THE STORY OF THE HUMAN BEING

From the Beginning of Creation to Beyond Death

Body, Self and Spirit



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Al-Saraf Al-Husayni

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In the name of God, the Most Gracious, the Most Merciful

The Story of the Human Being

From the Beginning of Creation to Beyond Death

The Journey of the Body and Soul in Light of the Holy Quran
and the Narrations of the Ahl al-Bayt (peace be upon them)

With a Scientific, Biological, and Anatomical Reading
within the Limits of Available Evidence

The seventh book in a series of eleven books

By the researcher and writer

Sayyid Hussam Zaha Murtadha
Al-Saraf Al-Husayni

Date of composition: 7 March 2024 CE
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English Edition

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Dedication

To those who seek scientific and religious truth, who are not ashamed to ask questions and do not let what they are accustomed to become a barrier to evidence; to those who open a book about the human being prepared to reconsider some of their ideas about themselves and others. I dedicate this story to you, hoping that it will deepen our understanding of our lives and our kindness towards those who share our journey of existence.

To my father and mother; from your care, I learned, before I read about the stages of development, that a human being begins in need of someone to carry, feed, and watch over them during sleep. Your favor upon me is beyond the scope of any book. I ask God to make the benefit of this endeavor a means of honoring you, and to grant me the ability to repay the love and patience you have shown me.

To my wife, my companion on this journey: thank you for giving me room to read, for bearing with my absorption in writing, and for the shared life that restores meaning to words. I write about the human being knowing that much of what we learn about compassion and patience comes not from books alone, but from those who share our days and support us when we are weak.

To my two sons and my daughter: I hope you will read these pages knowing that a person's worth is not measured by strength, appearance or possessions. Learn how the body works, ask for evidence, and remember that behind every body is a self that suffers and hopes. Knowledge should make the human hand more capable of helping, not more cruel.

To my first teacher of the Holy Quran, Umm Duaa, and to Sheikh Abdul Rasoul Al-Sudani Al-Nasiri, with whom I studied during my very brief time at the Najaf seminary; to my teachers at the different stages of my education, and to those who helped me understand biology and community health. I remember what I owe you for those beginnings, and I hope to remain faithful to the questioning and reconsideration that learning requires.

To the soul of His Eminence Sheikh Ahmed Al-Waeli, may God have mercy on him; in gratitude for the impact of his teachings that accompanied our upbringing, connecting religious inquiry to people's lives and instilling in us a desire for understanding. I do not attribute the results of this work to you, but rather acknowledge an impact to which I owe love and gratitude.

To my students and the young people I meet, and to everyone who asks about their birth, their self, their death and what follows it; to people who are ill and those who care for them, to older people and those who patiently serve them, and to those who have lost a loved one and still carry questions in their hearts. I dedicate this story in the hope that it will bring knowledge closer to our lives and preserve human dignity at every stage.

Author's Note

Praise be to God, Lord of the Worlds, who created humankind and taught them, and placed within their lives signs that call them to reflection and gratitude. Peace and blessings be upon our master and prophet Muhammad and his pure and righteous family. I ask God to make this work beneficial and to help me in conveying it truthfully, understanding it well, and correcting any errors that may arise.

When a person looks at their hand, they may see it as a tool to take what they need, without pausing to consider the bones, joints, and nerves that work together in a single movement. But when they see a child being born, a sick person weakening, or a loved one passing away, the question returns more urgently: What is this human being who grows before our eyes and then disappears from our sight? What do we know about their body? What has revelation told us about their soul and their destiny? Where does knowledge begin, and where do its tools end?

From these questions, I present "The Story of the Human Being." I do not want a book that merely lists the names of organs and then ends, nor a collection of death stories divorced from the life that precedes them. I want a continuous journey, during which the reader sees their connection to their beginning, their need for the necessities of life, the responsibilities they bear, and what is mentioned in the Holy Quran and the narrations of the Ahl al-Bayt (peace be upon them) about the end of their life and what comes after.

I am Sayyid Hussam Zaha Murtadha Al-Saraf Al-Husayni. I am not a religious scholar, nor do I claim the standing of a qualified jurist or expertise in every field this book touches. I present myself as a researcher and a collector of what I can find in the depths of books: I read to learn, gather material to organise it, and write to bring it closer to readers seeking scientific and religious truth.

I therefore need to explain the limits of my work as clearly as its purpose. Checking a narration against its source does not by itself establish the soundness of its chain of transmission. Reading a medical study does not qualify me to diagnose or prescribe treatment, and knowing a word's linguistic meaning does not entitle me to attribute every thought that occurs to me to God's intended meaning. Where specialist knowledge is needed, I refer to those who possess it, attribute opinions to their authors, and identify what remains disputed or unresolved.

Working with my children and students has taught me that questions close to life deserve clear answers. It is not enough to tell a young person that their body is remarkable and then leave them without understanding, or to fill their mind with terms they cannot connect to their life. I therefore try to begin with a familiar scene, explain what relates to it, and give readers a path they can follow to the source if they wish to learn more.

The Holy Quran will remain the foundation of religious research in this narrative. I gather the relevant verses, read them within their context, and then refer to the narrations of the Prophet (peace and blessings be upon him and his family) and his Ahl al-Bayt (peace be upon them) as preserved in the Imami sources. I benefit from the efforts of Quranic commentators, hadith scholars, and jurists, without making

any of their interpretations part of the Quranic text or the pronouncements of the infallible Imams. As for describing the body, its functions, and its development, I refer to specialized references and relevant research.

For me, the pleasure of storytelling does not lie in inventing a supernatural scene or filling gaps in sources with imagined dialogue. A question may remain without a definitive answer, and researchers may differ in their understanding of a text or their evaluation of a report. In such instances, I prefer that the reader understand the limits of our current understanding and that the scope of research remain clear, rather than finding verbal certainty unsupported by evidence.

I hope this knowledge will bear fruit in how we regard the human being: the child who needs care, the woman during pregnancy and childbirth, the person living with a disability, the frightened patient, the older person whose abilities are changing, and the deceased whose right to respect remains. For me, understanding creation is inseparable from the responsibility of treating it faithfully.

Whatever is correct in this book is by the grace of God, and whatever error or shortcoming therein is my responsibility. I thank anyone who helps me correct a passage, clarify a meaning, or add to a topic, and I consider this review a service to the book and its reader, not a detraction from its author.

General Introduction

The Story Closest to Us

We live in our bodies before we learn the names of their organs. We feel hunger before we know how the body regulates its need for food, hear our mother's voice before we study the ear, and experience fear and joy before we read about the nervous system. We then grow up and may become so accustomed to this life that we think its familiarity removes the need to ask questions about it.

But familiarity does not equate to understanding. One may know their way around a vast city yet not know what happens in their lungs when they breathe, or may speak at length about others yet be unable to explain a change within themselves. And when they fall ill, or welcome a newborn, or bid farewell to a deceased loved one, they discover that the human story is not a distant subject to be read from the outside; they live some of its chapters and anticipate others.

God Almighty says: {And on the earth are signs for those who are certain [in faith].} (Surat Adh-Dhariyat, verse 20)

And God Almighty said: “And in yourselves. Then will you not see?” (Surat Adh-Dhariyat, verse 21).

These two verses direct attention to the earth and to the human self. Citing them does not mean treating every anatomical fact as a direct explanation of a verse; rather, we begin with a Quranic invitation to observe and reflect. Details of structure and function require their own sources and evidence, just as interpreting a verse requires attention to its context, language and the explanations transmitted about it.

One Life, Many Questions

This book follows the human being from the question of origins to development in the womb, then birth, growth, maturity and old age. It explores cells, tissues and organ systems, their integration, and the effects of disease, environment and care. It then considers the self, intellect, perception and spirit according to the usage of each discipline and source, before turning to dying, death, the changes in the body afterwards, and what revelation tells us about barzakh, resurrection, judgement and ultimate destiny.

These topics may seem disparate if read separately. However, they converge in the single human being: the child who learns to speak is the same one who later bears the responsibility for their words, and the eye, whose structure we study, is also an organ mentioned in the discourse of gratitude and responsibility. This connection gives the narrative its unity, but it does not negate the distinctions between the anatomical question and the ethical or metaphysical one.

When we ask how an organ develops in the embryo, we need embryology. When we ask about the religious ruling on an action relating to pregnancy, we need jurisprudential inquiry and its prerequisites. When we ask about the spirit, we cannot answer merely with a radiological image or make spirit another name for an

electrical signal in the nerves. These questions meet in the human being, while each retains its own means of establishing claims and its own limits.

What Do We Mean by Body, Self and Spirit?

I use body in the title of this journey to mean the physical aspect whose structure, functions and changes can be studied. As for self, spirit, intellect and heart, I do not assume at the outset that they are interchangeable terms or that each has a single meaning wherever it appears. A term may refer to the person themselves in one text and occur in a different discussion in another. Its meaning must therefore be established in context before conclusions are built upon it.

God Almighty said: {And they ask you, [O Muhammad], about the soul. Say, "The soul is of the command of my Lord. And mankind has not been given of knowledge except a little."} [Surah Al-Isra, verse 85]

We establish the verse here, with its inherent reminder of the limitations of our knowledge, without using it in the introduction to definitively resolve all interpretations of the meaning of the spirit. The book returns to the discussion of the term, its contexts, and its interpretation in its appropriate section, while distinguishing between what pertains to the human soul and what is mentioned in other texts regarding the meanings of the spirit. Respect for the unseen does not necessitate closing the door to inquiry, but rather prevents us from claiming knowledge of details for which there is no evidence.

The Human Being Who Must Not Be Excluded from the Narrative

The subject of the book is not limited to the image of the healthy, young human being capable of speech and action. It includes the infant, the one who cannot express their needs, the one born with a congenital difference, the one living with a chronic illness or disability, and the one whose perception changes in old age. The differences between males and females, and matters related to pregnancy, childbirth, and breastfeeding, are presented as an integral part of human understanding, not as an afterthought added after the discussion has concluded.

Descriptions of weakness or affliction in the texts should not be transformed into harsh judgments against individuals. Not every illness is evidence of negligence, nor is a person's standing with God determined by their physical appearance or the results of their examination. Describing what happens in the body requires precision, and describing our obligations towards the afflicted person requires compassion and justice.

The Book's Place in the Series

I began researching, collecting material and working on the books of this series together in 2017. Work on their subjects overlapped; I did not necessarily complete one book before starting the next. Some books were completed while work on others continued, alongside the review and revision of those already written.

The series comprises eleven books. The Story of the Human Being: From the Beginning of Creation to Beyond Death is seventh in its reading order. It follows The

Story of the Universe, The Story of Plants, The Story of Animals, The Story of Angels, The Story of the Jinn, and The Story of Creation before Adam. This is a thematic reading order, not a chronology of the creation of all beings or of when work on each book began or ended.

It is followed by The Story of Guidance in its four parts, The Story of the Spirit, The Story of Paradise, and The Story of the Creation We Do Not Know. The four parts of The Story of Guidance count as one title within the series: eleven refers to the books by subject, not to the number of physical volumes in which each may appear.

These books share an approach that begins with the Holy Quran and draws on the narrations of Prophet Muhammad and the Ahl al-Bayt, peace be upon them, as well as the work of scholars and specialists. I identify sources and the limits of knowledge, while preserving the distinct scope and structure of each book.

Here I focus on the human being: the origin of human creation, the development of the body, its organs and functions, the stages of life, the self, spirit and responsibility, and then death, barzakh, resurrection and ultimate destiny. I bring together relevant religious texts and present scientific, biological and anatomical knowledge within the limits of its evidence, distinguishing the text, its interpretation and scientific description.

I therefore do not repeat the complete life of every prophet; that fuller account of the prophets, their successors and those connected with them belongs to The Story of Guidance. Nor do I exhaust the worlds of angels and jinn, equate discussions of the human spirit with everything examined in The Story of the Spirit, repeat the details of The Story of Paradise, or describe unknown creation without evidence. I draw on these subjects where they illuminate the human journey, leaving their fuller treatment to their own books.

The date of composition of this book is 7 March 2024 CE, corresponding to 26 Sha’ban 1445 AH. This date belongs to The Story of the Human Being; it does not replace 2017 as the year in which work on the series began, nor does it exclude subsequent review, revision and updates to sources.

The Methodology of the Book and the Accuracy of Transmission

The Holy Quran: The Foundation of Religious Research

I gather all verses related to the topic, whether the word "human," "mankind," "people," or "children of Adam" appears in them, or whether the topic is addressed without these terms, such as verses about pregnancy, birth, breastfeeding, hearing, sight, death, and resurrection. I include the complete verse when explaining it, along with the name of the surah and the verse number, and I read what precedes and follows it where understanding depends on the context.

I distinguish between the text and the interpretation: what the verse explicitly states is attributed to it, what a commentator sees is mentioned as an interpretation, and what I suggest in terms of connection or reflection is presented within its proper scope. I do not transform the similarity between a Qur'anic term and a scientific term into an absolute correspondence, nor do I make the text dependent on a revisable experimental detail without proof.

The Narration, its Source, and its Chain of Transmission

I refer to Imami sources according to the research topic, primarily al-Kafi, Man La Yahduruhu al-Faqih, al-Tahdhib, and al-Istibsar regarding rulings, and the books of al-Saduq such as al-Tawhid, Ilal al-Shara'i', Ma'ani al-Akhbar, al-Khisal, al-Amali, and Kamal al-Din. I also utilize Nahj al-Balaghah, al-Sahifa al-Sajjadiyya, and Risalat al-Huquq, taking into account the methods of transmission and the different nature of these works.

I use Wasa'il al-Shi'a, Bihar al-Anwar and other collections to locate texts and their sources, then return to the available original and state explicitly when I quote through an intermediary. I distinguish a narration's text from the compiler's explanation, a chapter heading or an editor's words, and record differences in wording when they affect the meaning. Several books reproducing the same chain do not constitute several independent chains of transmission.

The presence of a report in a reliable source does not mean that every report within it has a sound chain of transmission. Therefore, the status of a report is stated according to what can be verified: a text that has been compared with its source, a chain of transmission upon which a specialized ruling has been transmitted, a chain of transmission containing an interruption or ambiguity, or a detail that has not been fully examined. I do not issue a judgment of fabrication or authenticity simply because a report agrees with or contradicts an opinion I favor.

Commentaries, Language, and Doctrinal Research

I draw on al-Tibyan, Majma' al-Bayan, al-Mizan and other Imami commentaries, and on narration-based commentaries such as al-Ayyashi, al-Qummi, Nur al-Thaqalayn and al-Burhan as needed. I do not pass over questions requiring investigation of a book's attribution, a narration's chain of transmission or differences between textual

versions. Where interpretations differ, I present what affects the outcome of the inquiry rather than conceal the disagreement behind a categorical statement.

The principles of monotheism, justice, prophethood, imamate, and resurrection, as well as the infallibility of the prophets (peace be upon them), are observed according to the Imamite methodology, with no narration contradicting the clear verses of the Quran being given precedence. Philosophical or theological elaborations are attributed to their respective schools and authors and are not presented as narrative texts unless they are indeed narratives.

Scientific and Anatomical Knowledge

Scientific information is drawn from specialized educational references, scientific reviews, and research relevant to the question. A distinction is made between established descriptions, limited results, hypotheses, and open-ended questions. When presenting a number, time, or percentage, the unit of measurement, method of calculation, and context of the result are stated. The findings of a limited experiment are not generalized to all of humanity.

In the Arabic original, terms are explained in Arabic, with their scientific equivalents given where these improve precision. Appendix Four provides a textual atlas and tables of body systems; the book contains no anatomical images or diagrams. It is not a substitute for medical consultation, and reporting a therapeutic claim does not justify adopting a prescription before its evidence and safety have been evaluated.

Distinguishing Between Scientific, Jurisprudential, and Metaphysical Research

In matters such as fertilization, brain death, and organ transplantation, the medical description is presented first, within its limitations, and then the jurisprudential rulings are attributed to their respective authorities. Regarding the soul, the intermediate realm (Barzakh), and the afterlife, adherence is limited to what is permitted by the texts and their evidence. A personal experience, vision, or near-death testimony is insufficient to establish or generalize metaphysical details.

Narration Without Invention

The chapter begins, where appropriate, with a scene close to the reader's life, then the idea connects to the texts and explanations. We do not attribute to Adam, a prophet, an imam, or a dying person statements that are not supported by sources, nor do we describe the movement of the soul or the scene of the grave with the account of an eyewitness. If we use an illustrative example, it remains clear that it is an example from the author, not a reported fact.

Continued Coverage and Review

During this work, I create a record linking each topic to its verses, narrations, scientific references and the chapter that addresses it. The search includes explicit names, descriptions, organs, conditions and actions, rather than searching only for the word human. The record distinguishes material collected, material checked

against its source and material still requiring investigation; comprehensive coverage must not be claimed before the work needed to support that claim is complete.

The review examines texts and their meanings, consistency of terminology, and the place of each piece of information and its relationship to other chapters. Pages are not filled with repetition, nor is a subject rich in material shortened in a way that breaks its context. Where the evidence remains unclear, conjecture does not fill the gap; the point at which judgement must be suspended is stated.

Reading and Reference Guide

The parts can be read in sequence as one journey, or readers can find a particular subject through the front contents. To locate a topic within a chapter, readers can consult the Detailed Topic Guide at the end of the book; the subject index groups discussions under their topic headings.

Numbers in square brackets, such as [1], refer to the source list for the same chapter; numbering restarts in each chapter. Qur’anic references appear beside the quoted passage with the surah name and verse number. In the concluding bibliography, M followed by a number identifies a source record, not a page.

Source citations use vol. for volume, p. or pp. for page or pages, and hadith for the narration number. Chapter numbers in the subject indexes refer to chapters, whose opening pages are listed in the front contents; these are distinct from page numbers. The concluding bibliography gathers sources actually used, with the route of transmission explained where necessary. A work is not included merely because it might be relevant if it was not consulted.

The nine appendices include a verse map, a narration record, an embryological table, a textual atlas, age tables, two dictionaries, points of disagreement, and a guide to distinguishing between types of knowledge. The four tables are found in Appendices 3, 4, and 5.

A narration is read with its source and the limits of the accompanying investigation, an interpretation is read as an interpretation, and a scientific description is read within its evidence and context. The presence of a source in the list does not imply the correctness of everything in it, nor does the educational information replace the assessment of the individual case.

Part 1: The Human Being and the Question of Beginnings

Chapter 1: Who Is the Human Being?

A Tiny Hand Opens the Question

When a newborn grasps the finger of someone nearby, the movement seems simple: a small palm, tiny fingers, and an adult bending down with a smile. Yet this familiar scene raises a question that the names of bones and muscles alone cannot answer: who is this person who has come into the world?

We can ask about his body: How was it formed? How does it move? We can ask about his future life: What will he learn? Who will care for him? How will he choose when he is able to choose? Then comes the question that encompasses all these questions: What makes us see him as a human being worthy of care, before he utters a word, performs an action, or even knows his own name?

We will not begin the story with a human being whose strength and knowledge are complete, as if the weak stand outside his definition. We begin with this newcomer who is in need of others, for need is not a foreign occurrence in our lives. Each of us begins with it, and to it we return in many forms, even when we believe we have reached the pinnacle of independence.

This chapter introduces our account of the human being; it does not exhaust everything said about the subject. We read the terms by which the Quran addresses the human being and its reminders of human origins, dignity, weakness and responsibility. We draw guidance from what has been transmitted from the Ahl al-Bayt, peace be upon them, then take the first step in studying the body.

Before becoming something mentioned

God Almighty said: “Has there not come upon man a period of time when he was nothing to be mentioned?” (Quran 76:1)

And God Almighty said: “Indeed, We created man from a sperm-drop mixture that We might try him; and We made him hearing and seeing.” (Surah Al-Insan, verse 2)

And God Almighty said: “Indeed, We guided him to the way, whether he be grateful or ungrateful.” (Surah Al-Insan, verse 3)

This Quranic opening combines origin, creation, trial, and guidance. Man, who now has a name, a voice, and desires, was not always in the state in which he knows himself. Reminding him of his beginning is not an insult; rather, it is a way of putting his arrogance in its proper perspective and awakening him to gratitude for an existence he did not create for himself.

The verses move from the drop of fluid, nutfah, to hearing and sight, and then to the path to which the human being is guided. I do not read this sequence as a detailed medical timetable of organ development, but as connecting human formation with a

life of responsibility. The meaning of amshaj, or mixtures, the stages of formation, and their relationship to embryological knowledge will each be discussed in its own place with its evidence.

The guidance mentioned here does not imply that all people make the same decision; the verse mentions gratitude and ingratitude. We are dealing with a creature whose existence is inseparable from the story of its stance, and it is not enough to describe it by simply knowing the material from which its body is formed.

Insan, Bashar, Nas and the Children of Adam

The Quran refers to the human being through several terms, including insan, bashar, nas and the Children of Adam. We should not assign each term a rigid meaning and then impose it on every occurrence. Claiming that bashar means the body alone while insan means the spirit alone requires evidence; a desire to divide the terms into separate categories cannot supply it.

The opening of Surah Al-Insan speaks of human formation and testing. In addresses to nas, or people, the call extends to the group being addressed. Addressing the Children of Adam connects us to a shared origin. These, however, are observations about particular contexts, not linguistic rules that remove the need to read the other verses.

God Almighty said: “Say, ‘I am only a man like you, to whom it has been revealed that your God is but one God. So whoever hopes for the meeting with his Lord - let him do righteous work and not associate in the worship of his Lord anyone.’” (Surah Al-Kahf, verse 110)

This verse affirms the humanity of the Prophet (peace and blessings be upon him and his family) and, in the same verse, affirms the revelation he received. Sharing in humanity does not negate the unique status of prophethood, just as the unique status of prophethood does not necessitate excluding him from humanity. Therefore, we do not take a single word and disregard the contextual explanation.

We will also encounter nafs (self or soul), ruh (spirit), qalb (heart), fu'ad (also commonly translated as heart), and aql (intellect). Depending on its context, a term may carry a meaning different from its contemporary medical or philosophical usage. We need this caution whenever we move between the language of the text and that of anatomy, so that a shared name does not lead us to interpret an organ as an ethical function.

One Origin Does Not Negate the Diversity of Faces

God Almighty said: “O mankind, fear your Lord, who created you from one soul and created from it its mate and dispersed from both of them many men and women. And fear God, through whom you ask one another, and the wombs. Indeed, God is ever, over you, an Observer.” (Surah An-Nisa, verse 1)

The address begins with mankind, returning them to a single soul, then mentions the dispersal of men and women. The discussion of the creation of Adam and his wife, which stems from this principle, will be addressed separately. Therefore, we should

not rush to provide details not explicitly stated in the verse, nor add to its wording the story of the wife's creation from a specific organ without verifying the relevant narrations.

What we need at the outset is to ensure that the diversity of appearances does not obscure the unity of origin. Differences in names and countries do not justify viewing some people as a separate species, beyond the reach of mercy. Nor does the unity of origin imply that people are identical copies in their bodies, predispositions, or life circumstances.

God Almighty says: “O mankind, indeed We have created you from male and female and made you peoples and tribes that you may know one another. Indeed, the most noble of you in the sight of God is the most righteous of you. Indeed, God is Knowing and Acquainted.” Surah Al-Hujurat, verse 13.

The differences between peoples and tribes remain in the verse, but the way we regard them changes: they offer an opportunity to know one another, not a licence for superiority. Honour before God is then linked to piety, not merely to tribal identity. This does not authorise us to claim knowledge of people's inner states; the verse ends by affirming God's knowledge and full awareness.

When we later examine physical differences, we must keep this distinction in mind. Physical characteristics are subjects for description and understanding, and are not, in themselves, a judgment on a person's righteousness or standing before God.

Dignity bestowed, and responsibility not relinquished.

God Almighty says: {And We have certainly honored the children of Adam and carried them on land and sea and provided for them of the good things and preferred them over much of what We have created, with [clear] preference.} [Surah Al-Isra, verse 70].

First, we notice that the verse says the Children of Adam. It presents an honour concerning the human species and mentions the blessings of being carried on land and sea and provided with good things. We also retain its word many, rather than replace it with all. This phrase alone does not settle every question about the relative standing of human beings and angels.

In Al-Mizan, Sayyid Muhammad Husayn al-Tabataba'i distinguishes between honouring, understood as care and distinction through qualities particular to the one honoured, and giving preference, understood as exceeding others in a shared quality. He connects human honour with intellect and the discernment and planning that arise from it. I present this as an interpretation of the verse, not part of its wording, and do not substitute the commentator's view for examining the evidence in the detailed discussion. [1]

In reading this, we must not turn a discussion of the characteristics of the human species into a test that every individual must pass to deserve humane treatment. An infant does not have to prove their dignity by writing an essay. Losing the ability to speak does not remove a person from the Children of Adam, and needing care does not make someone a burden whom it is permissible to humiliate.

This is an ethical application of the general meaning, not a claim that a single verse has detailed all legal and medical rulings. Those rulings have their own evidence and specific applications. But the starting point is clear: we deal with a human being, then we examine their needs and the ruling on the action related to them, and we do not begin by stripping them of their humanity.

Honoring someone does not mean condoning every action they commit. A person can commit injustice and be held accountable for it, without the injustice justifying abandoning justice in their treatment. Here, the recognition of dignity and accountability coexist, and neither necessitates the negation of the other.

Woman and Man Within the Story

The term "human being" may be used in a narrative, but the story may focus solely on the man's life, with the woman appearing only peripherally. This book, however, addresses the lives of both men and women, exploring the characteristics of each when relevant to the subject, without making one a standard by which the other's humanity is diminished.

God Almighty says: {Whoever does righteousness, whether male or female, while being a believer - We will surely cause them to live a good life, and We will surely reward them according to the best of what they used to do.} [Quran 16:97]

This promise explicitly mentions both male and female, linking faith and good deeds to a good life and reward. The verse does not negate every physical difference or every legal detail, but it prevents us from presenting the path of action and reward as if it were a story pertaining only to men.

When we reach the topic of pregnancy and childbirth, we will not merely describe the fetus and forget the woman who carries it. And when we address parenthood, we will examine responsibility and care, not simply the ability to procreate. Thus, the scientific questions remain connected to the individuals whose bodies we are discussing.

Born needy, learns gradually.

God Almighty says: “And God brought you forth from the wombs of your mothers while you knew nothing, and He gave you hearing, sight, and hearts that you might give thanks.” (Quran 16:78)

This verse reminds us of a beginning when we possess no acquired knowledge, and of blessings linked to learning and gratitude. I am not suggesting that the arrangement of words alone provides an anatomical timeline for the development of each organ, nor am I interpreting the phrase “while you knew nothing” as a detailed negation of every predisposition or response observed in newborns; such research requires its own tools and data.

The student reading these pages was not born literate, and the researcher explaining a body part first learned the names of things. Therefore, knowledge should not be a reason to despise the ignorant, but rather a responsibility in education. Remembering the beginning softens the harshness of those who demand that others

know immediately what took them years to learn.

The best of forms, and weakness that needs nurturing.

God Almighty said: {We have certainly created man in the best of forms.} (Quran 95:4)

And God Almighty said: {Then We reduced him to the lowest of the low.} (Quran 95:5)

And Allah Almighty said: {Except those who believe and do righteous deeds, for them is a reward uninterrupted.} (Surah At-Tin, verse 6)

We do not read the description of the good constitution and then close the chapter; the context continues the discussion, mentioning faith, deeds, and reward. It is not sound methodology to take these verses as a detailed judgment on the physical constitution of every individual, attributing a moral defect to someone born with a physical difference, or claiming that illness contradicts the principle of honor. Furthermore, the interpretation of “the lowest of the low” requires presenting the opinions of the commentators, and it is not appropriate to transform it here into a derogatory term for illness or old age.

And God Almighty said: “God desires to lighten your burden, for mankind was created weak.” (Surah An-Nisa, verse 28)

The mention of weakness here, along with the desire for lightening, is within the context of rulings and teachings. We should not interpret this as a judgment that mankind is incapable of all good, nor should we make the ability to choose a denial of their need for help. There is a difference between knowing our limitations and submitting to them, and between acknowledging weakness and using it as an excuse for every shortcoming.

God Almighty said: “Indeed, mankind was created anxious.” (Surah Al-Ma'arij, verse 19)

And God Almighty said: “When evil touches him, he is impatient.” Surah Al-Ma'arij, verse 20.

And He, the Exalted, said: {And when good touches him, he is stingy.} Surah Al-Ma'arij, verse 21.

And He, the Exalted, said: {Except for those who pray.} Surah Al-Ma'arij, verse 22.

And He, the Exalted, said: {Those who are constant in their prayer.} Surah Al-Ma'arij, verse 23.

The exception comes within the same context that describes panic, and the verses that follow describe other qualities. We should not confine a person to the first description and disregard the path of spiritual development mentioned in the surah. Nor should we treat these descriptions as a medical diagnosis; judging a psychological disorder or interpreting the suffering of a particular person cannot be derived from a general statement made about them.

A soul capable of purification, not a past that closes off the future.

God Almighty said: {And by the soul and He who fashioned it.} (Surah Ash-Shams, verse 7)

God Almighty said: {And inspired it [with discernment of] its wickedness and its righteousness.} (Surah Ash-Shams, verse 8)

God Almighty said: {He has certainly succeeded who purifies it.} Surah Ash-Shams, verse 9.

And Allah Almighty said: {And he who corrupts it has failed.} Surah Ash-Shams, verse 10.

The context leads us to purification and its opposite. A person's knowledge of the names of virtues is insufficient if it is not translated into action, nor does falling into error become a definitive definition of him. The discussion of innate nature, free will, and repentance will come in their proper places, but here we establish that the image of man in the Book is not drawn by the body alone, nor by the past alone.

We do not derive from these verses a neurological theory about the location of good and evil in the brain. Studying the mechanisms that accompany thought is one thing, and evaluating action and intention is another, related to it but not identical to it. Maintaining this distinction allows us to learn from science without imposing upon it what it has not tested.

The Mind: Where Does Ability Lead Us?

In the Book of Intellect and Ignorance in Al-Kafi, al-Kulayni transmits a report raised to Imam Abu Abd Allah al-Sadiq, peace be upon him, in which intellect is described as: 'That by which the Most Merciful is worshipped and the gardens of Paradise are attained.' [2]

This text raises the question of the purpose of using the capacity for thought, as not every successful stratagem is a virtue. A person may skillfully devise a harmful means, but the success of the means does not validate its purpose. We benefit from this report in this ethical sense, not as an empirical definition of intelligence or a description of brain structure.

Faithfulness in transmission requires us to state that the chain in Al-Kafi includes an unnamed narrator and the expression rafa'ahu, meaning that the report was raised to the Imam without the full chain being supplied. I therefore do not present it here as sound in its chain, or base a doctrinal judgement on it alone. The location of the text has been checked, but verifying its presence in the book remains distinct from assessing its chain of transmission.

Your equal in creation

In the covenant of Imam Ali (peace be upon him) to Malik al-Ashtar, as compiled by Sharif al-Radi in Nahj al-Balaghah, he says regarding the people: “They are of two kinds: either a brother to you in faith, or your equal in creation.” [3]

The context of this statement is not a discussion of physical appearance, but rather

guidance on treating people with mercy and kindness. What concerns us here is the connection between the definition of humanity and behavior towards it: it is not enough to acknowledge the unity of creation theoretically and then make differences in religion a reason for cruelty.

The text is cited in its place in Nahj al-Balaghah, without this attribution alone being a claim to verifying all the chains of transmission of the covenant. Detailed historical and chain-of-transmission research requires a separate undertaking, which we cannot substitute for the fame of the statement.

The Body Has Rights in Usage

In the Treatise on Rights attributed to Imam Ali ibn al-Husayn al-Sajjad (peace be upon him), as quoted in Tuhaf al-Uqul, it states: “As for your own right over yourself, it is that you fulfill it in obedience to God.” The text then mentions fulfilling the rights of the tongue, hearing, sight, hand, foot, stomach, and private parts. [4]

This reading takes us from the question: What can an organ do? to the question: How should we use it? For the tongue is not merely an instrument for speech, and the hand is not merely an instrument for grasping; the impact of words and actions extends into the lives of others.

This is an ethical reading of the text, not a substitute for studying the organ anatomically. The quoted passage has been checked against the available text of Tuhaf al-Uqul. This single transmission, however, does not settle the investigation of the treatise's transmission routes or the comparison of its wording across sources.

One Body, Multiple Levels of Study

When we approach the body scientifically, we can study it on overlapping levels: molecules that make up cells, cells that form tissues, tissues that make up organs, and organs that function within systems. The cooperation of these levels is what we need to understand when we move from the name of an organ to its function. [5]

Systems are not closed boxes; an organ may perform functions that are connected to more than one system. Therefore, this division helps us learn, but it doesn't mean that the body is fragmented in its function like its headings in a catalog. [5]

This is a preliminary map, and we will gradually delve into its details. We won't present the reader with an anatomical diagram and assume they are familiar with its orientation and terminology, nor will we fill this introduction with numbers that the question doesn't require. We want knowledge that the reader can build upon.

A scientific description of the body alone does not answer all of humanity's questions. It reveals a structure, function, or relationship that is open to investigation, while the ultimate purpose, duty, and metaphysical destiny require appropriate evidence. Furthermore, religious knowledge does not exempt us from resorting to scientific inquiry when the question concerns the function of an organ.

From Knowledge to Trust

God Almighty said: “And do not pursue that of which you have no knowledge. Indeed,

the hearing, the sight, and the heart—all of those will be questioned.” (Surah Al-Isra, verse 36)

This verse makes verification part of human responsibility. As we write about the human being, it reminds us that good intentions do not permit the invention of a narration, that an elegant phrase does not make information correct, and that saying 'I do not know' when appropriate is more accurate than an answer that goes beyond the evidence.

God Almighty said: “Does man think that he will be left neglected?” (Surah Al-Qiyamah, verse 36)

Here the next question arises. We have considered humankind as a creature of origin, diverse in nature, honored, weak, capable of learning and refinement, and responsible for the use of what has been given to them. But why were they created? And what does it mean that they should not be left without purpose?

We return to the small hand with which we began. We do not know the future of its owner, nor should we presume to write their destiny. What we do know now is that they are human beings in need of care, and that understanding their creation should increase our awareness of their rights. From this knowledge, we move to Chapter 2: Why Was Humankind Created?

References and Documentary Notes for Chapter 1

Quranic Verses: The name of the surah and the verse number are indicated next to each text. This chapter gathers foundational evidence and does not claim to be exhaustive of all verses related to humankind; verses on creation, responsibility, organs, stages of life, and destiny are distributed throughout its chapters.

[1] Muhammad Husayn al-Tabataba'i, Al-Mizan fi Tafsir al-Qur'an, commentary on Surat al-Isra, verse 70; the digital text is available on the Great Commentaries website. The quotation here is a summary of the commentator's opinion, not a verbatim quotation or a claim of consensus.

[2] Muhammad ibn Ya'qub al-Kulayni, Al-Kafi, vol. 1, Book of Intellect and Ignorance, Hadith 3, according to the numbering of the digital version in Al-Thaqalayn. In the chain of transmission: "From some of our companions, who traced it back to Abu 'Abd Allah." The reference establishes the location of the narration but does not grant the chain of transmission a connection that does not exist there.

[3] Nahj al-Balaghah, compiled by al-Sharif al-Radi, Letter 53, The Covenant of Malik al-Ashtar; the Arabic text published with translation on the Islam website. No independent investigation of the chains of transmission of the covenant has been completed in this chapter.

[4] Ibn Shu'bah al-Harrani, Tuhaf al-Uqul, Treatise on Rights, the right of the self, p. 256 in the available digital edition in the Al-Muntaqim Library. No grading of the treatise's chain of transmission is reported here; comparison of its transmission routes and wording remains a task for further investigation.

[5] J. Gordon Betts et al., Anatomy and Physiology 2e, OpenStax, Section 1.2: The Structural Organization of the Human Body; used to verify levels of organization and the interrelation of organ functions, without transferring diagrams or passages from the book.

Chapter 2: Why Was the Human Being Created?

When Knowing the Way Is Not Enough

A person may leave their home knowing the street they will take, the work that awaits them, and the time they will return, only to be surprised by a question that these details cannot answer: Where is my whole life headed? Knowing the way to work is not knowing the purpose of life, and mastering the means does not, by itself, give it a valid goal.

In the previous chapter, we approached the human being's identity, dignity and responsibility. Now we ask about the meaning of human existence. Asking about purpose does not mean seeking a need within God that our creation fulfilled; that would confuse Creator and creature. Nor does it mean extracting every particular wisdom from every event, as though our knowledge encompassed all that God's knowledge encompasses. We seek to understand what revelation explains and to recognise where that explanation ends and the commentator's interpretation or the reader's reflection begins.

We were not created in vain.

God Almighty says: {Did you then think that We created you in vain and that you would not be returned to Us?} (Surah Al-Mu'minun, verse 115).

God Almighty says: “Exalted is God, the Sovereign, the Truth. There is no deity except Him, Lord of the Noble Throne.” (Surah Al-Mu’minun, verse 116)

The accountability of humankind for their actions is linked to the reminder of returning to God. Life, in this context, is not a series of events that end without reckoning. What we do does not lose its meaning simply because it has passed, nor does the right of the oppressed become nonexistent because the oppressor managed to conceal it from others.

Hence, the question of purpose differs from the question of profession or fame. A person may succeed in their work but fail in their integrity, or they may remain out of the public eye while preserving a right unknown to others. The value of life is not limited to how much others perceive it.

Worship and God's Self-Sufficiency from His Creation

God Almighty says: {And I did not create the jinn and mankind except to worship Me.} (Surat Adh-Dhariyat, verse 56)

God Almighty says: {I do not want from them any provision, nor do I want them to feed Me.} (Surat Adh-Dhariyat, verse 57)

God Almighty says: {Indeed, it is God who is the Provider, the Possessor of Strength, the Firm.} (Surat Adh-Dhariyat, verse 58)

The verses do not leave us with the word "worship" alone, but follow it with the negation of seeking sustenance and nourishment from created beings. This context is important: God is not a human king whose needs increase with the expansion of his

dominion, nor does He complete anything He lacks through a worshipper. It is humankind that is in need of guidance and purification.

In Al-Mizan, Al-Tabataba'i explains the purpose here from the perspective of the perfection that returns to the created being, not from the perspective of compensating for a deficiency in the Creator. He explores the connection between worship, knowledge, and mercy as interconnected meanings, while discussing the difference between the general purpose of creation and the actions of individuals who do not worship. This is a presentation of his interpretive opinion, not an omission of the multiple aspects discussed in the verse. [1]

When we say that humankind was created for worship, we do not mean that everything they do is automatically worship, nor that every choice they make is pleasing. There is command and guidance, and there is response or rejection. If the mere occurrence of an act were proof of God's pleasure with it, then the prohibition against injustice would be meaningless.

Is worship an escape from life?

God Almighty says: {Say, "Indeed, my prayer, my rites of sacrifice, my life and my death are for Allah, Lord of the worlds."} (Surah Al-An'am, verse 162)

God Almighty says: {He has no partner. And this I have been commanded, and I am the first of the Muslims.} (Surah Al-An'am, verse 163)

This declaration encompasses prayer, rites of sacrifice, life, and death. Worship does not place life outside the relationship with God. However, specific acts of worship retain their rulings and conditions. We do not replace prayer with social work, nor do we claim that doing good to people absolves us of all other obligations.

What we need to address is the disconnect between the act of worship we perform and the behavior that undermines its meaning. The hand raised in supplication is not exempt from returning what is entrusted to us, and the tongue that remembers God is not permitted to harm the innocent. When a person sincerely fulfills their duties in their home, teaching, or service, they are not necessarily living a life detached from their religious purpose.

This does not mean judging the inner thoughts of those who perform religious duties; intentions cannot be discerned from outward appearances alone. Rather, we are clarifying that human life is broader than the moment of ritual, and that the sincerity of religious practice should not be separated from upholding rights.

Knowledge That Leads to Action

God Almighty says: “It is God who created seven heavens and of the earth, the like of them. The command descends between them so that you may know that God is All-Powerful over everything and that God has encompassed all things in knowledge.” (Quran 65:12)

This verse connects contemplating creation with understanding God’s power and knowledge. It is not required of every reader to become an expert in every field, but it is important to gain something from this knowledge that transcends mere

information: awareness of one’s limitations, a commitment to truthfulness, and gratitude for the understanding granted.

Al-Saduq, in his *`Ilal al-Shara`i`, narrated a hadith from Imam al-Sadiq (peace be upon him) relating the words of Imam al-Husayn (peace be upon him) concerning the connection between knowing God and worshipping Him, and then being content with worshipping Him alone, thus rendering worship of anything else unnecessary. The hadith continues with the mention of knowing the Imam of the Time, whose obedience is obligatory, and then al-Saduq offers an interpretation of this meaning. Here, we distinguish between the text of the hadith and the author's commentary, and we do not consider the phrase "that they may know Him" to be a Quranic verse in place of "that they may worship Me." [2]

This hadith is relevant to the research on this topic, but comparing its text alone is insufficient to determine the authenticity of its chain of transmission. Therefore, we do not base the foundation of knowledge or Imamate solely upon it. The Quranic principle we have before us encompasses worship, contemplation, and knowledge. Thus, knowledge is not merely the naming of things, nor is worship a movement performed without the individual attempting to understand what they are saying.

Trials: How do we use what we have been given?

God Almighty says: “He Who created death and life to test you [as to] which of you is best in deed - and He is the Exalted in Might, the Forgiving.” (Surah Al-Mulk, verse 2)

The wording is “best in deed,” not merely “most active” or “most visible.” A person may perform many deeds that are corrupted by injustice or the pursuit of fame, or a single act may preserve a right that was on the verge of being lost. We do not separate good intention from good action; a harmful act does not become right simply because its perpetrator declared a good intention.

The test here is not to be understood as a human examination in which the examiner seeks information he was unaware of about the one being tested. This meaning should be read in conjunction with God’s all-encompassing knowledge, which has already been mentioned. A person lives by their choices, bears the consequences of their actions, and is held accountable for them; they do not increase God's knowledge by adding to it what He did not already know.

God Almighty says: “Every soul will taste death, and We test you with evil and good as a trial; and to Us you will be returned.” (Quran 21:35)

This verse mentions both good and evil. The test is not limited to loss and illness; a person may be tested by the strength, wealth, and opportunities they possess. When we ask about the trials faced by the poor or the sick, we should also ask about the responsibility of those who are able to help them.

This does not give us the right to determine the cause of every pain. I do not know, simply by seeing a sick person, that their illness is a punishment, nor do I know that someone's poverty is proof of their fall from grace in God's eyes. Likewise, the notion of divine trial does not justify neglecting treatment or remaining silent in the face of

injustice; for alleviating harm and supporting the afflicted are actions by which our responsibility is tested.

Capacity and Mercy in Understanding Religious Obligation

God Almighty says: “God does not burden any soul beyond its capacity. It will have [the consequence of] what it has earned, and it will bear [the consequence of] what it has incurred. Our Lord, do not hold us accountable if we forget or make a mistake. Our Lord, do not place upon us a burden like that which You placed upon those before us. Our Lord, do not burden us with that which we cannot bear. Pardon us, forgive us, and have mercy upon us. You are our Protector.” “So grant us victory over the disbelieving people.” (Quran 2:286)

This verse does not present responsibility in isolation from capacity and the request for forgiveness and mercy. Therefore, it is incorrect to impose a single form of performance on all people, given their varying circumstances, and then take the inability of some as evidence of weak faith. As for the details of the obligations of children, the sick, and those whose cognitive abilities are altered, these require further jurisprudential discussion, which this introduction cannot resolve.

In education and upbringing, this principle reminds us to help the learner understand and act, not to burden religious discourse with accusations. There is a significant difference between calling upon a person to do what they are capable of and demanding from them what we presume their ability to do without knowing their circumstances.

Cultivating the land without violating its sanctity

God Almighty said: “And to Thamud We sent their brother Salih. He said, ‘O my people, worship God; you have no deity other than Him. He created you from the earth and settled you in it, so seek His forgiveness and then repent to Him. Indeed, my Lord is near and responsive.’” (Surah Hud, verse 61)

The speech of Salih, peace be upon him, combines the command to worship, the reminder of creation from the earth and settling you in it, and the call to repentance. The essence of this scene is not to glorify construction power for its own sake, but rather to address a people responsible for their actions. It is unacceptable to use the development of the land as an excuse to justify its corruption or the oppression of its inhabitants.

God Almighty says: “But seek, through that which God has given you, the home of the Hereafter; and [yet], do not forget your share of the world. And do good as God has done good to you. And do not seek to cause corruption in the land. Indeed, God does not like corrupters.” (Surah Al-Qasas, verse 77)

This counsel occurs in the account of Qarun and links blessings with doing good and refraining from corruption. From this perspective, a person's question is not only 'How much do I possess?' but also 'What do I do with what I possess, and who is harmed if I use it unjustly?'

Agriculture, industry, education, and caregiving can be fields that benefit people, but

they can also be tainted by deception and harm. The name of the profession is not enough to judge all its actions; rather, one must consider the intention, the means, the impact, and the rights of others.

Justice is part of the path.

God Almighty says: “We have already sent Our messengers with clear proofs and revealed with them the Scripture and the balance so that mankind may uphold justice. And We revealed iron, in which is great might and benefits for mankind, and so that God may make evident those who support Him and His messengers unseen. Indeed, God is Powerful and Exalted in Might.” (Surah Al-Hadid, verse 25)

The message in this verse does not stop at a belief that leaves no impact on people; it reminds them of their upholding justice. This connects the question of purpose to honest dealings, fairness in judgment, and the protection of those unable to protect their rights.

Citing the verse on justice does not mean that every contemporary dispute can be resolved with a general slogan. We need to know the facts, hear the parties involved, and distinguish between the legal ruling and its application, in which we may err. However, an error in application does not justify abandoning the fundamental objective of justice.

Love, Fear, and Hope in Worship

Al-Kulayni narrates a hadith from Imam al-Sadiq (peace be upon him) that distinguishes between those who worship out of fear, those who seek reward, and those who worship out of love for God. He describes the last group by saying, “That is the worship of the free, and it is the best form of worship.” [3]

Explaining what is best does not necessitate declaring the worship of everyone who fears punishment or hopes for reward invalid. The intention here is to highlight the difference in motivation and to open the way for a heart that does not stop at calculating benefit alone. For love does not contradict hope, and hope does not absolve one of the responsibility of action.

The ruling on this hadith was examined in Mir'at al-'Uqul, vol. 8, p. 86, and we found al-Majlisi's description of it as "good like a sound hadith." I mention the ruling attributed to its source, and I do not claim it to be a consensus among hadith scholars. Al-Majlisi explains the superiority of worship motivated by love, while maintaining the fundamental merit of worship performed seeking reward or avoiding punishment. [3]

Mercy and the Horizon of Destiny

God Almighty said: {And if your Lord had willed, He could have made mankind one community; but they will not cease to differ.} (Surah Hud, verse 118)

God Almighty said: “Except those on whom your Lord has mercy. And for that He created them. And the word of your Lord has been fulfilled: ‘I will surely fill Hell with jinn and men all together.’” (Surah Hud, verse 119)

The phrase 'And for that He created them' requires reading what precedes and follows it; commentators have discussed what it refers to. Reading this verse together with the verse on worship, Al-Mizan favours its reference to mercy, rather than treating blameworthy disagreement as desirable in itself. We must neither detach the verse's ending to make punishment a purpose unrelated to choice and the establishment of proof, nor remove its warning on the grounds that we are discussing mercy. [1]

In *Ilal al-Shara'i*, there is also a narration from Imam al-Sadiq (peace be upon him) denying that creation is for the purpose of bringing benefit to God or averting harm from Him. It mentions the benefit to the created being and its attainment of eternal bliss. The general meaning aligns with the denial of need in the verses of Surah Adh-Dhariyat. However, I have not conducted an independent investigation into the chain of transmission of this narration. Therefore, it is presented here as evidence from the body of Islamic tradition, not as an independent principle upon which proof depends. [2]

One Purpose, Questions That Do Not Displace One Another

We can now draw together the threads of this chapter without erasing differences in the wording of the texts: worship directs the human being towards God; knowledge illuminates that direction; testing is the setting in which actions become manifest; justice and doing good are human responsibilities towards others; and mercy and the return to God open the horizon of ultimate destiny.

This gathering is an interpretation of the relationship between the meanings, not a claim that each word is synonymous with the others. Therefore, we will examine each topic in its proper place, and we will not allow a brief statement to replace its verses and details.

When we return to everyday life, the question of purpose is no longer remote from small actions: a trust we fulfil, knowledge we verify, an oppressed person we do not neglect, and worship whose sincerity we try to preserve. In this way the great question enters life, rather than remaining a heading at the beginning of a book.

Having asked why the human being was created, we turn to what the Quran says about the original material of human creation. Here we encounter the terms dust, clay, sounding clay and water, along with another responsibility: to understand the text without adding a laboratory recipe it does not provide.

References for Chapter Two

[1] Muhammad Husayn al-Tabataba'i, Al-Mizan fi Tafsir al-Quran, Tafsir al-Dhariyat 56–58, including the discussion of its connection to Hud 118–119. Used to present the commentator's opinion, not to dismiss the disagreement.

[2] Shaykh al-Saduq, Ilal al-Shara'i', vol. 1, chapter 9: The Reason for the Creation of Mankind and the Differences in Their Conditions, hadiths 1 and 2, p. 9 in the version displayed in the Ahl al-Bayt Digital Library. Al-Saduq's commentary is separated from the text of the first hadith. The two texts were compared, but the ruling based on their chains of transmission was not completed.

[3] Al-Kulayni, Al-Kafi, vol. 2, Book of Faith and Disbelief, Chapter on Worship, hadith 5. Al-

Majlisi's ruling, "good like authentic," and its explanation in Mir'at al-'Uqul, vol. 8, p. 86, were compared. The ruling is attributed to him, but there is no claim of consensus or independent biographical investigation.

Chapter 3: The Original Matter of Creation

The Earth We Walk On

A person holds a handful of soil and sees it as a familiar substance that crumbles between his fingers. Then he reads that the origin of his creation is connected to this very earth, and he stands before a vast distance between what is in his hand and the one who looks at his hand. How did the discourse transition from dust to a human being who hears, speaks, remembers, and asks questions?

This chapter offers no recipe for making the human being anew, nor does it fill the text's silences with imagined scenes. It gathers the Quranic terms describing the original material, examines their relationships, and distinguishes them from accounts of the reproduction of descendants and embryonic development. We begin with this distinction to avoid confusing Adam's beginning with that of every child.

The Beginning of the Human Being and His Descendants

God Almighty says: {He Who perfected everything He created and began the creation of man from clay.} (Surah As-Sajdah, verse 7)

God Almighty said: “Then He made his offspring from a drop of fluid despised.” (Surah As-Sajdah, verse 8)

God Almighty said: “Then He fashioned him and breathed into him of His spirit and made for you hearing, sight, and hearts. Little are you grateful.” (Surah As-Sajdah, verse 9)

The context mentions the beginning of human creation and then explicitly refers to descendants. There is therefore no contradiction in the wording between a clay origin and reproductive fluid: the first creation is not identical in every detail to the continuation of human descent. We will return to verse nine when discussing fashioning and spirit, without reducing it to a material description alone.

Describing the fluid as lowly does not permit contempt for a human being because of their beginning. Rather, it counters self-conceit by recalling an origin that the person does not control and whose strength offers no ground for boasting. We have seen that the Quran combines reminders of origin with honour for the Children of Adam; neither meaning should be used to cancel the other.

Dust in the Story of Adam

God Almighty says: “Indeed, the example of Jesus to God is like that of Adam. He created him from dust; then He said to him, ‘Be,’ and he was.” (Quran 3:59)

The verse mentions Adam by name and refers to dust in the context of the argument concerning Jesus, peace be upon him. It is not a list of chemical elements, but rather a statement of God's power and that the strangeness of creation in our view does not

make the created being a god.

Furthermore, the analogy in the verse does not necessitate an exact match in every detail of the birth; the Quran mentions Mary's pregnancy with Jesus in its various places. The comparison should be read in its proper context and not transformed into an equation that erases the explicit differences between the two stories.

Clay and sticky clay

God Almighty says: “It is He who created you from clay, then decreed a term—a term specified with Him—then you doubt.” (Surah Al-An'am, verse 2)

God Almighty said: “So ask them, ‘Are they stronger in creation or those We have created?’ Indeed, We created them from sticky clay.” (Surah As-Saffat, verse 11)

The word “clay” refers to the earth when it is mixed with water, and “sticky” describes its cohesion and adherence. The verse in As-Saffat comes in a discourse that rebukes the denial of creation and the power to create. The apparent weakness of matter in the eyes of humans does not preclude divine power from being connected to it.

Herein lies the benefit of combining the surahs: the word “dust” refers to the earthly origin, and the word “clay” refers to one of its forms. The difference in terminology does not necessarily imply a difference between two opposing narratives. At the same time, these words alone do not establish the number of days or years that each stage took.

Hama' Masnun and Salsal: Altered Mud and Sounding Clay

God Almighty says: {And We have certainly created man from clay, from molded mud.} [Al-Hijr 15:26]

God Almighty says: 'And the jinn We created before, from scorching fire.' [Al-Hijr 15:27]

God Almighty says: {And when your Lord said to the angels, “Indeed, I am going to create a human being from clay, from molded mud.”} [Al-Hijr 15:28]

God Almighty said: “So when I have fashioned him and breathed into him of My spirit, then fall down prostrating before him.” (Surah Al-Hijr, verse 29)

This group of verses mentions the material of creation in connection with a comparison to the creation of the jinn, followed by fashioning, the breathing of the spirit and prostration. Prostration will be discussed in the next chapter; here we pause over the terms describing the material.

Al-Tabarsi, in Majma' al-Bayan, presents the meanings of “salsal” (clay), including dry clay that makes a sound when tapped, and he explains “hama’” (mud) as altered clay. He mentions several meanings for “masnun” (molded), including cast, shaped, and altered. Honesty requires showing this diversity, not claiming that a single linguistic detail is the sole meaning of the verse. [1]

Al-Tabarsi brings together dust, clay, altered mud and sounding clay as descriptions

of different states of the material from which Adam was created, rather than contradictory reports. This is an interpretive reading of the terms together; it does not by itself provide material quantities or timings that the Quran does not state. [1]

God Almighty says: “He created man from pottery-like clay.” (Surah Ar-Rahman, verse 14).

The simile remains: “like pottery.” Therefore, it is not permissible to interpret the simile as a definitive assertion that the body was placed in fire like pottery; this is an unnecessary detail added to the verse. The simile may clarify a characteristic of the material without conveying all the stages of its creation.

Water: Meaning changes with context

God Almighty says: “Have those who disbelieved not considered that the heavens and the earth were a joined entity, then We separated them, and made from water every living thing? Will they not then believe?” (Quran 21:30)

God Almighty says: “And it is He who created man from water and made for him kindred by blood and marriage. And ever is your Lord Powerful.” (Quran 25:54)

Water appears in the general context of life, in the context of human beings and kinship by blood and marriage, and in Surah As-Sajdah in the discussion of descendants. We should not erase these differences of context by imposing a single laboratory definition on every occurrence. Describing reproductive material as water does not mean semen is pure water with no other components, just as the general verse about life is not a table of the percentages of water in organs.

The study of water and its functions in the body has its own scientific domain. What we need now is to preserve the Quranic meaning in its proper context, and then present the scientific information as independent knowledge that can aid in contemplation, not as a forced translation for every word.

From Sulalah (Extract) to Nutfah (Drop)

God Almighty said: {And We have certainly created man from an extract of clay.} (Surah Al-Mu'minun, verse 12)

God Almighty said: “Then We made him a sperm-drop in a secure lodging.” (Surah Al-Mu'minun, verse 13)

God Almighty said: “Then We made the sperm-drop into a clinging clot, and We made the clinging clot into a lump of flesh, and We made the lump of flesh into bones, and We clothed the bones with flesh; then We produced him as another creation. So blessed is God, the best of creators.” (Surah Al-Mu'minun, verse 14)

We have included the complete group of verses to make the transition in context clear, while leaving embryological detail to its own part of the book. There we will examine the meanings of nutfah, alaqah and mudghah, what embryology describes about the overlapping development of organs, and when a comparison is justified or becomes strained.

We do not assign a specific week of pregnancy to each word without linguistic and

scientific evidence. Likewise, we do not automatically equate "the other creation" with an event that can be measured by a medical device; this is a matter of interpretation and narration that will be presented with its own arguments and limitations.

Creation in the First Sermon of Nahj al-Balaghah

In the first sermon attributed to the Commander of the Faithful (peace be upon him) in Nahj al-Balaghah, there is a description of gathering soil from different types of earth, mixing it with water, then shaping and smoothing it, until the transition occurs to a human being with intellect, limbs, and knowledge. Among its words are: "Then He, Glory be to Him, gathered from the earth's roughness and its smoothness, its sweetness and its saltiness, soil." [2]

The sermon connects matter, form, and the forces by which man operates, not stopping at the earth alone. When reading it, one must separate its text from the commentator's annotations, especially when the footnotes contain scientific or philosophical language belonging to the era of the commentary.

Furthermore, the expressions in the sermon are not a substitute for modern anatomical terminology. We read it within its rhetorical and doctrinal context, and then study nerves and tissues using its methods. No independent investigation of all the methods of transmission in this sermon has been undertaken here; attribution to Nahj al-Balagha does not equate to a claim of continuous transmission in this edition.

Attributing the Spirit to God Does Not Divide the Divine Essence

A reader might suppose that 'of My spirit' means the human being contains a part of God. That does not follow from the possessive expression. Majma' al-Bayan explains the attribution here in terms of honour and ownership. [1]

In Al-Kafi, in the chapter on spirit in the Book of Divine Unity, al-Ahwal asks Imam al-Sadiq, peace be upon him, about the spirit in Adam. The reply is: 'This is a created spirit, and the spirit in Jesus is created.' Al-Majlisi grades the first hadith as sahih, or sound, in Mir'at al-Uqul, vol. 2, p. 82. [3]

This narration is clearer in our question than an imagined description of the blowing; it proves that the aforementioned soul is created. Therefore, we do not treat the blowing as a physical breathing of God Almighty, nor do we ascribe to it an instrument or movement characteristic of a created being. As for the true connection of the soul to the body, and the difference between the meanings of the soul in the texts, these will be discussed in their respective places.

Between the Origin of Matter and Scientific Interpretation

Proving the earthly origin does not exempt us from studying the cell. Knowing the matter from which something is formed is not equivalent to knowing its organization and function. Many things can share some components, yet differ greatly in their structure. Therefore, life cannot be reduced to a list of names.

Conversely, finding an element both in soil and in the body does not by itself

establish how Adam was created. Similarity in some components is a narrower finding than an explanation of the entire history of human origins. We will examine evidence about human origins in modern science in a separate chapter, distinguishing what can be tested from what belongs to reports of the unseen.

Scientific research into the mechanisms of creation does not, in itself, become a judgment on the value of humankind. One whose origin is simple matter is not less dignified, nor is one whose power surpasses others more entitled to injustice. The question of humanity and its rights began with the book, and it must remain present as we study its material nature.

From the Earth, and to it, and from it again.

God Almighty says: “From it We created you, and into it We will return you, and from it We will bring you forth once more.” (Surah Ta-Ha, verse 55).

This verse encompasses the beginning, the return, and the resurrection once more. The earth, in this narrative, is not merely the place of birth and work; it is also connected to death and resurrection. We will return to the decomposition of the body from the perspective of scientific knowledge, and to the resurrection from the perspective of scripture, without confusing the observation of the change in matter with the description of the unseen.

Thus, remembering the dust is not an invitation to hate the body, but rather to humility that protects it from arrogance, and to the understanding that it is a trust with a limited lifespan. From the material of creation, we now move to Adam, peace be upon him: to his creation, the teaching of the names, the prostration, Paradise, and the descent, as presented in the Quran.

Chapter Three References

[1] Al-Fadl ibn al-Hasan al-Tabarsi, Majma' al-Bayan fi Tafsir al-Quran, commentary on Al-Hijr 26-35, especially the linguistic discussion, the relationship between terms for the material of creation, and the explanation of attributing the spirit to God.

[2] Nahj al-Balaghah, compiled by al-Sharif al-Radi, First Sermon, section on the description of the creation of Adam, peace be upon him; the text displayed in the Rafid Library with commentary. The text of the sermon was used, not the scholarly or theological annotations of the commentator, and no independent investigation of its chains of transmission was conducted.

[3] Al-Kulayni, Al-Kafi, vol. 1, Book of Tawhid, Chapter on the Spirit, Hadith 1. The text and al-Majlisi's ruling of "authentic" were compared in Mir'at al-'Uqul, vol. 2, p. 82. The ruling pertains to this hadith and does not apply to the rest of the hadiths in the chapter.

Chapter 4: The Creation of Adam, Peace Be upon Him

When a person looks to the beginning of the path, they are not merely searching for the history of the body; they also ask: How did knowledge begin? Where did responsibility come from? Was the earth a purposeless exile, or a field for a life meant to know its Lord? Here, the story of Adam, peace be upon him, leads us from questioning matter to questioning meaning. Clay is present, but with it come teaching, choice, warning, and mercy.

We do not tell this beginning as an open story whose gaps can be filled with whatever excites the listener. We begin with the Quran, then draw on its interpretation and narrations from the Ahl al-Bayt, peace be upon them, distinguishing the text, its interpretation and unestablished details. Since the prophets' lives receive fuller treatment in The Story of Guidance, our concern here is what Adam's story reveals about the human being.

1. The Earth in the Origin of the Declaration

“And when your Lord said to the angels, ‘Indeed, I will make upon the earth a successor.’ They said, ‘Will You place upon it one who causes corruption therein and sheds blood, while we exalt You with praise and declare Your holiness?’ He said, ‘Indeed, I know that which you do not know.’” [Al-Baqarah: 30]

The earth is mentioned in this declaration before the discussion of entering and leaving Paradise. Therefore, it is incorrect to imagine earthly life as an accident that surprised divine wisdom, or a project that arose because something escaped divine knowledge. There is a designation, knowledge, and purpose, even if questions remain about the details of the path.

The verse does not conceal the corruption and bloodshed that humans commit, but it does not reduce humanity to these two things alone. Among his descendants are those who wound, and among his descendants are those who heal wounds; some destroy, and some build. What God has reserved for His knowledge cannot be encompassed by a reading that judges humanity solely by the evil they commit.

In the interpretation of Al-Mizan, the angels' statement is read as a request to understand wisdom, not as an argument with God. The teaching of the names is understood as the key to the vicegerency for which humanity has been qualified. This is an explanatory statement of the context, not an addition to the words of the verse. [1]

2. A Fashioned Body and a Created Spirit

In the previous chapter we encountered clay, fashioning and the breathing of the spirit in the verses of Al-Hijr and As-Sajdah. Here we draw their implications together without repeating all the texts: Adam's material does not make him divine, attributing the spirit to God does not mean that Adam contains part of God's essence, and knowing something about the body's composition does not mean we comprehend the mystery of its life.

In a reading consistent with divine unity, breathing does not become an image of a physical being blowing through a bodily organ. We believe what God has stated in a manner consistent with His transcendence, and refrain from inventing a mechanism the text has not explained. The report in Al-Kafi that the spirit mentioned in Adam's creation is created has already been presented, with its location and al-Majlisi's reported grading.

3. Teaching the Names: Knowledge at the Beginning of the Story

“And He taught Adam all the names, then presented them to the angels and said,

‘Inform Me of the names of these, if you are truthful.’” [Al-Baqarah: 31]

“They said, ‘Glory be to You! We have no knowledge except what You have taught us. Indeed, it is You who is the All-Knowing, the All-Wise.’” [Al-Baqarah: 32]

He said, “O Adam, inform them of their names.” And when he had informed them of their names, He said, “Did I not tell you that I know the unseen [aspects] of the heavens and the earth? And I know what you reveal and what you conceal.” [Al-Baqarah: 33]

At the beginning of this honor stands education. The distinction was not based on physical size or strength. Knowledge here is a gift from God; therefore, those who have learned have no right to use their knowledge as a reason to forget the first teacher, or as an excuse to despise those who did not have the opportunity to learn.

What are these names? Al-Tabataba'i holds that the teaching goes deeper than memorising the words of a language and concerns knowledge of the realities of the things named, drawing on the context of presenting them and declaring their names. We attribute this reading to him; we do not derive from the verses a detailed list of the sciences and crafts Adam knew. Such a list would require specific evidence. [1]

The angels' response remains a valuable lesson for every seeker: to acknowledge the limits of one's knowledge. Saying "I do not know" is not a flaw in claiming knowledge; the flaw lies in concealing our ignorance by attributing what we do not know to God or His saints.

4. Prostration, Reverence, and the Test of Arrogance

{And when We said to the angels, "Prostrate to Adam," they prostrated, except for Iblis, who refused and was arrogant and became of the disbelievers.} [Al-Baqarah: 34]

And when We said to the angels, “Prostrate to Adam,” they prostrated, except for Iblis. He was of the jinn and disobeyed the command of his Lord. Then will you take him and his descendants as allies other than Me while they are enemies to you? Wretched is the exchange for the wrongdoers. [Al-Kahf: 50]

The prostration in the story occurred by God’s command, not as a declaration that Adam was a god worthy of worship. The honor bestowed upon him did not absolve him of servitude. Furthermore, we do not use this incident alone as a basis for establishing a practical ruling on prostrating to individuals; rulings have their own evidence and specific contexts.

The Quran states that Iblis is from the jinn; therefore, we do not describe him as an angel who transformed into a devil. The difference in the situation is not between one who asks and one who does not, but between a question seeking understanding and an arrogance that rejects the matter. A person may possess much information yet remain incapable of submitting to the truth; in this case, knowledge becomes an argument against him instead of a path to salvation.

5. Paradise: Blessing and the Limits of Approaching

{And We said, "O Adam, dwell, you and your wife, in Paradise and eat freely from it wherever you wish. But do not approach this tree, lest you be among the wrongdoers."} [Al-Baqarah: 35]

“So We said, ‘O Adam, indeed this is an enemy to you and to your wife. Then let him not expel you from Paradise so you would suffer.’” [Ta-Ha: 117]

“Indeed, you will not be hungry therein or be naked.” [Ta-Ha: 118]

“And that you will not thirst therein or be exposed to the sun’s heat.” [Ta-Ha: 119]

Food, drink, shelter, and protection from the sun: needs similar to our physical experience, mentioned in the description of the blessings of Paradise. The prohibition against a tree does not make the entire scene one of deprivation; the verse mentions abundance and plenty before mentioning the limit.

As for determining the location of Paradise, and whether it is the Paradise of the Hereafter or another Paradise, we do not settle this with a modern map or the name of a country commonly known. In al-Kafi, there is a narration from Imam al-Sadiq (peace be upon him) describing it as “a paradise among the paradises of this world,” and explaining that if it were among the paradises of the Hereafter, Adam would not have left it. Al-Majlisi’s ruling on this narration was compared in Mir’at al-‘Uqul, vol. 14, p. 230, and it is considered “unknown”; therefore, we do not present it as an authentic narration with definitive meaning. [2]

Al-Mizan offers another interpretation describing Adam’s Paradise as an intermediate Paradise. We mention the point of disagreement without combining the different interpretations into a single description, and without claiming that the Qur’an specified its coordinates or the details of its environment. The lesson of the story does not depend on our ability to map its location. [3]

6. How Does Temptation Present an Illusion as a Promise?

“Then Satan whispered to them, to reveal to them what was hidden from them of their private parts. He said, ‘Your Lord did not forbid you this tree except that you become angels or become of the immortal.’” [Al-A'raf: 20]

“And he swore to them, ‘Indeed, I am to you a sincere advisor.’” [Al-A'raf: 21]

“Then Satan whispered to him, saying, ‘O Adam, shall I show you the tree of immortality and a kingdom that will never perish?’” [Ta-Ha: 120]

The promise was not made in the name of harm, but rather in the name of immortality, kingdom, and advice. This opens a wide door to understanding deception: a harmful invitation may disguise itself as a desired benefit. Not every oath is truthful, nor is every statement about good proof of the speaker's trustworthiness.

These verses do not call the tree an apple, nor do they make the first woman the origin of evil. The dual form in Al-A'raf is clear, and in Ta-Ha, the whispering is directed at Adam himself. Therefore, it is not correct to fill the story with things that

place the blame solely on the woman, or to add a serpent, a peacock, and a detailed scene without verifying the source.

7. The Language of Disobedience and the Question of Infallibility

{And We had already made a covenant with Adam before, but he forgot; and We did not find in him determination.} [Ta-Ha: 115]

{So they both ate of it, and their private parts became visible to them, and they began to fasten together leaves from Paradise to cover themselves. And Adam disobeyed his Lord and erred.} [Ta-Ha: 121]

“Then his Lord chose him, accepted his repentance, and guided him.” [Ta-Ha: 122]

These words are part of the Quran, so we do not omit them to avoid questioning, nor do we separate them from the choosing, repentance, and guidance that follow. In the Imamite reading that believes in the infallibility of the prophets, the meaning of command, prohibition, and disobedience is examined in this context, and the incident is not automatically equated with a legislative transgression deserving punishment.

Among the points of explanation presented by Al-Mizan is that the prohibition was guidance towards preserving the blessings of Paradise, not a binding legislative prohibition. Therefore, disobeying it results in hardship in earthly life, not punishment for a legislative sin. This is linked to the occurrence of the story before the legislation of religion in earthly life, and the omission of the preferable course of action is explained in this context. This is an interpretive choice by its author; there is no explicit wording in the verse, nor is it a claim that all Imami scholars formulated the issue in the same way. [3]

Clarifying this distinction does not offer a device for relabelling our sins as merely leaving the better course, tark al-awla; the rulings that apply to us do not change with the descriptions we choose. The aim is to understand the event in context, safeguard the standing of prophethood against hasty judgements, and retain the complete Quranic text in the discussion.

8. Repentance, Descent, and the Promise of Guidance

{They said, “Our Lord, we have wronged ourselves, and if You do not forgive us and have mercy upon us, we will surely be among the losers.”} [Al-A'raf: 23]

'Then Adam received words from his Lord, and He accepted his repentance. Indeed, He is the Accepter of Repentance, the Merciful.' [Al-Baqarah: 37]

We said, “Descend from it, all of you. And when guidance comes to you from Me, whoever follows My guidance - there will be no fear concerning them, nor will they grieve.” [Al-Baqarah: 38]

And those who disbelieve and deny Our signs - those are the companions of the Fire; they will abide therein eternally. [Al-Baqarah: 39]

The scene does not end with the exposure of their private parts or the loss of blessings: there is acknowledgement, mercy and a promise of guidance. The human being was not left on earth without a message to provide direction. Reports and

interpretations identifying the words Adam received require their transmission routes to be brought together and examined; an unverified identification must not become part of the verse itself.

It is not just for God to burden Adam's descendants with the sin of an act they did not commit. The Quran establishes the principle of individual responsibility:

“Say, ‘Is it other than Allah I should seek as a lord while He is the Lord of all things? And every soul earns not [blame] except against itself, and no bearer of burdens will bear the burden of another. Then to your Lord is your return, and He will inform you concerning that over which you used to differ.’” [Al-An'am: 164]

We inherit conditions and consequences in the world, but that is not the same as inheriting a personal sin for which God will hold us accountable merely because of our lineage. A child is not born guilty and in need of apologizing for his existence; A human being is born with dignity, and their responsibility begins according to their demonstrated ability and assigned duties.

9. What We Take with Us from the Story of Adam

We emerge from this beginning with knowledge, not imagined details: humankind is created and honored, capable of learning, and surrounded by a call to guidance and an enmity that seeks to mislead them. Arrogance is dangerous even with knowledge, and returning to God is a door that despair should not close.

In this chapter, we do not assert the height or age of Adam, the place of his descent, or the numerical date of his creation; these are matters that cannot be established by rumor or a narration whose source we do not know. Every piece of information has its place in examination, and our refraining from adding to the Quranic story does not diminish it.

When the Quran says 'you and your spouse', a bond appears at the beginning of the human story that must not be treated as marginal: the beginning of the family. From here we turn to Eve, to the unity of human origins, and to what the texts do and do not say about the creation of the couple.

Chapter Four References

[1] Muhammad Husayn al-Tabataba'i, Al-Mizan fi Tafsir al-Qur'an, Tafsir al-Baqarah 30–33; Tafsir of the angels' question and the teaching of the names. The opinion is attributed to its author, and the narrations cited in the research are not considered to have verified chains of transmission.

[2] Al-Kulayni, Al-Kafi, vol. 3, Book of Funerals, Chapter on the Paradise of This World, Hadith 2, on the authority of al-Husayn ibn Maysar. The text and al-Majlisi's ruling of "unknown" are compared in Mir'at al-'Uqul, vol. 14, p. 230; this is not the first hadith of the chapter.

[3] Al-Tabataba'i, Al-Mizan, commentary on Ta-Ha 115-126: the nature of Adam's garden, the prohibition understood as guidance, infallibility and divine choosing. The chapter presents this reading as an interpretation, without treating its details as matters of agreement.

Chapter 5: The Creation of Eve and the Beginning of the Human Family

The story of humanity is not told in a single voice. In the first scene the Quran recounts of dwelling in Paradise, Adam and his wife appear together. When life spreads after them, men are not of noble lineage and women of inferior lineage; they are all children of one human bond. Therefore, the search for Eve is not a mere detail in the story of Adam, but rather a search for half of this story, for the meaning of the relationship with which the family began.

We will use the name Eve as it appears in Islamic narratives and traditions, noting that the Quran does not mention this name, but rather refers to Adam's wife. This is a small difference in wording, but it is important for documentation: not every name commonly found in Quranic stories is found in its exact wording.

1. One Soul: Unity of Origin Before Diversity of Roles

“O mankind, fear your Lord, who created you from one soul and created from it its mate and dispersed from both of them many men and women. And fear Allah, through whom you ask one another, and [do not cut off] the ties of kinship. Indeed Allah is ever, over you, an Observer.” [An-Nisa: 1]

This verse combines the origin of creation, piety, and kinship. Knowledge of lineage, therefore, is not a historical pleasure isolated from conduct. Whoever knows that others share their humanity is not permitted to exploit their weakness, and whoever remembers kinship does not make closeness an occasion for exploitation.

Al-Mizan interprets the single soul as Adam, and its mate as his wife, and reads “from it” in terms of the unity of the species and human similarity; thus, he sees no evidence in the verse itself for Eve being created from a rib. This interpretation, attributed to its author, separates the meaning of the Quranic phrase from the disputed narrative detail. [1]

The unity of origin does not negate all physical differences or every detail in rulings, just as the existence of differences does not imply a difference in human value. The error begins when we move from describing a function or constitution to judging that a human being is less deserving of dignity simply because they are a woman or a man.

2. The Rib Narrative: What do we establish, and what do we leave for investigation?

The saying that Eve was created from Adam's rib is common in popular discourse and may be used as a pretext to describe all women as crooked. However, the widespread use of this saying does not absolve us from two distinct questions: What text are we referring to, and what can we possibly infer from it?

In Shaykh al-Saduq's *Ilal al-Shara'i*, within the chapter on the reason for the origin of procreation, there is a narration by Zurarah on the authority of Imam al-Sadiq (peace be upon him), which includes a denial of the claim that Eve was created from

Adam's far left rib. It poses a rhetorical question about the assertion that divine power is incapable of creating a wife from anything other than a rib, followed by a detailed account of her creation and the intimacy she brings. [2]

The mere presence of this narration in a reputable book is insufficient to definitively establish the authenticity of all its narrators or to be certain of every detail of its text. Therefore, we will establish its location and its content related to the dispute, without offering a narrators' authentication that we have not verified, nor will we recount its complete, detailed story and then expect the reader to treat it as a divine revelation.

The methodological conclusion is clear: the creation of Eve from a rib is not a Quranic text, and there are Imami narrations that refute this image. However, the final determination of which narration to rely on and reconciles all the different accounts requires a thorough examination of their chains of transmission, and cannot be achieved by simply extracting a sentence from a single narration.

Even if we were to examine a narration that mentions a rib, discussing how an individual was created at the beginning of existence is one thing, and judging the morals of all women in the world is another. Describing the material of creation does not lead to a judgment that a woman is a liar, lacks dignity, or deserves humiliation. That is an addition by the speaker that requires evidence, and it is not a necessary conclusion from the narration.

3. Addressed Together, Not the Source of Men's Evil

“And O Adam, dwell, you and your wife, in Paradise and eat from wherever you will, but do not approach this tree, lest you be among the wrongdoers.” [Al-A'raf: 19]

[So he deceived them with delusion. And when they tasted of the tree, their private parts became apparent to them, and they began to fasten together leaves from Paradise to cover themselves. And their Lord called to them, “Did I not forbid you from that tree and tell you that Satan is a clear enemy to you?”] [Al-A'raf: 22]

They said, “Our Lord, we have wronged ourselves, and if You do not forgive us and have mercy upon us, we will surely be among the losers.” [Al-A'raf: 23]

The address is to them, the deception is to them, and the confession is from them. The whisperings were directed to Adam in Surah Ta-Ha. Therefore, we have no right to replace this image with a story that makes Eve the sole tempter, and then burdens all her daughters with an inherited sin.

The exposed body in the story is not a reason to despise the body; their seeking to cover themselves embodies the meaning of modesty. We will return to the body, covering, and marital relations in their respective places, but we note here that modesty is not equivalent to hating one's creation, and that woman is not the sin from which man must be rid.

4. Tranquility, Affection, and Mercy

“And of His signs is that He created for you from yourselves mates that you may find tranquility in them; and He placed between you affection and mercy. Indeed in that

are signs for a people who give thought.” [Ar-Rum: 21]

Tranquility is not merely a roof that shelters two bodies; people may live together in a house, yet each may live in fear of the other. It is a concept in which one finds the security of closeness, supported by affection and mercy. Affection manifests itself in care, and mercy is especially evident when one partner is weak or needs patience that is not dictated by the beauty of the moment.

Therefore, it is inappropriate to recount the story of the first family in a way that reduces the wife to a mere instrument for procreation. Having children is one aspect of married life, but not the sole meaning of partnership, nor is it the measure of dignity for those who are childless. Children may be delayed or not come at all, and both spouses retain the right to respect and humane companionship.

O you who have believed, it is not lawful for you to inherit women against their will, nor should you make difficulties for them in order to take [back] part of what you gave them unless they commit a clear immorality. And live with them in kindness. For if you dislike them - perhaps you dislike a thing in which Allah has placed much good. [An-Nisa: 19]

We will establish the verse in its entirety, then take from it what concerns us: kind treatment, not turning closeness into domination. As for the details of the exception and the financial and marital rulings, these are referred to its interpretation and jurisprudence, and we will not derive arbitrary rulings from it in a chapter about the origin of humankind.

5. Pregnancy in the Text and the Question of Attributing Polytheism

'It is He who created you from a single soul and made from it its mate, so that he might find tranquillity with her. When he lay with her, she conceived a light burden and continued with it. When it became heavy, they both called upon God, their Lord: If You grant us a sound child, we will surely be grateful.' [Al-A'raf: 189]

[But when He gave them a good child, they attributed partners to Him concerning that which He had given them. Exalted is God above what they associate with Him.] [Al-A'raf: 190]

We do not detach the first verse from the next, or hasten to attribute worship of other than God to Adam and Eve. Al-Mizan reads the scene as describing human parents generally, among the descendants of Adam. It draws on the plural wording and the subsequent condemnation of polytheism, and rejects reports attributing polytheism to Adam in a way that contradicts his being chosen and guided. This states the commentator's position; it neither removes nor replaces the Quranic sentence. [3]

As for the stories that specify the number of Eve's pregnancies, the names of the children, or make their lives dependent on a name suggested by Satan, we do not include them here as a fixed historical record. The reader's need for a coherent narrative does not give the writer the right to compile conflicting accounts into a biography that appears certain.

6. Women on the Path to Closeness to God

'Indeed, the Muslim men and Muslim women, the believing men and believing women, the obedient men and obedient women, the truthful men and truthful women, the patient men and patient women, the humble men and humble women, the men who give charity and the women who give charity, the fasting men and fasting women, the men who guard their chastity and the women who guard theirs, and the men who remember God often and the women who remember Him: God has prepared for them forgiveness and a great reward.' [Al-Ahzab: 35]

In this detailed account, we hear mention of men and women in Islam, faith, truthfulness, patience, humility, charity, fasting, chastity, and remembrance of God. A woman is not reduced to her relationship with a man; she is addressed in her own right, her actions are accounted for, and the path to closeness to God is open to her.

When we later read about Fatima al-Zahra (peace be upon her), Mary, the mother of Moses, and other female role models in the text, this principle should remain present: virtue is not granted to one body and withheld from another simply because of gender. Rather, a person is revealed through their chosen faith and actions, and through the grace bestowed upon them by God.

7. From the Couple to Their Descendants

The beginning of the family is therefore not merely a story of a rib whose details we differ on, but rather a story of a single origin, a dwelling place, a shared discourse, and a shared responsibility. And with the transition from spouses to offspring, the question expands: How did procreation begin, how do we read its accounts, and how did people become nations and tribes without their shared humanity being severed? That is the subject of the next chapter.

Chapter Five References

[1] Al-Tabataba'i, Al-Mizan, commentary on An-Nisa: 1; the meaning of the single soul and the unity of the species in the creation of the spouse.

[2] Sheikh Al-Saduq, Ilal Al-Shara'i', Vol. 1, Chapter 17 “The Reason for How Procreation Began,” Hadith 1, pp. 17–18. The hadith was included to clarify the existence of a narration denying creation from a rib, and no authentication of its chain of transmission or generalization of all its details was adopted.

[3] Al-Tabataba'i, Al-Mizan, Interpretation of Al-A'raf 189–198; Aspects of understanding the spouses in verses 189–190 and a critique of attributing polytheism to Adam.

Chapter 6: Adam's Descendants and the Spread of Humanity

From the first household, families branched out, and from the children, circles of kinship expanded until even those distant, whose language we do not understand, became our partners in humanity. Between the beginning of the story and its present lies a vast distance that no single record can fill. The Quran clarifies for us the principles of lineage, responsibility, and mutual recognition, while narratives add

varying accounts, and the human sciences examine material evidence. Understanding is not sound if we treat these different forms of knowledge as a single entity.

1. Progeny is an extension of life, not a repetition of Adam's creation.

“And Allah created you from dust, then from a sperm-drop, then made you pairs. And no female conceives nor gives birth except with His knowledge. And no one is granted long life nor is his lifespan shortened except that it is in a record. Indeed, that, for Allah, is easy.” [Fatir: 11]

In the verses of Surah As-Sajdah, we distinguished the beginning of creation from clay from the making of descendants from a lowly fluid. Here the reference to origin is followed by the drop, then pairs, pregnancy, birth and lifespan. Each newborn does not begin in the same exceptional manner described for Adam's creation. Descendants come through reproduction, whose details we will examine in the parts on cells, heredity and reproduction.

The lineage of Adam and his wife was discussed at the beginning of Surah An-Nisa (The Women). In the reading adopted by this book, it establishes the unity of the origin of humankind, but it does not provide a complete list of the names of their generations, their places of residence, and their birth dates. Whenever we request further details, we must also request supporting evidence.

2. How did the first generation of children reproduce?

This is one of the questions that is often addressed with certainty in gatherings, even though its narrative and exegetical basis requires careful consideration. The verse in Surah An-Nisa does not contain a list of the spouses of Adam's sons, nor an explicit description of how they were married. Therefore, a distinction must be made between what the text of the verse states and what the interpreter infers or what is reported.

In his commentary on An-Nisa: 1 in Al-Mizan, al-Tabataba'i favours the view that Adam's sons and daughters married one another at that beginning. He bases this on his reading that the descendants originated only from Adam and his spouse, and explains it by a difference in the law applicable at that time. We record this as his opinion and reasoning, not as an agreed view among Imami scholars. [1]

In contrast, al-Saduq, in his *`Ilal al-Shara`i`, in the chapter on the reason for the origin of procreation, cites two reports that refute this account. The second report states that two wives were sent down from Paradise for two sons of Adam, and that procreation continued through intermarriage in the following generation. This is the gist of the report, not an established fact that we declare to be true simply because it is reported. The chain of transmission for the second report includes the phrase "from someone who heard Zurarah," which is clearly ambiguous regarding one of its intermediaries; therefore, we cannot deem it authentic without further investigation. [2]

We do not resolve this discrepancy by claiming that all the narrations are in agreement, nor do we fill the gap between the texts with historical speculation.

Divine power is not limited by our understanding, but the possibility of a particular method does not prove that it was the method that occurred. Similarly, a commentator's preference for one interpretation of a verse does not make the names of the wives and their dates explicitly stated within it.

The details therefore remain among the questions for which an independent assessment weighing the narrations has not been completed in this inquiry. Suspending judgement does not challenge creation itself or humanity's shared origin; it defines the limits of the available evidence. Studying the laws of that beginning has no bearing on justifying forbidden relationships in people's lives today.

3. The Two Sons of Adam: When Kinship Does Not Prevent Injustice

“And recite to them the story of the two sons of Adam, in truth, when they both offered a sacrifice [to Allah], and it was accepted from one of them but was not accepted from the other. He said, ‘I will surely kill you.’ He said, ‘Indeed, Allah only accepts from the righteous.’” [Al-Ma'idah: 27]

“If you stretch out your hand to kill me, I will not stretch out my hand to kill you. Indeed, I fear Allah, Lord of the worlds.” [Al-Ma'idah: 28]

“Indeed, I want you to bear my sin and your own sin and thus be among the companions of the Fire. And that is the recompense of the wrongdoers.” [Al-Ma'idah: 29]

“So his soul prompted him to kill his brother, and he killed him and became one of the losers.” [Al-Ma'idah: 30]

“Then Allah sent a raven searching in the ground to show him how to bury the body of his brother. He said, ‘Woe to me! Am I not even able to be like this raven and bury the body of my brother?’ And he became one of the regretful.” [Al-Ma'idah: 31]

The Quran does not name the two sons in these verses, although they are known in narratives as Cain and Abel. Nor does it mention that the dispute was over the marriage of a sister, nor does it specify the type of sacrifice, the instrument of killing, or its location. The central scene is the acceptance of the act of piety, followed by the threat, then the killing of the brother and the subsequent remorse.

Kinship may be a source of mercy, but it does not protect one from envy. The act of aggression is not lessened simply because the victim is a brother; rather, it is compounded by the betrayal of a bond that was supposed to protect him. Furthermore, the brother's refusal to kill does not, in itself, constitute a general ruling invalidating all legitimate self-defense; that is a matter of jurisprudence with its own evidence and context.

The presence of the raven offers a lesson in the limitations of humankind: those endowed with reason may need to learn from a scene in nature what they were previously unaware of. However, we do not interpret this as claiming that all human knowledge began in the same way, nor do we add to the narrative animals and scenes not mentioned in the text.

[Because of that, We decreed upon the Children of Israel that whoever kills a soul

unless for a soul or for corruption [done] in the land - it is as if he had killed all of mankind. And whoever saves one - it is as if he had saved all of mankind. And Our messengers had certainly come to them with clear proofs. Then indeed, many of them, after that, throughout the land, are transgressors.] [Al-Ma'idah: 32]

We read the verse with its opening, which relates to the Children of Israel, and with its conditions, not as a truncated slogan. Within the context of the story, it emphasizes the sanctity of life. It does not grant individuals the right to issue or carry out death sentences themselves; proving guilt, judging, and punishing are not entrusted to human anger or suspicion.

4. The diversity of languages and colors is not a difference in the essence of dignity.

“And among His signs is the creation of the heavens and the earth and the diversity of your languages and your colors. Indeed in that are signs for those of knowledge.” [Ar-Rum: 22]

“O mankind, indeed We have created you from male and female and made you peoples and tribes that you may know one another. Indeed, the most noble of you in the sight of Allah is the most righteous of you. Indeed, Allah is Knowing and Acquainted.” [Al-Hujurat: 13]

People are not required to become one color or speak one language in order to recognize one another. Difference is mentioned within the verses, and mutual understanding is a stated objective in their division into peoples and tribes. Therefore, skin color is not a valid measure of morality, nor is tribal affiliation a pre-existing certificate of virtue.

In al-Kafi, there is a narration from Imam Ali ibn al-Husayn (peace be upon them both) distinguishing between loving one's people and aiding them in injustice, and condemning the preference of their worst over the best of others. His words are: “It is not tribalism for a man to love his people, but it is tribalism to aid his people in injustice.” Al-Thaqalayn quotes al-Majlisi as deeming the narration weak; therefore, we include it with this note, and we do not make it the sole basis for rejecting injustice, which is indicated by the principles of the Qur'an. [3]

A person can love his family, his dialect, and his country without insulting others. Indeed, the truest support for his people may be to deter them from injustice they mistakenly believe to be their glory. As for noble lineage, it is a matter of respect, but there is no justification for aggression, nor is there any substitute for individual responsibility for one's actions.

5. Human Dispersal: Texts and Material Evidence

Where did the earliest groups cross, and when was each continent inhabited? The verse about human descent does not answer these questions with detailed routes and dates. Archaeology, fossil studies, genetics and the study of past climates investigate them. Each piece of evidence has limits, and each estimate carries uncertainty.

We do not treat a later genealogical list as a precise clock measuring all of prehistory. Nor do we link every contemporary people to a specific son of Adam or Noah without investigation; names may change, groups may overlap, and languages may spread among people who do not share a single close ancestor.

In Chapter Eight we will read scientific evidence on its own terms and distinguish genetic kinship, family descent, and honour and religious obligation in religious discourse. A genetic test does not measure piety, and pride in a religious lineage does not provide evidence for dating a rock layer.

6. Humanity is More Than a Genealogy

Knowing one's origins helps us preserve relationships, but it does not define a person. A close relative may be far removed in deeds, and we may find in a stranger a compassion we did not find in a relative. From the family tree emerges a deeper question: What is the connection that binds a person to their Lord before they identify themselves by their family name and tribe?

This question brings us closer to the covenant and innate nature. The story of humanity does not end with who gave birth to them, but rather inquires into what they were created with, what they were made to bear witness to, and how this relates to their freedom and responsibility in life.

References for Chapter Six

[1] Al-Tabataba'i, Al-Mizan, commentary on An-Nisa: 1, section 'Discussion of Reproduction in the Second Generation of Human Beings'. The account is limited to identifying his view, without presenting it as doctrinal consensus or an empirical scientific finding.

[2] Al-Saduq, Ilal al-Shara'i, vol. 1, chapter 17, hadiths 1 and 2, pp. 17-20. The second hadith's chain begins on p. 18, and the account of the two wives concludes on p. 20. Its chain includes an unidentified intermediary, expressed as 'from someone who heard Zurarah'. A comprehensive assessment weighing the chains of reports about the beginning of human reproduction has not been completed here.

[3] Al-Kulayni, Al-Kafi, vol. 2, Book of Faith and Disbelief, Chapter on Tribalism, Hadith 7. Al-Majlisi's ruling on the narration in Al-Thaqalayn: "Weak." The volume number displayed in the "Mirror of Intellects" section was not used because it appeared on the page in an inconsistent manner.

Chapter 7: The Covenant, Fitrah and the Realm of the Primordial Covenant

A child may learn the name of their country years later and may know the names of their ancestors later, but the question about their Lord opens a door deeper than a family record. Does a person's connection with God begin when they hear a lesson in creed, or is there something in their very creation that prepares them for this knowledge? And what is the meaning of the covenant that the Qur'an speaks of?

This chapter calls for care: its terms are familiar from sermons, while its details are among the most debated questions about human beginnings. We do not wish to deny an unseen realm because we cannot imagine it, or turn it into pictured scenes as though we had witnessed it. We will distinguish the fundamental testimony, the meaning of fitrah, and the mode of existence commonly called alam al-dharr.

1. The Text and Purpose of the Covenant

{And when your Lord took from the children of Adam, from their loins, their descendants and made them bear witness against themselves, [saying], “Am I not your Lord?” They said, “Yes, we have testified.” [This was] lest you should say on the Day of Resurrection, “Indeed, we were of this unaware.”} [Al-A'raf: 172]

“Or you might say, ‘Our forefathers were polytheists before us, and we were their descendants after them. Will You then destroy us for what the wrongdoers did?’” [Al-A'raf: 173]

“And thus do We explain the verses, and perhaps they will return [to the truth].” [Al-A'raf: 174]

The text describes taking, calling to witness, a question and an answer, followed by an explanation concerning proof and return. The expression alam al-dharr itself does not occur in these verses; it became familiar through narrations and their interpretation. The verse specifically refers to the Children of Adam, their loins and their descendants. We must not substitute different wording when quoting it and then base an interpretation on that substitution.

Two excuses are present in these two verses: negligence and merely following the forefathers in polytheism. The point is not that a person should be blamed for their lineage, but rather that lineage should not become a barrier preventing them from seeking the truth. We have already discussed that no soul bears the burden of another; the covenant does not negate this principle.

2. Innate disposition is not a book preserved in the newborn's memory.

“So set your face toward the religion, inclining to truth. [Adhere to] the fitrah of Allah upon which He has created mankind. There is no altering the creation of Allah. That is the correct religion, but most of the people do not know.” [Ar-Rum: 30]

Al-Kulayni narrates on the authority of Zurarah that he asked Imam al-Sadiq (peace be upon him) about the fitrah mentioned in the verse, and he replied, “He created them all upon monotheism.” Al-Majlisi deemed this narration authentic, as found in Mir’at al-‘Uqul, vol. 7, p. 57. In another narration from the same chapter, fitrah is linked to Islam and the covenant, and it is mentioned that it includes both believers and disbelievers. [1]

This does not necessitate that a child be born with a memorization of theological terminology, the names of schools of thought, or the details of religious obligations. The innate disposition (fitrah) referred to in the text is distinct from the knowledge acquired through learning. The Quran mentions the beginning of our sensory knowledge in this manner:

“And Allah brought you forth from the wombs of your mothers while you knew nothing, and He gave you hearing, sight, and hearts that you might give thanks.” [An-Nahl: 78]

We read the two verses together without allowing one to negate the other. The readiness for knowledge, or the origin of innate knowledge as explained in the narrations, is not the acquisition of detailed sciences. Not every impulse we feel is a sound instinct simply because it is strong; habit, fear, desire, and what one receives from their environment may all intertwine in a person's feelings.

3. Narrations: Establishing the Source Before Constructing the Image

In the fourth hadith of the chapter on the innate nature of creation in monotheism in

al-Kafi, Zurarah narrates from Imam al-Baqir (peace be upon him) the account of the emergence of Adam's offspring, in which it says: "They emerged like ants." Al-Majlisi judged this fourth hadith to be "good," as mentioned in Mir'at al-'Uqul, vol. 7, p. 57. Here we have a narration with a known source, not merely a popular expression without basis. [1]

However, "like ants" does not provide us with a measure of the size of souls, nor a description of cells or atoms in the modern physical sense. Furthermore, the terms used in the hadith for identification and demonstration are not taken, within the framework of the doctrine of transcendence, to imply that God is a physical body that can be seen by the eyes. We refer the ambiguous to the clear:

“Vision perceives Him not, but He perceives [all] vision. And He is the Subtle, the Acquainted.” [Al-An'am: 103]

In Al-Mahasin by Al-Barqi, there is a narration from Zurarah, on the authority of Imam Al-Sadiq (peace be upon him), who said: “The knowledge was established in their hearts, but they forgot the event,” and he mentions remembering it later. This narration distinguishes between the persistence of knowledge and the recollection of the event, but we do not add to the establishment of its position an independent ruling on the soundness of its chain of transmission, which we have not done here. [2]

This chapter does not equate all the narrations in this section in terms of strength, nor does it transfer the authenticity of one narration to another merely because of a similarity in content. The basic meaning may be established through one method, while the details of place, time, and number may still require further evidence.

4. Aspects of Understanding: Why did the commentators differ?

Majma' al-Bayan presents several understandings of the testimony: bringing forth the descendants in a form described as al-dharr and addressing them; reading the scene as the evidence for God's lordship established in creation and intellect, with acknowledgement expressing the manifestation of proof; and a reading concerning a group to whom proof was established through messengers. It also presents objections to some of these readings. Disagreement about how the testimony occurred is therefore not a modern invention. [3]

Al-Mizan criticises reducing the covenant to material particles carrying people's complete personalities before earthly life; it also finds an interpretation solely as an implicit expression of their earthly condition insufficient. It favours a human mode of existence with a malakuti, or unseen-realm, aspect, preceding this life in rank rather than as an earlier earthly history of the same kind, in which testimony and address are real. This summarises its view; it does not claim that the interpretation is unique or that the word malakuti occurs in the covenant verse. [4]

Therefore, we should ask precisely: Is the disagreement about the very existence of humankind's testimony to God's Lordship, or about how it occurs, or about the interpretation of the verse's wording, or about the authenticity of a specific report? Grouping these questions under one heading and then judging them all with a simple

yes or no obscures the true subject of inquiry.

We do not judge the beliefs of the readers based on their imagined image of the world of pre-existence. We establish the texts, mention their various interpretations, and maintain the distinction between believing in what has come from God and comprehending the nature of the unseen.

5. The Covenant, Prophethood, and Guardianship

There are narrations in the Imami tradition that expand the discussion to include prophethood and guardianship. In al-Saduq's book, al-Tawhid, in the chapter on God Almighty's creation being inclined towards monotheism, there is a narration that explains this innate disposition as: "Monotheism, Muhammad is the Messenger of God, and Ali is the Commander of the Faithful." We mention it here so that this aspect of the teachings of the Ahl al-Bayt (peace be upon them) is not overlooked. However, this research does not offer an independent biographical investigation of its chain of transmission, so we do not attribute any judgment of authenticity to it. [5]

A distinction is necessary between the fundamental belief in prophethood and imamate and its proofs, and the argument for it based on a specific, unseen detail in a narration from the traditions of innate disposition (fitrah). Not every detail becomes valid because its subject matter is significant, and doubt regarding the chain of transmission of a narration does not negate a fundamental belief supported by other evidence.

The reports of prophethood and wilayah here connect with the book's discussions of guidance, divine proof and the Imamate. Reports concerning lights, shadows and clay must each be read with attention to their wording, chain of transmission and context. Merely mentioning their subjects cannot replace examining their meaning and reliability.

6. Does the covenant mean that destiny is predetermined for us?

A person might hear some accounts of the clay or the precedence in acknowledging God's creation and mistakenly believe that they have no choice, and that what they do today is merely an automatic manifestation of a decree that cannot be changed. However, this understanding clashes with the discourse of purification, action, and repentance. It is incorrect to base the doctrine of predestination on a single account or on a meaning that is not considered in conjunction with other texts.

“And by the soul and He who fashioned it” [Ash-Shams: 7].

“And inspired it [with discernment of] its wickedness and its righteousness.” [Ash-Shams: 8]

“He has certainly succeeded who purifies it.” [Ash-Shams: 9]

“And he has certainly failed who corrupts it.” [Ash-Shams: 10]

These verses direct us to the state of the self and what a person does to purify or corrupt it. We must not use an unseen reality we do not fully understand as an

excuse to neglect self-reform, label a child as made of evil clay and beyond hope, or justify an injustice suffered by someone by claiming that they chose it in a previous life of which they have no knowledge.

The covenant is not reincarnation; We do not use this to prove that humans have lived in successive bodies, nor do we consider familiarity with or aversion to a person as confirmed memories from a previous world. Such claims add to the text and may be used to coerce people into relationships or decisions for which there is no evidence.

7. Innate nature does not negate the need for divine revelation and learning.

{Messengers as bearers of good tidings and warners, so that mankind will have no argument against Allah after the messengers. And ever is Allah Exalted in Might and Wise.} [An-Nisa: 165]

“Whoever is guided is only guided for [the benefit of] himself. And whoever goes astray only goes astray to his own detriment. And no bearer of burdens will bear the burden of another. And We would not punish [a people] until We had sent a messenger.” [Al-Isra: 15]

We do not interpret the covenant in a way that negates the sending of messengers, the responsibility of teaching, or the consideration of ability and the establishment of proof. Divine accountability is not a process by which we pass judgment on people from afar; for God knows best what has been conveyed to them, what they have understood, what they have been able to do, and what has been concealed from them.

The first sermon of Nahj al-Balaghah describes the prophets' task as 'to call upon them to fulfil the covenant of His fitrah, remind them of His forgotten blessing, establish proof to them through conveying the message, and stir up for them the buried treasures of intellect'. Reminder, communication and awakening the intellect meet in this text; fitrah does not become an excuse to dispense with learning. We quote the sermon's text without claiming an independent investigation of all its transmission routes here. [6]

8. The Fruit of the Covenant in Life

The fruit of this chapter is not merely memorising the name of a realm the reader has never seen, but asking what they do with what they know. Do they substitute imitation of their forebears for reflection? Do they allow pride to obscure their need for God? Do they remember their responsibilities before demanding their rights?

The covenant reminds us that humankind is not an isolated entity, in innate nature lies the gateway to knowing their Lord, in the message is clarification, and in action is a test. As for what lies beyond this life, we believe in what has been proven, and we stop where the evidence stops.

From here we move to a different question: What do fossils, genetics, and the life sciences say about human history? We will read their evidence as it is, without

conflating the question of the covenant with the measurement of bone age, or making the laboratory the judge of what its instruments do not claim to measure.

References for Chapter Seven

[1] Al-Kulayni, Al-Kafi, vol. 2, Book of Faith and Disbelief, Chapter on the Creation's Innate Inclination towards Monotheism, Hadiths 2, 3, and 4. Al-Majlisi's rulings were compared in Mir'at al-'Uqul: Hadith 2 is "Sahih" (7/56), Hadith 3 is "Sahih," and Hadith 4 is "Hasan" (7/57). These are his rulings based on specific chains of transmission; they should not be generalized to every narration on the subject.

[2] Ahmad ibn Muhammad ibn Khalid al-Barqi, al-Mahasin, vol. 1, p. 241, the hadith of Zurarah concerning the establishment of knowledge and the forgetting of the situation, no. 225; edited by Sayyid Jalal al-Din al-Husayni al-Armawi, Dar al-Kutub al-Islamiyyah, Tehran. The number 225 is repeated for another hadith in the corresponding electronic text; therefore, this hadith is distinguished by its narrator and its beginning. This is a comparison of the location and text, not an independent correction of the chain of transmission.

[3] al-Fadl ibn al-Hasan al-Tabarsi, Majma' al-Bayan, Tafsir al-A'raf 172–174, presenting the aspects of extraction, witnessing, and objections.

[4] al-Tabataba'i, al-Mizan, Tafsir al-A'raf 172–174, the explanation and the narrative research; especially the distinction between the material atomic conception and the previous existence with its celestial aspect.

[5] Al-Saduq, Al-Tawhid, Chapter 53, “God Almighty created humankind upon the principle of monotheism,” Hadith 7, narrated by Abd al-Rahman ibn Kathir from Imam al-Sadiq (peace be upon him). This confirms the source and content, but does not independently verify the chain of transmission.

[6] Nahj al-Balaghah, First Sermon, Section on the Sending of the Prophets and the Covenant of Innate Nature. The text of the sermon is used without the publisher's commentary.

Chapter 8: Human Origins in Modern Science

Beneath the earth lie bones that do not speak the names of their owners, and on the stone are the marks of a vanished hand. Within our cells lies matter bearing witness to a long history. The researcher approaches these remains with tools of measurement and comparison, asking: Who lived here? When did they live? What was their connection to others? These are genuine questions, deserving more than an emotional response of acceptance or rejection.

We have entered this book from the Quran, and we do not abandon its authority when we read science. However, integrity demands that we distinguish between the divine text, our understanding of it, the experimental result, and the model that explains it. We should not attribute to the Quran what it did not say, nor should we claim that science has resolved a question its tools have not tested.

1. What is meant by evolution?

In biology, evolution is the change in inherited traits within populations across generations. One manifestation of this is the change in the frequency of genetic variations. It is different from the growth of a child into an adult, and different from the origin of the first life from non-living matter. Grouping these disparate questions under a single term makes the discussion unsettling from the outset.

Population changes involve mutations that create genetic diversity, natural selection where survival and reproduction opportunities vary according to traits and

environment, genetic drift occurring by chance, and gene flow resulting from the movement and interbreeding of individuals between populations. Selection does not imply that an organism plans to alter its genes for a future need, nor that every existing trait has reached its optimal form. [1]

In a scientific context, the term "theory" does not simply mean a passing conjecture; it refers to a framework that interprets evidence and allows for the testing of predictions. The modern evolutionary framework is based on corroborating evidence, although scientific disagreements persist regarding the details of mechanisms, history, and relationships between specific populations. We do not present it as an unsubstantiated narrative, nor do we equate each branch of it with the others in terms of certainty. [2]

2. Humans in Scientific Classification

Biology names our present species Homo sapiens, the wise human. This is a taxonomic designation, not a certificate that every individual acts with reason and wisdom. Anatomical and genetic evidence places our species among the primates, with a close evolutionary relationship to the great apes. [3]

The assertion of a common ancestor does not mean that humans were born from a chimpanzee living among us today. Rather, the scientific model posits that humans and chimpanzees share an older common ancestor, from which their lineages branched out. The closest analogy is that of cousins, not the transformation of a present cousin into a cousin. Furthermore, evolutionary history is not a ladder on which all past rungs have survived to this day; many branches have become extinct. [2]

In fossil research, the term "human" is sometimes associated with the genus Homo or with ancient human lineages, while in religious texts it carries connotations of honor, responsibility, and prophecy. The difference in terminology alone does not resolve every question between the two fields, but it prevents us from assuming that every use of the word refers to the same thing.

3. What do fossils reveal?

Bones and teeth tell us about aspects of structure, and muscle and joint markers and limb shapes can help infer locomotion. Tools, fire marks, and cuts on bones reveal activities undertaken by the site's inhabitants. However, most soft tissues are not preserved, and the fossil record is not a record of every individual who lived. Therefore, inferences are stronger when independent evidence aligns and weaker when based on a single, incomplete trace. [4]

The Smithsonian Institution projects the emergence of our species in Africa around 300,000 years ago. This is an approximation of the species' biological history, not the birthdate of a specific individual by name, nor a declaration that all the characteristics of modern humans were fully realized at a single moment. [3]

The Jebel Irhoud fossils in Morocco are important evidence. In 2017, studies by the team working at the site found a combination of facial features close to those of modern humans and a relatively more archaic braincase shape. Different parts of the

body need not change at the same rate or at the same time. [5]

Site-related dating studies estimated the age of fire-baked flint tools associated with fossils in the sediments at a weighted average of approximately 315,000 years with a margin of error of 34,000 years. This is a published estimate, not a sacred figure or one derived from bone color. The method of measurement and its margins are stated to prevent the approximation from becoming a false accuracy. [6]

4. How are ancient ages measured?

There is relative dating, which arranges the oldest and newest according to the relationships between the layers, and numerical dating, which uses the physical and chemical properties of suitable samples. Not every method is suitable for every material or every time period; the sample itself may be dated, or sediments or materials associated with it may be dated, and the validity of this correlation is part of the strength of the inference. [4]

Examples include measuring changes in radioactive isotopes or using the light emitted from minerals after specific treatments to determine the time since they were exposed to a suitable event for measurement. Radiocarbon dating alone is not sufficient to date all remains from the distant past; therefore, it is incorrect to dispute the age of an ancient site on the assumption that all ages were calculated using carbon dating alone. [4]

A good scientific question doesn't simply say, "Perhaps they were wrong." It asks: What was the sample? What was the method? What assumptions were made? Did another method agree with it? Conversely, the researcher shouldn't conceal stratigraphic disturbance, the possibility of sample contamination, or the degree of uncertainty.

5. What does heredity add to bones?

Genetic studies compare patterns of similarity and difference between DNA sequences and use models of inheritance, mutation, and migration to estimate relationships between populations. It's not just about morphological similarities in two skulls; there are relatively independent genomic clues that can be compared to fossil evidence. [2]

Ancient DNA has been extracted from some remains, including those of Neanderthals. Ancient material deteriorates and can be mixed with modern genetic material, so precautions are needed during collection and analysis. One result of the comparison is evidence of interbreeding between the ancestors of some modern humans and Neanderthals, as well as genetic links to other ancient groups such as the Denisovans. The picture is not one of a succession of isolated groups that never interacted with one another. [7]

Finding a DNA segment of ancient origin does not make the person who carries it today less human, less intelligent or less valuable. Genetic descent cannot properly serve as a basis for such judgements, nor should the name of an extinct group become an insult directed at a living person.

6. An African Origin with a Complex Population History

The African origin of our species is supported by converging evidence, but pinpointing the precise location and pattern of branching and interbreeding within Africa is a subject of ongoing research. In a study by Ragsdale and colleagues published in 2023, multiple population models were compared, and the researchers favored a model of relatively closely related ancestral groups that continued to exchange genes over a long period. The University of California, Davis, explained this result as a more complex model than starting from a single isolated group. [8]

This does not transform every detail in the model into definitive truth, nor does it mean that the origin of Homo sapiens lies outside of Africa. It is an example of how agreement on a broad framework can coexist with active research into the internal structure of that framework.

Nor should the estimated population numbers in the models be read as a direct count of people whose names have been found. The models compare a possible history with data patterns and are influenced by the sample, mutation rate, migration representation, and other assumptions.

7. Is the “Mitochondrial Eve” the Eve of the stories?

Mitochondrial DNA research traces a particular maternal line, not all of a person's ancestors. The 1987 study by Cann, Stoneking and Wilson contributed to inferences about a common ancestor of these lines. The paper itself notes that its findings do not tell us about the contributions of men and women whose mitochondrial lines have left no surviving descendants. [9]

Therefore, the common designation “mitochondrial Eve” does not imply that she was the only woman of her time, or that she was the first woman in existence. Similarly, tracing the Y chromosome line pertains to a paternal line, not all lines of descent. The use of the names Adam and Eve in popular expressions of heredity does not prove that the research identified the couple mentioned in religious tradition or that they lived together. [7, 9]

This is a methodological conclusion from what these studies measure: the ancestry tree of a molecule or a portion of the genome is not identical to the tree of all a person's ancestors, and does not identify prophetic names or attributes. Similarity of names does not remove the difference in meaning.

8. The Qur'an and Reflection on Creation

“Say, ‘Travel through the land and observe how He began creation. Then Allah will produce the final creation. Indeed, Allah is over all things competent.’” [Al-Ankabut: 20]

This verse invites us to travel and reflect, in a context that connects the beginning of creation with the final creation and the power of God. We learn from it the importance of reflecting on the wonders of creation, without claiming that it is a detailed text on a specific scientific theory or modern dating methods.

“And He has created you in stages.” [Nuh: 14]

The mere mention of the stages of creation is insufficient to prove or disprove natural selection. Demonstrating that the Quran refers to a specific theory requires an examination of the language, context, and other verses, not simply a resemblance between a general term and a modern concept. The verses concerning clay, sperm, and the creation of Adam have already been discussed, so we should not overlook them when discussing possible interpretations, nor should we replace them with a ready-made slogan of complete correspondence.

9. Adam's Place in the Account: A Question Not Settled by Naming a Fossil

This book's religious presentation assumes that Adam was a person chosen by God, and his story, as narrated in the Quran, has already been presented. In contrast, science studies the history of populations and their biological connections based on available evidence. Therefore, if one seeks to equate Adam's identity with a specific fossil stage or genetic history, additional evidence must be provided; knowing the age of a bone is insufficient to attribute the name of a prophet to it.

The understanding that all humans originated from a single biological union in a relatively recent time raises serious questions when compared to models of population diversification. We do not dismiss these questions by claiming that the two fields are entirely different; whenever an explanation includes a material claim about lineage or time, that claim acquires an aspect comparable to the evidence.

However, we do not resolve the problem by proposing a reconciliation that we declare as a religion: such as asserting, without any verifiable text, that Adam is merely a symbol, or that all previous fossils pertain to a creation without responsibility, or that a specific genetic history is the moment of the ensoulment. Such correspondences remain interpretations that require evidence, not results that emerge spontaneously from a laboratory.

In Al-Saduq's Al-Tawhid, a report from Jabir ibn Yazid, from Imam al-Baqir, peace be upon him, mentions 'a thousand thousand worlds, and a thousand thousand Adams'. Its chain includes Amr ibn Shimr, whom al-Najashi describes in his biographical entry as 'very weak'. This is a specific limitation concerning a narrator in this chain; widespread repetition of the report does not establish its soundness. We identify its location without building a fossil chronology upon it or equating its numbers with counts of extinct species. Even an established report about another creation would not by itself identify which fossil belonged to it. [10]

10. The Limits of Science and the Limits of Reasoning from It

Explaining biological change does not constitute proof that existence is without a creator or without purpose; this is a philosophical claim that goes beyond simply describing the mechanism. Conversely, belief in a creator does not, on its own, determine the history of every genetic change or the name of every fossil ancestor. It is incorrect to place what we do not know in either field within the other and then consider it known.

The concepts of survival or adaptation do not justify the strong oppressing the weak.

The scientific description of what has occurred in nature is not a moral imperative to replicate it. Protecting the sick, the disabled, and the elderly does not require proving their superiority in a biological race to be considered a humanitarian duty.

The conclusion of this chapter is that the history of human biology is a field of strong evidence and open questions, and that respecting evidence does not necessitate reducing humanity to its physical form, just as respecting revelation does not necessitate denying all details of natural history not mentioned in the texts. We retain what has been established and state what remains unresolved.

This concludes Part One. We have considered the human being in terms of origin, purpose, honour and responsibility, then examined what the study of material traces reveals. We now approach the body before us, beginning with its water, elements and molecules before entering the world of the cell.

References for Chapter Eight

[1] OpenStax, Concepts of Biology, Section 11.2 “Mechanisms of Evolution”; Mutation, Selection, Drift, and Gene Flow.

[2] Human Origins Program, Smithsonian Institution, 'Introduction to Human Evolution': types of evidence, common ancestry and questions under discussion in the human family tree.

[3] Smithsonian Institution, Homo sapiens species page; used to define the species and estimate its emergence, not to determine the time of Adam.

[4] Smithsonian Institution, “Dating”; relative and numerical dating, the archaeological and fossil record, and the limitations of dating methods.

[5] Max Planck Society, “The first of our kind” research team statement, June 7, 2017; presenting Hublin et al.’s findings on Jebel Irhoud, with links to the original studies.

[6] Richter et al., 2017, “The age of the hominin fossils from Jebel Irhoud, Morocco, and the origins of the Middle Stone Age,” Nature; DOI: 10.1038/nature22335. See the study record and abstract in the Southern Cross University repository; the estimate of 315 ± 34 thousand years was taken from there.

[7] Smithsonian Institution, “Ancient DNA and Neanderthals”; the nature of ancient DNA, maternal and paternal inheritance, and mating evidence. Use of this section is limited to these points and does not adopt all figures or simplified formulations on the page.

[8] Ragsdale et al., 2023, 'A weakly structured stem for human origins in Africa', Nature 617, 755-763, DOI: 10.1038/s41586-023-06055-y. This chapter draws on the team's explanation published by the University of California, Davis; it does not claim a review of all the analyses accompanying the paper.

[9] Cann, Stoneking, and Wilson, 1987, “Mitochondrial DNA and Human Evolution,” Nature 325, 31–36; original text reproduced on Memorial University’s website. Used to explain the boundaries of the mitochondrial tree, not to endorse its earlier estimates as the latest dating of the species.

[10] Al-Saduq, Al-Tawhid, p. 277, hadith 2, from Jabir ibn Yazid. The biographical entry for Amr ibn Shimr, a narrator in its chain, was checked in Rijal al-Najashi, p. 287, entry 765, where he is described as 'very weak'. This does not constitute an exhaustive study of all supporting reports or a judgement that the report's text was fabricated.

Part 2: The Biological Foundations of Human Life

In Part One we approached the question of beginnings; here we approach the body in which we live every day. We do not start with the large organs alone. Behind a moving hand and a beating heart lie smaller levels: molecules, cells and cooperating tissues. Understanding these levels prepares us to read about pregnancy, growth, body systems, disease and ageing in the parts that follow.

Chapter 9: What Is the Body Made Of?

A person holds a glass of water, not always realizing that its chemical composition is similar to the water that sustains the life of their cells. They look at their hand and see it as a familiar organ, even though behind this appearance lies an organized assembly of elements and compounds that, when considered individually, bear little resemblance to a hand.

The intention is not to turn the reader into a chemist, but rather to provide a few keys to understanding when we discuss membranes, blood, bone, hormones, and genes. Knowing the name of a substance is a starting point; more importantly, understanding its location and its relationship to other substances is crucial.

1. Familiar Elements in a Complex Structure

The most prominent elements of the body are oxygen, carbon, hydrogen, and nitrogen. Other elements, such as calcium, phosphorus, sodium, potassium, and iron, are also present. An element is a type of matter defined by its atoms, while a compound is formed by the combination of elements through chemical bonds. Therefore, the oxygen within a water molecule is not a gas trapped within it, like a bubble in a bottle. [1]

A carbon atom in the human body does not become a new element simply because it enters a living organism. What changes is the bonding of atoms, the organization of compounds, and the reactions involved. In this sense, our body connects with the matter of the world, while the question of life and its organization remains broader than merely listing elements. [1]

We cannot understand a poem by the number of its letters alone, nor can we understand the body by a list of its elements alone. This is an analogy for the sake of approximation; there is no equivalence between a word and a molecule. Rather, it reminds us that order and relationship are important, and that describing the parts does not negate the need to study their combined function.

2. Water: A Presence Not Entirely Visible to the Eye

Water constitutes a large part of body mass, but the percentage is not a single number for everyone. It changes with age and body composition, and varies between tissues; for example, fatty tissue contains relatively less water than many lean

tissues. Therefore, we use general percentages for approximation, not to estimate the body of a specific individual. [2]

The water molecule is polar; the charge is distributed unevenly within it, which helps dissolve many ions and polar compounds. However, it does not dissolve everything, and fatty substances do not mix with it in the same way as salt. Its thermal properties also contribute to mitigating temperature fluctuations, and the evaporation of sweat draws heat from the body's surface. [3]

Water is not confined to the blood. It exists inside and between cells and is present in fluids that perform transport, lubrication, and protection functions. Hence, our need for it is not merely a habit that arose because of its pleasant taste; It is connected to the way the body itself functions. [2]

The amount of fluids an individual needs depends on their age, circumstances, and health condition; this chapter is not a prescription for drinking or a treatment for dehydration. We will return to the regulation of water in the kidneys and internal balance, without turning an educational figure into a medical prescription applicable to everyone.

3. Salts and Ions

When table salt dissolves, its components dissociate into sodium and chloride ions. An ion is an atom or group of atoms that carries an electrical charge. Body ions contribute to functions such as nerve impulses and muscle contraction, while calcium phosphate salts are part of the mineral component of bones and teeth. Not all salts are table salt, and their functions are not limited to providing taste. [4]

The importance of these substances does not mean that increasing their quantity is always beneficial. The function of something is not understood solely from its presence, but also from its quantity, location, and balance with other substances. We will see this principle repeated in the body: what is needed in a specific place or concentration cannot be generalized to every place and every amount.

4. Sugars: Energy and Other Functions

Carbohydrates include simple sugars like glucose and larger compounds built from sugar units. The body stores glucose as glycogen, especially in the liver and muscles. Sugar chains linked to proteins or fats are also components of the cell surface. The word "sugar" here does not refer solely to sweets, nor are all its functions limited to providing a sweet taste. [5]

5. Fats: More Than Excess Storage

Triglycerides store energy, and stored fat contributes to insulation and protection. Phospholipids are components of membranes, and cholesterol is involved in membrane structure and the synthesis of compounds, including some hormones. These are vital functions; therefore, the word "fats" should not be used to describe something inherently useless. [5]

Distinguishing between normal function and health problem protects language from

misinterpretation. Saying that a substance is necessary does not permit its excess, and saying that its disruption may be harmful does not mean the body can do without it. Details regarding nutrition and metabolism will follow in their proper place.

6. Proteins: Different Functions Due to Different Structures

Proteins are composed of chains of amino acids, and the sequence of these units and the way the chain folds contribute to determining their function. Some proteins are structural, while others are for transport, defense, or movement. Many enzymes are proteins that catalyze chemical reactions. Hemoglobin, which carries oxygen, does not perform the same function as an antibody or a contractile protein, even though they all share a basic structure of amino acids. [6]

Disruption of the folding process or the surrounding conditions can alter a protein's function. It is not enough for its units to be present; they must be arranged in a structure that enables them to function. Furthermore, some amino acids are nutritionally essential, meaning the body must obtain them from food because it cannot synthesize them in sufficient quantities to meet its needs. [6]

7. Nucleic Acids and Energy Transfer Molecules

Deoxyribonucleic acid (DNA) and ribonucleic acid (RNA) are chains made up of units called nucleotides. DNA carries genetic information, and RNA plays roles in its expression, including participation in protein synthesis and regulation. A nucleotide contains a sugar, a phosphate group, and a nitrogenous base; therefore, these molecules cannot be reduced to abstract "codes" without physical structure. [7]

Another important molecule is ATP, or adenosine triphosphate. Cells couple its reactions to reactions and activities that require energy, and continually regenerate it. It is a medium for energy transfer and utilization; it is not a magical source that creates energy from nothing, nor is it the soul or the entire definition of life. [5]

8. A Controlled Chemical Environment

The chemical environments within the body vary; the environment of the stomach is not the same as that of blood. The pH scale represents acidity and alkalinity, and buffer solutions and bodily mechanisms help regulate it. Normally, blood pH ranges within a narrow range of approximately 7.35–7.45. This range should not be generalized to all bodily fluids, nor should it be assumed that increased alkalinity is an absolute health goal. [4]

Here we realize that the body does not survive simply by possessing the right substances, but by maintaining them in sustainable relationships. This will become clear when we consider respiration, the kidneys, and the circulatory system; none of these systems functions in isolation.

9. From Knowledge of Matter to Reflection on Humanity

“And in yourselves. Then will you not see?” [Adh-Dhariyat: 21]

We read this verse in the context of reflection and contemplation of the self, not as a

hidden list of compound names. Chemistry describes one aspect of what we observe, while reflective faith inquires into its significance in our relationship with the Creator and with life. Clarifying the boundary between description and significance does not diminish either.

When we learn something about the composition of our bodies, our pride in form, strength, and possession may diminish. What we consider our own requires water, food, and air, and a system we often overlook. This knowledge can become a source of gratitude and care, not merely an ability to recite terminology.

But simply collecting water, proteins, and fats in a container does not provide a description of a living cell. We must still see how these components are organized into units with boundaries, internal structures, exchanges, and signals. That is our next step.

Chapter 9 References

[1] OpenStax, Anatomy and Physiology 2e, Section 2.1, Elements, Atoms, and Compounds.

[2] United States Geological Survey, The Water in You: Water and the Human Body; variations in water proportions and functions, without relying on this page to determine individual therapeutic needs.

[3] OpenStax, Biology 2e, Section 2.2, Water Polarity and Thermal Properties.

[4] OpenStax, Anatomy and Physiology 2e, Section 2.4, Salts, Acidity, and Buffer Solutions.

[5] OpenStax, Anatomy and Physiology 2e, Section 2.5, Carbohydrates, Lipids, and ATP; brief overview of principles, not therapeutic dietary guidelines.

[6] OpenStax, Biology 2e, Section 3.4, Protein Structure and Function.

[7] OpenStax, Biology 2e, Section 3.5, Nucleotides, DNA, and RNA.

Chapter 10: The Human Cell

The skin appears continuous, but microscopic examination reveals that what we perceive as a single surface is composed of cells and their interrelationships. We are not dealing with inert granules arranged to form a complete structure; rather, we are looking at units that build, transport, receive signals, and change, with varying capabilities depending on their location and function.

The cell can be likened to a small city for the sake of clarity, but this analogy quickly falls short: there are no miniature workers hiding within it, nor is there an independent human mind making decisions inside each organelle. What we are describing are interactions and structures that can be studied, and from their cooperation, an aspect of the order of life becomes clear.

1. An educational image, not a template for all cells.

The common diagram of a single-nucleated cell and its surrounding structures includes typical components, but it doesn't represent every cell in the body. Skeletal muscle fibers are multinucleated, and mature human red blood cells lose their nuclei during maturation. Therefore, we will say "often" or "in the typical cell" where

appropriate, rather than generalizing the image to all examples. [1]

Specialized cells acquire characteristics suited to their function; the extended surface area of some absorbing cells increases the exchange area. The difference in shape doesn't indicate that one cell is a complete miniature human and another is incomplete, but rather the distribution of functions within a single organism. [2]

2. The Membrane: A Boundary Allowing Interaction

The plasma membrane surrounds the cell and is primarily composed of two layers of phospholipids interspersed with proteins and other components. Hydrophilic parts gravitate towards the fluids, while less hydrophilic parts gravitate towards the interior. The membrane is flexible and mobile at the molecular level, not a rigid wall separating the cell from the world. [3]

Some small substances cross relatively easily, while others require channels or carriers. Water moves in response to osmotic differences, whereas active transport mechanisms can move substances against their gradients by using energy directly or indirectly. This selectivity maintains important differences between the inside and outside of the cell; life does not require everything to be equal on both sides of the membrane. [3]

The membrane is also a receptor site; proteins within it carry signals into the cell when appropriate molecules bind to them. This is why a hormone may reach many cells, but they do not all respond in the same way; the presence of the appropriate receptor and the nature of the internal pathway are part of the response. [4]

3. Cytoplasm and Nucleus

The cytoplasm, as used here, is what lies between the plasma membrane and the nuclear envelope; it includes the intracellular fluid and various structures and organelles. It is not pure water in which disparate parts float without organization; it contains molecules, ions, reactions, and networks that contribute to the organization of internal processes. [2]

The nucleus contains most of the genetic material in a nucleated cell. It is surrounded by a double membrane and pores that regulate exchange with the cytoplasm. The nucleolus is involved in the production of ribosomal RNA and the assembly of ribosome subunits. DNA is organized with proteins, including histones, in a structure called chromatin. [1]

We sometimes call the nucleus the information center, but this does not mean that it works in isolation or without the rest of the cell. Reading information, modifying activity, and responding to the environment depend on interrelationships. The next chapter will be dedicated to revealing the meaning of this information and how it is used.

4. Protein Synthesis and Transport

Ribosomes assemble amino acids into chains according to the information carried in messenger RNA. The ribosomes themselves are composed of RNA and proteins; they

are found free in the cytoplasm or attached to the rough endoplasmic reticulum, depending on the product pathway. Ribosomes are not membrane-bound sacs, even though they are grouped with cellular structures in educational diagrams. [2]

The rough endoplasmic reticulum is involved in the synthesis and processing of proteins destined for secretion or membranes, while the smooth endoplasmic reticulum performs functions such as lipid synthesis and calcium storage regulation. The Golgi apparatus then modifies products and sorts them into vesicles for their respective destinations. The difference in pathway is important; a protein that functions inside the cell does not necessarily require the journey of a protein that is secreted outside. [5]

Thus, the phrase "the cell made a protein" simplifies many steps. Production does not end with the assembly of units, but includes structure, processing, and the destination of the product. We will see the implications of this when we examine hormones, enzymes, and immunity.

5. Energy and Component Reuse

Mitochondria contribute to ATP synthesis via pathways associated with cellular respiration. They have two membranes, the inner membrane is highly folded, and they carry their own DNA. It is incorrect to say that all of a cell's energy is produced in one location; pathways in the cytoplasm are also involved. [2]

Lysosomes contain enzymes that digest substances entering the cell or cellular components that are being broken down. Peroxisomes have functions in lipid metabolism and oxidation reactions, and contain enzymes that handle hydrogen peroxide. They are two different structures; we do not lump all breakdown processes under one name. [5]

Breakdown is not always destruction. It can be a way to remove a damaged part and reuse its components. Details of regulated cell death and its relationship to tissue life will be discussed in Chapter 15, so as not to confuse the regeneration of cell parts with the death of the entire cell.

6. Flexible Structure and Precise Movement

The cytoskeleton is composed of protein networks, including microfilaments, intermediate filaments, and microtubules. These networks contribute to maintaining shape, movement, internal transport, and cell division. Examples of structures involved in movement include cilia in some cells and flagella, which aid sperm motility. This structure is not like miniature bones; it is a structure that can be reorganised. [5]

It is a mistake to interpret a static microscopic image as a declaration that the interior is static. The image documents a moment or structure under the conditions of the examination, but understanding its function also requires monitoring changes and experiments that connect structure with function.

7. The cell does not live in isolation.

Cells are surrounded by extracellular matrix, which includes proteins and other components that vary depending on the tissue. This matrix is not a neglected space; it contributes to support and interaction with cells. Intercellular junctions exist, including tight junctions that restrict passage between cells, anchoring junctions that provide cohesion, and gap junctions that allow the passage of ions and small molecules between adjacent cells. [6]

Communication has different distances: signals that affect the secreting cell itself, others that affect neighboring cells, and hormones that travel through the blood to more distant targets. Receiving a signal activates internal pathways that may alter protein activity or gene expression. The signal is integrated with the cell's state; the result is not simply the presence of a single substance in the blood. [4]

We can consider the meaning of interdependence in this cooperation, but the moral obligation among people is not automatically derived from the behavior of cells. Society is not a fabric in which an individual can be discarded simply because we have seen a cell change or die. We benefit from the analogy as long as it clarifies, and we stop when it begins to justify injustice against humanity.

8. An Exception Reveals the Accuracy of the Rule

The mature human red blood cell is a clear example: it carries hemoglobin and contributes to oxygen transport, while lacking a nucleus and mitochondria and being incapable of synthesizing new proteins. It relies for its energy on pathways that do not require mitochondria. Therefore, the absence of a particular organelle does not invalidate the cell's name, nor is it correct to impose a standardized image upon it. [7]

We will return to this cell in the chapter on blood; the point here is that precision begins with respecting diversity and exceptions, not with memorising one diagram and forcing every example to fit it.

9. The Body's Structure and the Owner's Responsibility

“O mankind, what has deceived you concerning your Lord, the Most Generous?” [Al-Infitar: 6]

“Who created you, proportioned you, and balanced you.” [Al-Infitar: 7]

“In whatever form He willed, He assembled you.” [Al-Infitar: 8]

These verses come in a discourse that awakens humanity from arrogance, not in a lesson that names organelles. We read with them what we have learned as a field for consideration: the body we are familiar with is broader than our ordinary knowledge of it, and caring for it is inseparable from humility before what we do not yet understand.

The description of being fashioned does not imply that someone with an illness or a congenital difference has less dignity. Scientific inquiry describes structure and function; a person's dignity is not measured by the number of their organelles or the

soundness of every part of their body. We will retain this principle throughout the chapters on health and illness.

Having established the location of the nucleus and ribosome, the next question becomes more specific: What is genetic material, and how does some of its information become proteins that perform work?

Chapter Ten References

[1] OpenStax, Anatomy and Physiology 2e, Section 3.3: the nucleus, chromatin, multiple nuclei and the loss of nuclei in some cells.

[2] OpenStax, Biology 2e, Section 4.3, Cytoplasm, Ribosomes, Mitochondria, and Structural Specialization.

[3] OpenStax, Anatomy and Physiology 2e, Section 3.1: the membrane and transport across it.

[4] OpenStax, Biology 2e, Section 9.1, Cellular Signaling Patterns and Receptors.

[5] OpenStax, Anatomy and Physiology 2e, Section 3.2, Organelles and Cytoskeleton; the analogy of autolysis to apoptosis found in some of the page simplifications was not adopted.

[6] OpenStax, Biology 2e, Section 4.6: the extracellular matrix and cell junctions.

[7] OpenStax, Anatomy and Physiology 2e, Section 18.3, Structure and Metabolism of Mature Red Blood Cells; here, the focus is on their cellular characteristics.

Chapter 11: Genetic Material

A father may see in his son a resemblance to his own face, and a mother may see in her daughter a trait she recognizes from her family. This age-old observation raises a more nuanced question than mere resemblance: How is information that contributes to the body's structure transmitted, and how is it used by cells that differ in shape and function?

Heredity helps us understand part of the answer, but it does not transform a person into a carbon copy of either parent. Here, we begin with the basic language of genetic material, postponing the patterns of trait transmission and variation to a separate chapter.

1. DNA: A Material Carrying Information

DNA consists of two strands twisted into the structure known as the double helix. Each strand has a sugar and phosphate backbone, and the bases are paired: adenine (A) with thymine (T), and cytosine (C) with guanine (G). The sequence of these bases, not just the presence of the four types, is the basis upon which molecules carry their information. [1]

Most DNA is found in the nucleus of the nucleated cell, with a smaller amount in the mitochondria. Using the word "information" does not make the molecule a book to be read by a miniature person; it is a way of describing the relationship between a chemical arrangement and the cellular processes that use it. [1]

Just as knowing the letters of a language is not enough to understand every book, knowing the names of the bases is not enough to understand every genetic function.

However, this analogy does not allow us to attribute independent intentionality to the molecule, nor does it exempt us from studying the interaction that links the sequence to the result.

2. Gene, Chromosome, and Genome

A gene is a functional unit of genetic material. Genes carry information used to make proteins, while others carry information to produce types of RNA that do not convert into protein. The human genome contains about 20,000 protein-coding genes. This does not mean that all DNA is composed of such genes, or that their number equals the number of traits we can name. [2]

A chromosome is a structure of DNA and proteins that organize it, including histones. The genome is the totality of genetic material intended in this context, distinguishing between the nuclear genome and the mitochondrial genome when necessary. A gene is a functional unit, a chromosome is a level of organization, and the genome is a broader whole; these three terms should not be used interchangeably. [1, 3]

Chromosomes are most condensed and clearly defined at certain stages of cell division. The common X-shaped image does not mean that each chromosome remains in this shape throughout the life of the cell; This represents a situation related to the duplication and organization of matter in preparation for separation. [3]

3. Number of Chromosomes and the Limits of Generalization

In the normal pattern, human nucleated somatic cells contain 46 chromosomes distributed in 23 pairs. These comprise 22 pairs of autosomes and one pair of sex chromosomes, with the predominant patterns being XX in females and XY in males. Describing the normal pattern does not imply the absence of chromosomal variations or that every cell in the body follows the same pattern. [4]

Gametes typically carry 23 chromosomes, resulting in two sets from the parents being combined during fertilization. This explains one aspect of the transmission of information without the usual number doubling in each generation. We will explain the mechanism of the reduction in number in the next chapter. [5]

Number is not a measure of dignity or intellect. Discussing chromosomal variation describes an aspect of constitution; it does not define a person nor does it justify labeling them as deficient in their humanity. The person with the condition remains a name, a face, and a life, not just a number on a report.

4. From DNA to RNA to Protein

In transcription, the cell uses a portion of DNA as a template to make RNA. In the case of protein-coding genes, messenger RNA is processed and then used for translation. It binds to the ribosome, which handles triplet units of its bases called codons; transfer RNA molecules are involved in bringing in the appropriate amino acids. There are also stop codons that terminate the chain instead of adding an amino acid. [6]

Transcription here does not mean making an image of the whole cell, and translation does not mean that the gene itself becomes a protein. Information is passed through chemical steps, while DNA remains a different material from the product whose formation its information helped direct. [6]

This preliminary picture requires an important qualification: not all RNA is a message to make a protein. Some is incorporated into the ribosome, some transports amino acids, and some regulates the activity of other genes. Therefore, we cannot reduce all gene activity to a single arrow that always ends in a protein. [7]

5. Why is a liver cell different from a nerve cell?

Many somatic cells carry the same basic nuclear genetic material, but gene activity varies among them. Each cell uses a set of information to varying degrees and at different times, depending on its state and specialization. Transcription factors and cellular signals regulate how much is transcribed, and there are other levels of control at later stages. [8]

The presence of a gene does not mean that it is active at maximum capacity in every location, nor that the same product is made in the same quantity at all times. This idea connects the chapter on genetic material with the chapter on the cell: the nucleus, membrane, signaling, and organelles are not separate islands. [8]

Hence, the question "Does a person carry this gene?" is insufficient on its own in many cases; we may need to know its variant, its activity, the tissues in which it operates, and its relationship to other genes. We will discuss this in more detail when we talk about hereditary traits and diseases.

6. What does not code for a protein?

A small portion of human DNA directly codes for proteins, while other parts contain regulatory regions, genes for non-coding RNA types, and structures that contribute to chromosome organization. The functions of many regions are still under investigation. It is incorrect to label everything that does not code for a protein as having no function, nor to claim that the function of every base has been determined. [7]

The lack of knowledge of a specific function is not automatic proof of its non-existence, nor is it proof of a function we choose without experimentation. This is a useful principle that transcends genetics: gaps in our knowledge invite us to investigate, not to fill them with linguistic certainty.

7. Epigenetic Regulation

Epigenetic regulation studies changes in gene activity that do not involve altering the DNA sequence itself. Its mechanisms include chemical modifications to DNA or to the histones to which it binds. Some of these patterns may be influenced by the environment and may persist throughout cell division. This does not automatically mean that every psychological experience or acquired behavior is passed on to all offspring. [9]

When we hear that the environment influences gene expression, we should not interpret this as a promise that thought alone can alter any gene or cure every disease. It refers to specific mechanisms that are studied under their own conditions, not an absolute power granted to us by an appealing scientific label.

8. Genetic Information Is Not the Whole Story of Human Life

The genome describes profound aspects of the biological basis, but it is not a record of all human decisions, relationships, and actions. We study the means by which the body functions without letting them replace the question of responsibility with which we opened this book. When a claim relates to complex behavior, simply adding the word "genetic" is insufficient to dispense with evidence.

Genetic information has a sanctity connected to the dignity and privacy of its owner. Our technical knowledge is not a justification for defamation, for considering a person a potential disease before they have lived their life, or for judging their moral character from a test result. A detailed discussion of medical ethics and genetics will follow.

We have not discussed here the diagnosis of an individual case or the interpretation of a medical examination; this requires a specialist and the clinical and familial context. Our aim is for the reader to understand the terminology and to distinguish between established information and broader inferences.

When a cell divides, it is not enough for this information to be present; it must be replicated and distributed. This is the issue we are now addressing.

References for Chapter Eleven

[1] U.S. National Library of Medicine, MedlinePlus Genetics, What is DNA?; DNA structure and its nuclear and mitochondrial location.

[2] MedlinePlus Genetics, What is a gene?; Gene definition and approximate estimates of protein-coding genes.

[3] MedlinePlus Genetics, What is a chromosome?; DNA organization with proteins and chromosome condensation.

[4] MedlinePlus Genetics, How many chromosomes do people have?; Description of the usual number and pattern, without generalizing to exceptions.

[5] MedlinePlus Genetics, How do cells divide?; Number of chromosomes in gametes and fertilization.

[6] MedlinePlus Genetics, How do genes direct the production of proteins?; Transcription, translation, and codons.

[7] MedlinePlus Genetics, What is noncoding DNA?; Regulation, noncoding RNA, and the limits of knowledge about sequence functions.

[8] MedlinePlus Genetics, Can genes be turned on and off in cells?; Variation in gene expression and regulation.

[9] MedlinePlus Genetics, What is epigenetics?; Epigenetic modifications; This page is not used to prove the transmission of every environmental effect across generations.

Chapter 12: Cell Division and Specialisation

A human being does not grow from a single cell to a body with multiple organs simply by increasing in size. Cells must multiply, differentiate, and organize themselves. Even after many aspects of growth are complete, many tissues continue to replace cells that have been lost or have reached the end of their lifespan.

However, division and specialization are not two names for the same process. The number of cells may increase without them all acquiring the same function, and a cell may become more specialized as its ability to divide diminishes. Understanding this difference prepares us to read about growth, regeneration, and disease without confusion.

1. The Cell Cycle

In the typical cell cycle of a cell preparing to divide, the mitotic phase is preceded by an interphase consisting of G1 (growth and activity), S (DNA replication), and G2 (complete preparation). Cells may exit the active cycle into a state described as G0, temporarily or for a prolonged period depending on the cell type. Cessation of division does not mean the complete cessation of all cell activity. [1]

After DNA replication, a chromosome consists of two sister chromatids. These two products of replication should not be confused with a pair of homologous chromosomes, one inherited from each parent. The former are two linked copies of a chromosome, while the latter are two members of a genetic pair. [1]

Memorizing the Latin letters is not the goal; rather, understanding the sequence of events is crucial: preparation, then replication, then distribution. If these stages are confused, one might mistakenly believe that DNA replication occurs at the same moment the spindle separates the chromosomes, when in fact they are two distinct steps.

2. Mitosis

In mitosis, the chromosomes condense and the spindle forms. The chromosomes then align at the equatorial plane, the sister chromatids separate towards opposite poles, and the nuclei are reconstituted. The main phases are called prophase, metaphase, anaphase, and telophase, with the prometaphase being highlighted in detail. Cytokinesis accompanies the end of the process. [1]

When mitosis proceeds normally, it produces two cells that usually have the same nuclear chromosome complement as the original cell before DNA replication. This intended genetic identity does not rule out changes during replication, nor does it require the two cells subsequently to have the same size, function or level of gene activity. [2]

What the diagram calls a single arrow leading from one cell to two represents the orderly transfer of material needed by both cells. Therefore, the precision of the distribution is part of the continuity of the tissue, not a marginal detail in a school picture.

3. Why does meiosis occur?

If gametes retained their usual somatic number and two full complements were combined at each fertilisation, the number would double across generations. Meiosis achieves chromosomal reduction: it is preceded by one DNA replication, followed by two divisions; the first separates homologous chromosomes, and the second separates sister chromatids. No complete replication of material occurs between the two divisions. [3]

At the beginning of the first division, segments are exchanged between non-sister chromatids in homologous pairs, and the independent distribution of the pairs also contributes to diversity. The result is not simply repeated division of the same copy, but rather the reassembly of inherited information in different combinations. [3]

This is why siblings are not usually identical genetic copies despite sharing the same parents. The details of sperm and egg formation, the differences in cytoplasmic distribution, and the timing of maturation will be discussed in the chapter on embryogenesis and reproduction.

4. Control Points, Not Infallibility

There are mechanisms that regulate the progression of the cell cycle and can halt it when problems arise that require repair. If a specific damage cannot be repaired, the cell may enter a state of regulated death. Disruption of this regulation can contribute to the development of cancer, which cannot be explained simply by the statement that cells "like to multiply"; it is a disruption of regulatory networks and multiple processes. [4]

The existence of review mechanisms does not mean they are infallible, nor does the occurrence of disease prove their absence. Science studies when they function, when they fail, and the resulting consequences. Blaming the patient for every malfunction in their cells is neither scientifically sound nor ethically appropriate.

5. Differentiation: How does a cell acquire its function?

Cellular differentiation, or differentiation, is the acquisition of specialized structural and functional characteristics. This is related to the regulation of gene expression and the signals that reach the cell and its microenvironment. A liver cell does not need a genome separate from that of a muscle cell to differentiate from it; the difference in information usage and growth pathways is sufficient, taking into account the exceptions and changes that may arise in some cells. [5]

Cells vary in their capabilities. The overall capacity to form the components of an organism in its early stages is not equivalent to the broad capacity to form different types of body cells, and this is not equivalent to the capacity of tissue cells with limited pathways. Therefore, it is necessary to clarify what we mean when we use the terms “totipotent,” “pluripotent,” and “multipotent.” [5]

Specialization does not mean that a cell has lost its value because it can no longer perform all tasks. Its usefulness in its location is connected to the function it has acquired. We mention this for clarification, not to create social classes based on cell

classification or to force a person into a role they did not choose.

6. What is a stem cell?

A stem cell combines the ability to self-renew and produce more specialized cells within its capacity. Not all stem cells are the same; their sources, capabilities, and growth conditions vary. Their division may result in the preservation of a stem cell reserve or the production of specialized progeny, depending on the context and signals. [6]

One research tool is induced pluripotent stem cells, which are produced by reprogramming differentiated cells, such as some skin cells, into a more versatile state. Reprogramming does not mean that the cell alone becomes a complete human being, nor that it is automatically suitable for transplantation and treatment. [6]

These models are useful in studying the disease and testing treatment ideas. However, moving to a safe treatment requires controlling the identity, function, proliferation, and compatibility of the cells with the transplant site, as well as evidence of benefit and risk. The success of a step in a laboratory dish is not the same as its success in a human life. [6]

7. Scientific Hope and the Responsibility of the Promise

Health authorities warn against unproven cell interventions that may cause infection, unwanted growth, or serious harm. The fact that the cells are taken from the patient's own body is not sufficient to guarantee safety. Therefore, we do not rely on a clinic advertisement or an individual's testimony as proof of treatment success, nor do we interpret this chapter as a recommendation for any specific procedure. [7]

The patient has the right to hope, and it is the duty of those who address them not to present this hope as certainty. Between rejecting all research and believing every promise lies a wide field for disciplined work: clear questioning, appropriate experimentation, follow-up on results, and explicit acknowledgment of what has not been proven.

Furthermore, researching cell sources, consenting to their use, the sanctity of the body, and the handling of embryos involve ethical and jurisprudential questions that cannot be resolved by technical capability alone. This will be discussed in its appropriate section by referring to specific sources and fatwas, without attributing a single ruling to all scholars.

8. From Numerical Increase to Structure

We emerge from this chapter with three interconnected ideas: division increases the number of cells and distributes matter; meiosis prepares for its transfer between generations; and differentiation gives cells their specialized functions. None of these alone is sufficient to explain a living organ.

The next question is: how do different cells organize themselves into tissues, and how do tissues cooperate to form an organ? We will see that the boundary between one cell and another is not the end of the relationship, but rather the beginning of a

new level of it.

Chapter Twelve References

[1] OpenStax, Anatomy and Physiology 2e, Section 3.5; The Cell Cycle, Chromatids, and Stages of Division.

[2] MedlinePlus Genetics, How do cells divide?; The key difference between mitosis and meiosis.

[3] OpenStax, Biology 2e, Section 11.1; Meiosis, exchange, and independent distribution.

[4] MedlinePlus Genetics, How do genes control the growth and division of cells?; Regulation, repair, and regulated death.

[5] OpenStax, Anatomy and Physiology 2e, Section 3.6; Differentiation and the limits of developmental capacity of cells.

[6] US National Institutes of Health, Stem Cell Basics; Self-renewal, specialization, reprogramming, and the transition from laboratory to therapy. The old regulatory inventory on this page is not used as a current list of licensed treatments.

[7] Australian Therapeutic Goods Administration (TGA), Stem cell treatments and regulation — a quick guide for consumers; Warning of the risks of unproven interventions; Not all historical licensing data on this page is relied upon.

Chapter 13: From Cells to Tissues and Organs

When we say "heart," we think of a beating organ, and when we say "skin," we think of what covers our exterior. But any organ we examine closely reveals the cooperation between different types of cells and the material surrounding them. It is not enough to know the cell in isolation to understand the organ; we must understand how they come together.

Our intermediary in this step is tissue: a level of organization between the cell and the organ. What matters to us is not just the name, but the relationship between the arrangement of cells, the type of surrounding material, and the function of the site where they operate.

1. Four Basic Types, and Wide Variation Within Them

Human tissues are broadly divided into four main types: epithelial, connective, muscular, and nervous. Many variations branch out from these, and their characteristics differ according to location and function. Histology studies their microscopic structure, organization, and relationships, and changes in this structure are used to understand and diagnose certain diseases. [1]

Classification is a tool for understanding, not four separate, non-mixing boxes. A single organ usually contains more than one tissue type, and a cell may perform a function in its location that is not apparent from its shape alone without knowing what surrounds it.

2. Epithelial Tissue: The Functioning Surface

Epithelial tissue covers surfaces, lines cavities and passages, and forms glandular parts. Its cells are close together, with an apical side and a basal side attached to a

basement membrane. Its functions include protection, absorption, secretion, and selective exchange. It is not an inactive covering attached to the body from the outside. [2]

It may be a single layer or multiple layers, and its cells may appear flat, cuboidal, or columnar. The thinness of some structures is suited to exchange, while multiple layers are suitable for areas that require greater protection. Pseudostratified epithelium appears multilayered, even though its cells are all attached to the basal lamina. [2]

Cilia help move substances across the surface in some places, while microvilli increase the absorption area. We shouldn't confuse them simply because they are extensions; their structure and function are different. The epithelium itself usually doesn't contain blood vessels and receives what it needs through exchange with the surrounding environment and tissues. [2]

We learn from this example that the surface is not a margin. What lies at the boundary between the body and its environment may be the most delicate site of action; it must allow, prevent, receive, and secrete according to its location.

3. Connective Tissue: The Intercellular Space Is Not a Void

Many connective tissues are characterized by a strong presence of extracellular matrix: ground substance and fibres, along with cells of varying types. Collagen fibers contribute to tensile strength, while elastic fibers provide elasticity and resilience. The properties of the tissue are related to the proportion and organization of these components, not just the number of cells. [3]

This family includes loose and dense connective tissues, cartilage and bone, and specialized tissues such as blood and adipose tissue. In bone, the matrix is mineralized, while in blood it is fluid. The difference in appearance between solid bone and flowing blood does not preclude their inclusion in a histological classification based on more than just their macroscopic appearance. [3]

Connective tissues are involved in support, attachment, protection, storage, transport, and defense. Cells that produce matrix and others that participate in the immune response may be found together in one location. Therefore, describing them as "connective" does not mean that their role is simply to bind pre-existing parts together. [3]

This knowledge will help us when we study tendons, joints, bones, and blood; the seemingly disparate names used in everyday life may be connected by common structural principles.

4. Muscle Tissue: Movement in its Outer and Inner Form

Muscle tissue has the ability to generate force through contraction. Its basic types are skeletal, cardiac, and smooth muscle. Microscopic striations are present in skeletal and cardiac muscle, but not in the same way in smooth muscle. The muscle that moves our arm and the muscle that propels food through the intestines are not identical. [4]

Skeletal muscles are involved in many voluntary movements, but they also participate in involuntary actions such as trembling. Cardiac muscle pumps blood in a specific rhythm, while smooth muscle is found in the walls of various organs, vessels, and passageways. Humans do not need to consciously command each contraction to sustain life. [4]

Muscle does not function as an isolated contractile bundle; it requires blood supply, regulation, and connection to surrounding tissues. We will discuss the details of movement, effort, and fatigue in the section on body systems, now that the nature of the tissue itself is clear.

5. Nervous Tissue: More Than Wires

Nervous tissue is composed of neurons and glial cells with multiple functions. Neurons receive, process, and transmit signals, and connect with other neurons, muscles, and glands. The common image includes a cell body, dendrites, and an axon, but the shapes and connections are diverse. [5]

Glial cells should not be reduced to passive filler; their various types contribute to supporting and regulating the nervous system, and some types form myelin around nerve axons. The proper functioning of the network depends on the relationships between these cells, not just the presence of individual neurons. [5]

Comparing nerves to wires helps visualize transmission, but it doesn't describe all the characteristics of living networks and the changes in their connections. When discussing memory, sensation, and emotion, we will need to move beyond this simple analogy, though we cannot deny its initial usefulness.

6. How do tissues become organs?

An organ is an anatomically distinct structure in which different types of tissues cooperate to perform functions. A system comprises organs that work together in a larger process, and then the systems work together in the organism. Moving from one level to another does not mean the disappearance of what came before; the organ remains based on its cells, tissues, and their relationships. [6]

Let's take a hollow organ as an example to understand this: we might find a lining that interacts with the contents of the cavity, connective layers that support it, muscles that change movement or diameter, and nerves and vessels that serve regulation and nutrition. An organ is not merely a collection of names; the arrangement and connection of its layers are part of its function.

Furthermore, the attribution of an organ to a specific system does not preclude its contribution to another system. The classification of systems serves the study, while functions within the body are intertwined. Therefore, we do not equate the arrangement of the book's chapters with the actual scope of work in humans. [6]

7. Tissue Membranes and Embryonic Layers

A tissue membrane differs from the cell's plasma membrane. Mucous and serous membranes are tissue structures, not merely phospholipid layers. Synovial

membranes are found in movable joints, and they have a structure and function appropriate to their location. The common term "membrane" does not negate the difference in the level of structure. [1]

Embryonic tissues arise in relation to the basic embryonic layers: the ectoderm, mesoderm, and endoderm. These layers do not correspond to the four tissue types in a one-to-one fashion; epithelial tissue, for example, can arise from different layers depending on the organ. We will elaborate on this when we trace embryogenesis. [1]

This observation prevents us from creating overly simplistic maps and then deeming everything that deviates from them to be wrong. In science, maps are useful, but they still have to accurately represent the details of the organism they depict.

8. Reading Tissue and Reading the Human Being

Examining a tissue sample allows us to know things that the naked eye cannot reveal. But the sample is not the whole person; it is a part taken from a specific place, time, and method, and its interpretation requires context. Therefore, a single microscopic image in a book or on a screen does not constitute a self-diagnosis.

On the other hand, the small size of cells does not diminish the importance of the work they perform. We may admire what we see of a strong muscle or a beautiful face, overlooking the unseen relationships that sustain all of this. Knowledge can reorder our admiration: from mere appearance to the regularity of function and the necessity of care.

We have moved from matter to the cell, and from the cell to the tissue and the organ. What remains in this part is to understand how differences between people manifest, and how some components of the body regenerate while others age or die. With these two questions, we prepare for the journey of prenatal development.

Chapter Thirteen References

[1] OpenStax, Anatomy and Physiology 2e, Section 4.1; Classification of tissues and tissue membranes and their relation to embryonic germ layers.

[2] Ibid., Section 4.2; Structure, functions and classification of epithelium.

[3] Ibid., Section 4.3; Extracellular Matrix and Types of Connective Tissue.

[4] Ibid., Section 4.4; Skeletal, Cardiac, and Smooth Muscles.

[5] Ibid., Section 4.5; Neurons, Glia and Myelin; General principles were used without adopting every generalization in the diagrams.

[6] Ibid., Section 1.2; Levels of Organization and Overlap of System Functions.

Chapter 14: Heredity and Human Diversity

Siblings share a home and parents, yet differ in features, temperaments, and responses. Some similarities are obvious, others are subtle, and a health condition may appear in a child with no known history in their parents. These observations are not a refutation of heredity, but rather an invitation to understand it beyond the simple image of replication.

The question is not whether genes have an effect or not, but rather: what kind of effect, in what trait, and with what degree of certainty? Respecting this question protects us from denying biology and, at the same time, from turning it into a final judgment on humanity.

1. Gene Variants and Diversity

Different versions of a gene are called alleles. An individual may carry two identical or different versions at a particular autosomal locus, depending on what they inherit from their parents. The mechanisms of meiosis and fertilization reassemble this information into diverse combinations, as discussed in the previous chapter. Family affiliation does not negate biological uniqueness. [1]

A difference in sequence should not be confused with a difference in value. A variation may have an effect on function, or it may have no known effect, or its effect may depend on other factors. These are descriptions of matter and function, not of the individual's status as a human being.

2. Patterns of Inheritance of Some Traits and Conditions

In an autosomal dominant pattern, a single variant may be sufficient for the condition to manifest, whereas an autosomal recessive condition is usually associated with two variants that affect both copies. Parents may carry a variant associated with a recessive condition without exhibiting its typical form. The term "dominant" does not imply superiority or moral superiority, nor does it necessarily mean greater prevalence. [2]

There are patterns associated with the X or Y chromosome, and patterns related to mitochondrial DNA, which is usually passed down maternally. In codominance, the effects of two copies are present together, as in some forms of the ABO blood group system. These are examples of different mechanisms; it is incorrect to subject every trait to a single, simplified law. [2]

The probability of inheritance of a condition varies depending on the gene, variant, and familial pattern. Simply stating "a disease exists in the family" is insufficient to assign a single risk to each individual. Personal assessment requires family history and expert interpretation, not generalizations drawn from this chapter.

3. Complex Traits Cannot Be Reduced to a Single Gene

Many conditions, including common forms of diabetes, heart disease, and obesity, are influenced by multiple genes and environmental and behavioral factors. They may cluster in families because relatives share genes and living conditions. Therefore, family clustering alone does not prove that a single gene is the cause, nor does the absence of a family history preclude a genetic predisposition. [3]

The term “environmental factors” is broader than a simple individual decision; it may include exposures and conditions that are not entirely within a person’s control. It is a mistake to turn research into a court of blame, and knowing the influence of heredity does not justify accepting the idea that every outcome is inevitable.

4. Novel Variants and Mosaicism

A variant may be inherited, may arise spontaneously during gamete formation or at stages of embryonic development, or may appear later in some somatic cells. Copying errors and certain exposures contribute to sequence variations. Not every variation is pathological, which is why in many contexts it is preferable to use the term "variant" rather than implying that every mutation is a harmful defect. [4]

Some cells in a person may carry a variant that other cells do not; this is a form of genetic mosaicism. Furthermore, variations confined to somatic cells differ from variations found in the germline in terms of their potential transmission to offspring. It is incorrect to assume that every variation in any cell will be inherited by children. [4]

A new variant helps explain how a condition can appear without a known family history. It does not allow us to determine when a particular variant arose merely by guessing, or to assign either parent moral responsibility for a molecular event they did not choose.

5. Penetrance and Variable Expressivity

Penetrance is the proportion of people carrying a particular variant who show features of the associated condition. When some carriers do not show those features, penetrance is described as incomplete. Variable expressivity means that the presentation or severity of the condition differs among affected people. These are distinct questions: does the condition appear, and how does it appear when it does? [5]

Therefore, the experiences of two individuals with the same variant may not be identical, and risk assessment may remain probabilistic. This does not mean that genes are ineffective; rather, the relationship between the variant and the outcome may be influenced by additional factors. It is not appropriate to extrapolate the description of a single case study to all individuals with the same genetic name. [5]

6. What Does Heritability Mean?

Heritability is a statistical measure of variation in a trait within a population and a specific environment. It does not tell us that a certain percentage of an individual's physical characteristics come from genes and the rest from the environment, nor does it prove that the trait is unchangeable. The estimate may vary depending on the population, circumstances, and methodology of the study. [6]

If a high estimate of heritability is published, it should not be interpreted as meaning that upbringing or circumstances have no effect whatsoever. Nor should it be used alone to judge the causes of differences between populations living in different conditions. The conclusion must remain within the scope of what was actually measured. [6]

This highlights the importance of reading the question the study was designed to answer, rather than simply focusing on a striking number in the title. A correct number can become misleading when applied from one population to an individual,

or from one environment to all environments.

7. Genetic Origin Is Not a Ladder of Races

Genomics distinguishes between the study of genetic origins and relationships and social classifications of race. The National Human Genome Research Institute shows that diversity within racially classified groups is vast, and that these classifications are historically and socially fluid; they do not represent rigid, natural boundaries separating humans into biological ranks. [7]

Differences in ancestry deserve careful consideration when they relate to a specific scientific or health question, but they do not justify attributing fixed virtues or vices to an entire people. Confusing ancestry with merit is an injustice to both science and humanity.

“And among His signs is the creation of the heavens and the earth and the diversity of your languages and your colors. Indeed in that are signs for those of knowledge.” [Ar-Rum: 22]

The verse presents the diversity of languages and colors as a set of signs, not as a means of bestowing superiority upon any particular lineage. We are not suggesting that it details molecular inheritance, but rather that we should consider the context of its discourse as we reflect upon diversity: the differences among humankind are a field for knowledge and consideration, not a pretext for arrogance.

8. Genetic Knowledge and Care

Genetic knowledge can help in understanding a condition, guiding testing, or assessing risk, but it does not negate an individual's right to privacy and respect. Carrying a variant associated with a disease does not make the person the disease, just as a reassuring result on a specific test does not guarantee immunity from all diseases.

This chapter is a conceptual introduction; it does not interpret individual laboratory results, nor does it provide guidance for marriage or parenthood decisions. Such decisions require expert consultation, and questions of Islamic jurisprudence should be addressed in their proper context and referred to their respective sources. We do not replace sound advice with hasty family conclusions.

We have seen that unity of origin does not imply identity, and that difference does not imply separation from our shared humanity. It remains for us to ask about time within the body itself: how do cells live, how do they repair themselves, and when do they age or die?

References for Chapter Fourteen

[1] MedlinePlus Genetics, What is a gene?; Alleles, with reference to recombination mechanisms to Chapter Twelve.

[2] MedlinePlus Genetics, What are the different ways a genetic condition can be inherited?; Patterns of inheritance and the limits of their generalization.

[3] MedlinePlus Genetics, What are complex or multifactorial disorders?; The interplay between

genetic and environmental factors.

[4] MedlinePlus Genetics, What is a gene variant and how do variants occur?; Inherited, acquired, new, and mosaic.

[5] MedlinePlus Genetics, What are reduced penetrance and variable expressivity?: penetrance and variable expressivity.

[6] MedlinePlus Genetics, What is heritability?: its statistical meaning and the limits of inference.

[7] National Human Genome Research Institute (NHGRI), Glossary, Race; Distinguishing between social classification and the study of genetic diversity.

Chapter 15: Cell Life and Death

A small wound closes, but the scar of another remains. Cells in tissues are replaced, while others continue to function for extended periods. We feel like the same person, even though the body is constantly changing. Not all our parts live at the same rhythm, and the disappearance of each cell does not signify the end of the individual.

In this chapter, we will explore regeneration, repair, aging, and cell death. These are related concepts, but not synonymous: tissue regeneration is not the same as molecular repair, cell aging is not the same as cell death, and cell death is not the same as the death of the organism.

1. Varying Cell Lifespans

Tissues have varying capacities for regeneration, and the lifespans of their cells differ. In the nervous system, many neurons are formed during early development and need to persist for a long time. Published research has shown that their survival has internal regulatory mechanisms, not simply a passive dependence on their environment. Therefore, it is incorrect to assume that all cells in the body are replaced at a uniform time. [1]

In regenerating tissues, cell production compensates for some of what is lost, but balance is what matters, not an unlimited increase in number. We have seen that cell division itself needs regulation; growth that is beneficial in one place and time can become harmful if it becomes unregulated.

We should not confuse the replacement of entire cells with the replacement of molecules within a surviving cell. The cellular entity may continue to exist with the regeneration of parts of it; therefore, the question "How old is this cell?" requires a definition of what we are measuring, not a single, general answer for the entire body.

2. Repair Before Replacement

Cellular regulation mechanisms include the ability to halt the cycle to repair problems in DNA. If the damage is irreparable, the cell may enter a path that ends in its regulated death. The response is not always cell replication, regardless of its status; the integrity of the content is part of the integrity of continued existence. [2]

Autophagy, on the other hand, involves the breakdown of cellular components and the reuse of their materials. Research into its mechanisms has highlighted that

organized breakdown is an essential part of cell life, not necessarily a sign of death. The existence of this process does not justify inferring that a diet or drug can cure every disease; explaining the principle is not the same as proving a therapeutic intervention. [3]

The idea can be illustrated by the maintenance of a house inhabited by its residents: repairing part of it does not mean demolishing it entirely. But the cell is not a static house; maintenance and activity are intertwined within it, and some of what is broken down is transformed into material that enters other pathways.

3. Apoptosis: Organized Death Within Continuous Life

Apoptosis is a form of organized cell death. It contributes to normal development, such as the removal of cells between the fingers during hand formation, and it also helps eliminate damaged cells. Disrupting its pathways can contribute to the survival of cells that should not persist, while the death of cells necessary for function is harmful. [4]

It is neither an absolute good in every measure and place, nor an evil that must always be prevented. Its effect is determined by the relationship of the event to the tissue's needs and the stage at which it occurs. We use the term "cell suicide" only as a common metaphor; we attribute no moral consciousness or personal intent to the cell.

Apoptosis does not encompass every form of cell death. Some forms of necrotic injury involve membrane rupture, leakage of contents and the triggering of inflammation. This differs from orderly removal in which cellular remains are taken up and processed, ordinarily without the same inflammatory effect. [2, 5]

4. Tissue Healing: Compensation Does Not Restore Everything

Following tissue injury, responses involving damage reduction, debris removal, and remodeling are involved. Regeneration of cells of the same type may contribute to compensation, or fibrous tissue may increase, resulting in scarring. Connective-tissue cells, regenerating vessels, and extracellular matrix are all involved in repair. Therefore, "healing" does not always equate to the restoration of all properties of the original tissue. [5]

The situation varies depending on the tissue, the size of the injury, and its circumstances. We are describing the principle here, not providing a general description of wound treatment or healing timelines. The medical details require further examination, and the section on immunity and disease will address inflammation and infection more clearly.

It is important that slow recovery does not become a reason to belittle the patient. What appears to be a small wound may have underlying conditions that go unnoticed; understanding the complexity of the repair process should enhance our care, not lead us to hasty judgments.

5. Cellular Senescence Is Not Death

In cellular senescence, a cell may enter a stable arrest of division while remaining alive and metabolically active, with changes in some functions and secretions. These secretions may affect neighbouring cells and the inflammatory environment of the tissue. A senescent cell is not simply a dead cell that has not been removed. [6]

This pathway has varying roles: it may limit the proliferation of damaged cells and contribute to some aspects of tissue repair, while the accumulation of senescent cells or disruption of their removal may have a detrimental effect. Therefore, we do not conclude that eliminating all these cells is an unconditionally valid goal, nor that their presence in any quantity is a sign of outright failure. [6]

The transient or quiet cessation of cell division, mentioned earlier in the cell cycle, is not synonymous with all that falls under the umbrella of cellular aging. Furthermore, human aging is a broader process than a single trajectory; we will explore it later at the level of organs and psychological and social life.

6. Telomeres: Protected Ends, Not a Clock That Reveals the Unseen

Telomeres are regions with repeating sequences at the ends of chromosomes, contributing to their protection. They may shorten with repeated cell division in many cells, while the enzyme telomerase can add repeats in certain cell types and contexts. Therefore, science does not treat the chromosomal end as a functionless, redundant tail. [7]

However, telomere length alone is not a calendar on which we can read the date of a person's death, nor does it encompass all the causes of aging. A change in a molecular marker alone does not prove that a person will live longer or healthier; the desired outcome requires appropriate, direct measurement.

7. What Can We Expect from Aging Research?

Scientists are searching for indicators and pathways that will help them understand aging and reduce associated disease and frailty. Research programs studying senescent cells underscore the importance of carefully controlled translations from laboratory findings to humans; results in animals are not sufficient to be prescribed for humans. [6]

The scientific hope here is not a promise that the body will transcend the limitations of life, but rather a quest for better understanding and more precise care. It would not be ethical for this book to promote a commercial product called "reversing aging" or to transform an initial success into a proven treatment. We will leave the names of therapeutic interventions and their suitability for expert medical review.

8. Time in the Body, and Dignity with Weakness

“Allah is He Who created you from weakness, then made you strong after weakness, then made you weak and old after strength. He creates what He wills, and He is the All-Knowing, the All-Powerful.” [Ar-Rum: 54]

The verse describes the succession of weakness, strength and grey-haired old age in

human life. We do not treat telomeres as its exclusive explanation or turn the verse into a laboratory description of cellular senescence. Rather, we read it alongside our own fragility, which we may overlook at the height of our strength.

Whoever is strong today knew weakness before their strength, and may know it afterward. This calls for compassion towards the elderly and the sick, and for not linking dignity to the ability to produce or move. A person does not lose their right to care when some bodily functions decline.

We will dedicate later parts of the book to death, dying, the intermediate state (Barzakh), and resurrection. What we have studied here about the end of a cell does not, in itself, establish a ruling in Islamic jurisprudence on the death of a person, nor does it explain the nature of the soul or its fate. Each issue has its own evidence and level of inquiry.

Conclusion of Part Two

We began with water, elements, and compounds, then moved on to the cell and genetic material, and continued with division, differentiation, tissues, and diversification, concluding with regeneration, aging, and cell death. We now possess a degree of scientific language that allows us to understand the beginnings of creation without leaving the words obscure.

The next step does not take us away from the human being into a remote experiment; it returns us to the beginning close to each of us: the meeting of inherited material, the start of pregnancy and the embryo's development within its mother's womb. There we will read Quranic texts and narrations in context and compare their accounts with what developmental science describes, while preserving the limits of each inference.

Chapter Fifteen References

[1] National Eye Institute (NEI), Neurons are genetically programmed to have long lives, July 24, 2020; a presentation of research on the mechanisms of neuronal survival. Used for the general principle, not to determine the lifespan of all cell types.

[2] MedlinePlus Genetics, How do genes control the growth and division of cells?; repair, regulated death, and removal of debris.

[3] National Cancer Institute (NCI), Glossary of Cancer Terms, Autophagy; definition of autophagy, the breakdown of cellular components, and the reuse of their products. This is a definitional source for the principle, not a review of the original research or evidence for a specific treatment.

[4] NHGRI, Glossary of Terms, Apoptosis; definition of apoptosis and its role in development and in removing some damaged cells, without adopting all the pathological simplifications in the voiceover.

[5] OpenStax, Anatomy and Physiology 2e, Section 4.6; tissue repair, regeneration, scarring, and inflammation, without taking it as a guide to the treatment of an individual wound.

[6] NIH Intramural Research Program, Preserving Cellular Health During Aging, Updated July 24, 2024; presentation of researchers' work on senescence, its secretions, and the limitations of translating findings to therapy.

[7] NHGRI, Glossary of Terms, Telomere; protection of chromosome ends and telomerase.

Part 3: Preparing for a New Human Life

After our journey through the cell, heredity, and tissues, the body is no longer an obscure entity. We have seen how life is built upon working parts, and how a human being carries a biological history that does not diminish their freedom or value. Now we approach the point where life passes from one generation to the next: how do two bodies prepare to form a new human being?

We will not begin with the image of the embryo before understanding its path. We will learn about the organs of men and women, then about reproductive cells and their maturation, the menstrual cycle and fertilization, the diversity in sexual development, and delayed conception. We will preserve the scientific language of our explanations, the sanctity of the body, and the dignity of those whose bodies are different or whose fertility is impaired—a dignity that does not require validation from a body part.

Chapter 16: The Male Reproductive System

Knowledge Untainted by Shame

A person may know the names of distant things in the sky, yet hesitate to ask about an organ in their own body. Not all hesitation is bad; modesty preserves the language and context of discussion, but it should not deprive a person of the knowledge needed to understand creation and maintain health. The following pages offer an anatomical and educational description, without sensationalism or a diagnosis of any particular individual.

We do not say that a man is merely his reproductive system, just as we do not say that he is his stomach or muscles. We are describing one aspect of the human being, remembering that a person is more than any single aspect. The ability to reproduce is a function, not a measure of knowledge, courage, faith, or how well someone treats others.

The Testes: Two Sites for Two Functions

In the standard anatomical description, there are two testes within the scrotum, a sac of skin outside the abdominal cavity. Each testis contains coiled seminiferous tubules within which the cells that develop into sperm originate. Between the tubules are Leydig cells, which produce androgens, the most important of which is testosterone. Sertoli cells support the germ cells within the tubules and provide them with a suitable environment for growth. [1]

Thus, we arrive at two related but not one and the same function: the production of reproductive cells and the production of hormones. A hormone is a chemical messenger that travels and affects tissues, while a sperm cell is a cell with its own structure and function. Distinguishing between them is the first step to protecting the reader from reducing all reproductive matters to a single word: "hormone."

The location of the testes outside the abdominal cavity is related to the temperature

suitable for sperm production. The muscles of the scrotum and the cremaster muscle contribute to changing the proximity of the testes to the body and altering the skin's appearance as part of thermoregulation. This does not mean that the testes are separate from the rest of the body; they are connected by blood vessels, nerves, and ducts. [2]

The Cell's Path After Leaving the Testis

Sperm cells travel through small ducts to the epididymis, a highly coiled duct located at the back of the testis. As they pass through it, they gain further maturity and motility, and some are stored there. The epididymis then connects to the vas deferens, a muscular tube that transports sperm toward the pelvis. [3]

Near the end of this pathway, the vas deferens joins the seminal vesicle duct, forming a short ejaculatory duct that passes through the prostate and opens into the urethra. The urethra is the tube that leads to the outside of the body via the penis; therefore, the urinary and reproductive systems share part of the exit pathway, with muscular and nervous regulation of both functions. [3]

This map distinguishes between the site of cell production, the site of maturation, and the route of transport. The external organ is not the factory where sperm are produced, nor is the bladder a storage facility. This distinction may seem simple, but it dispels many misconceptions that arise when the body is learned from hearsay rather than knowledge.

Sperm is not the entire seminal fluid.

Accessory glands add their secretions to the sperm cells. These glands include the seminal vesicles, the prostate gland (located below the bladder and around the beginning of the urethra), and the bulbourethral glands. The secretions of the seminal vesicles include substances such as fructose, and the secretions of the various glands contribute to the formation of the fluid medium surrounding the cells. [4]

Thus, seminal fluid is a mixture, and sperm are the cells within it. The word "semen" in common usage is not a precise substitute for every microscopic term. When we read an old text or a modern medical description, we should first ask: Is the text referring to the entire fluid, the individual cell, or the function of a specific organ?

This question prevents hasty comparisons between two expressions that do not address the same level. There is no need to burden familiar Arabic with microscopic details it was not intended to describe, nor to deny its accuracy in its field simply because it was not written in laboratory terminology.

The Penis and Urethra: Structure, Not Just Appearance

The penis consists of erectile tissue, including two corpora cavernosa and a corpus spongiosum that surrounds the urethra. It has a root, a shaft, and a glans, and the urethra extends to its external opening. These are anatomical terms that describe the positions and tissues, allowing for a clear understanding of function and medical examination in specific language, avoiding ambiguous terminology. [5]

Naming an organ does not diminish its respect. What diminishes respect is turning it into an object of ridicule, coercion, or exploitation. Knowledge given as needed and in its proper context opens the door to responsible questioning and helps individuals describe their concerns without fear of the word itself.

From the Brain to the Testis

The testis does not function in isolation. The hypothalamus, a part of the brain, sends gonadotropin-releasing hormone (GnRH), which affects the anterior pituitary gland, which then releases follicle-stimulating hormone (FSH) and luteinizing hormone (LH). LH stimulates Leydig cells to produce testosterone, and FSH, along with the hormonal environment within the testis, supports the function of Sertoli cells and spermatogenesis. [6]

Signals from the testis return to regulate this axis; testosterone contributes to feedback, and inhibin participates in inhibiting FSH secretion. Feedback means that the result influences the signal that helped create it, so the relationship is not a one-way street with no end. [6]

This is a brief overview that does not encompass all the details of the glands. What is important here is to see the connection between an organ inside the head and an organ outside the abdomen, and to realize that the separation between systems is a means of understanding, not a physical wall separating the body's organs from one another.

The Sperm-Drop in the Verse, and the Detail in Biology

God Almighty said: {And that He created the two kinds, the male and the female} [An-Najm: 45].

God Almighty said: {From a sperm-drop when it is emitted} [An-Najm: 46].

These two verses appear in a context that attributes creation to God and awakens humanity to its origins. The descriptions of the tubes, cells, and hormones are learned through anatomical and experimental research. We do not need to make every scientific term the exclusive interpretation of a word in the verse in order to reconcile contemplation of divine revelation with an understanding of the body.

Sexual differentiation will be discussed in detail in its proper place; merely mentioning the sperm-drop does not allow us to bypass the intertwined roles of chromosomes, genes, hormones, and tissue development. Leaving the scientific question open to further detail is not a deficiency in the verse, just as the verse is not an abridgment of a specialized embryology textbook.

The private parts have rights, and their owner has dignity.

In the Treatise on Rights, narrated from Imam Ali ibn al-Husayn al-Sajjad (peace be upon him), as cited by Ibn Shu'bah al-Harrani in Tuhaf al-'Uqul, it states: "As for the right of your private parts, it is to protect them from what is unlawful for you and to seek help in this by lowering your gaze, for it is one of the greatest aids." [7]

This is a discourse on human responsibility for one's actions, not a lesson on the

course of the ducts or hormone secretion. Fairness to the narration requires keeping it within its own domain: an organ is not separate from conscience, and knowledge does not grant its possessor the right to transgress. The text appears in the cited source without a continuous chain of transmission at this point; we therefore do not describe its chain here as sound, nor treat its fame as a verdict on every chain through which the Treatise was transmitted.

Furthermore, no one has the right to use delayed conception as a means to humiliate a man or question his humanity. We will examine the causes and tests in a separate chapter, but the ethical principle does not depend on a test result: a patient needs knowledge and compassion, not a court of conjecture.

From the Road to the Other Side

We have seen that the preparation for reproduction is distributed among cells, ducts, glands, and signals, and that a single name conceals a vast network of interactions. However, this is only half the map. In the other body, there are organs that do not replicate this structure; rather, they prepare the ovum, receive fertilization, and carry the embryo. It is to this map that we turn.

Chapter Sources and Documentation Notes

[1] US National Cancer Institute, SEER Training Modules: Testes; basic structure, seminiferous tubules, and Sertoli and Leydig cells.

[2] OpenStax, Anatomy and Physiology 2e, Section 27.1: Anatomy and Physiology of the Testicular Reproductive System; the scrotum and thermoregulation. The discussion of gamete formation is continued in a separate chapter.

[3] National Cancer Institute, SEER: Duct System; epididymis, vas deferens, ejaculatory ducts, and urethra.

[4] National Cancer Institute, SEER: Accessory Glands; location and secretions of the accessory glands, without generalizing about the pH of each secretion.

[5] National Cancer Institute, SEER: Penis; erectile bodies and parts of the organ.

[6] OpenStax, Biology 2e, Section 43.4: Hormonal Control of Human Reproduction; hypothalamic-pituitary-gonadal axis and feedback. The description here is simplified and does not imply that axis activity begins for the first time at puberty.

[7] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul 'an Aal al-Rasul, edited by Ali Akbar al-Ghaffari, p. 258, Risalat al-Huquq, the right of the private parts. A specific passage was quoted; no judgment was made affirming the soundness of its chain of transmission.

Chapter 17: The Female Reproductive System

A Map That Begins with Correcting the Names

When we say "the mother's womb," the image of the entire reproductive system may come to mind. However, the womb is one organ among many, not a name for everything in the pelvis. In this chapter, we will break down the names to clarify the functions: the ovaries, the fallopian tubes, the uterus and its cervix, the vagina, and the external genitalia. What we present here is the common anatomical structure;

developmental variations will be discussed in their own chapter.

The purpose of this knowledge is not to view women solely through the lens of reproduction. A woman is a complete human being, whether she becomes a mother or not. Rather, we study one of the functions of her body because it is a fundamental link in the human story, and because ignorance of this function has burdened the lives of many women with shame, blame, and unanswered questions.

The Ovaries: The Cell and Its Surroundings

The ovaries are located in the pelvis on either side of the uterus. The ovarian cortex contains follicles that hold egg cells, along with surrounding and supporting cells. The inner region contains tissue interspersed with blood vessels and nerves. The follicle is not another name for the ovum; rather, it is the structure in which the oocyte develops and interacts with the surrounding cells. [1]

This is a more accurate picture than imagining a sac in which fully mature ova accumulate, awaiting release. Cells have stages, their surroundings play a role, and maturation has its timing. We will return to the origin of this reserve of cells and to meiosis in the next chapter, so as not to confuse the spatial map with the history the cell has undergone.

The ovary also contributes to the production of reproductive hormones, most importantly estrogens and progesterone. Here, too, the cell's function is inseparable from the body's signals, and the organ's function is not limited to the moment of fertilization. The ovarian cycle is connected to changes occurring in the uterus within a reciprocal hormonal regulation. [2]

The fallopian tube is not a closed cord between two organs.

Each fallopian tube connects to the uterus, while its end near the ovary opens into a funnel surrounded by finger-like projections called fimbriae. There is no direct, sealed connection between the tube's opening and the ovarian surface. The fimbriae and fluid movement help capture the oocyte after ovulation. [3]

Inside the tube, microscopic cilia and contractions of the muscular wall contribute to the movement of the contents toward the uterus. Fertilization usually occurs in the tube, not inside the ovary. Therefore, the site where the two cells meet is not the same as the site where a normal pregnancy continues. Fertilization, implantation, and the difference between them will be explained later. [3]

This fact changes a common image: the embryo is not a fully formed baby that is thrown into the uterus, nor is the ovum a tiny organism waiting to be inflated. There are cells that meet, then processes that gradually regulate development, and the environment in which each stage takes place is different from the one after it.

The Uterus: A Living Wall, Not a Static Vessel

The uterus has a body, a fundus at its top, and a cervix at its bottom. Its wall is composed of layers, the most prominent of which are the uterine muscle and the endometrium. The endometrium changes under hormonal influences; the functional

part of it is renewed during the menstrual cycle, while a basal layer remains, contributing to its regeneration. The muscle plays a fundamental role in childbirth contractions. [4]

The word "lining" does not mean an artificial membrane covering a rigid wall. We are talking about living tissue with cells, glands, and blood vessels that changes according to the signals it receives. This may be one of the most important ideas we carried forward from the discussion of tissues: what appears to us as a simple surface may be a site of activity for many cells invisible to the naked eye.

The cervix is the lower part of the uterus that projects into the upper vagina. It has a canal and produces mucus whose properties change during the cycle. It should not be confused with the external vaginal opening, nor should the function of one organ be attributed to another merely because they are close together. [4]

The Vagina and External Organs

The vagina is a fibromuscular canal that connects the cervix to the outside; menstrual blood passes through it, and it is part of the vaginal birth canal. It is distinct from the urethra, through which urine exits, and from the rectum, which leads to the anus. The openings are anatomically close, but they do not perform the same function. [3, 5]

As for the external organs, collectively referred to as the vulva in anatomical descriptions, they include the mons pubis, the labia majora and minora, the clitoris, the vulvar vestibule, and the glandular openings within it. The clitoris is a highly innervated organ with erectile tissue, and it is a mistake to omit it from anatomical descriptions because discussing it is surrounded by social taboos. Medical knowledge is not an invitation to violate privacy. [5]

When we use names correctly, we can ask a clear question and understand a clear answer. Language that lumps each organ together under a vague term can increase anxiety and make the questioner feel that simply needing to understand is shameful. It is not merciful to make a mistake in the name easier to bear than learning the correct one.

A Small Tissue That Carries No Record of a Life

One of the areas where anatomy is most often confused with judging people is the tissue known as the hymen. The World Health Organization, in a joint statement with other UN agencies, affirms that the appearance of this tissue does not prove the history of sexual intercourse, and that there is no known test that can establish such a history. The so-called "virginity test" is not based on any scientific foundation that achieves its purported purpose. [6]

This is a specific medical finding, not an attempt to pass judgment on a person's life. The practical and ethical meaning we draw from it is clear: an anatomical appearance must not be turned into a tool for humiliating or accusing a woman, or forcing her to prove her innocence through a test that does not possess the ability attributed to it in the first place.

A medical examination necessitated by a health need is another matter; its purpose is to assess a specific problem, explain it to the woman, and treat her with respect. Not every examination of the genital area is an examination to prove behavior, and respecting privacy does not mean withholding necessary care or silencing pain.

Hormonal Rhythm: A Dialogue Between Organs

The hypothalamus, pituitary gland, and ovaries all work together to regulate reproductive activity. The hormones FSH and LH affect the ovaries, and their hormones then contribute to changes in the uterine lining and to regulating the menstrual cycle. The ovary has a phase in which follicles develop, followed by ovulation, and then a phase in which the corpus luteum forms from the remnants of the follicle that released its egg cell. [2]

However, the word "cycle" does not mean that every woman operates on a fixed schedule identical to every other. We cannot deduce from a single diagram the exact date of ovulation for every woman, nor can we consider every variation a disease. The details of timing, natural variation, and what needs evaluation will be the subject of Chapter 19, instead of drowning the organ system in numbers that may be misinterpreted.

Furthermore, the name of a hormone does not explain the personality of the person it describes, nor does it justify reducing their thoughts to their body. A book that describes a function should not become a language that justifies belittling human beings. Understanding the effect of hormones refines the question, but it doesn't provide a ready-made answer for every behavior.

In the wombs as He wills

God Almighty says: “He is the One Who shapes you in the wombs as He wills. There is no god but He, the Exalted in Might, the Wise.” [Al Imran: 6]

This verse opens the door to contemplating human creation under the Creator's authority and wisdom. When we describe muscles, lining, and tubes, we are not replacing this meaning, but rather becoming acquainted with some of what occurs in the world that the verse invites us to reflect upon. Naming a mechanism does not remove it from creation, just as belief in the Creator does not negate the need to learn the function of an organ.

A woman whose body possesses these predispositions is not merely a vessel through which others pass. She possesses knowledge, feelings, rights, choices, and responsibilities; and what we write about the womb should not obscure the woman herself. The narrative will expand to encompass motherhood, the hardships of pregnancy, care, and rights in its respective chapters, without reducing the woman to a single stage of her life.

The Cell Before the Meeting

We now have two complementary maps of reproductive function, differing in structure and timing. It remains for us to examine the two cells that may meet: How do some body cells become capable of transferring half of the chromosome set? And

why does the path of sperm formation differ from the path of egg cell maturation? This is the introduction to the next chapter.

Chapter Sources and Documentation Notes

[1] National Cancer Institute, US, SEER: Ovaries; location of the ovary, cortex, medulla, and follicles. Estimated oocyte counts were not used in this chapter.

[2] US National Cancer Institute, SEER: Female Sexual Response & Hormone Control; ovarian phases and hormonal communication. This source is used only for that aspect; not all of the page's generalizations are adopted.

[3] US National Cancer Institute, SEER: Genital Tract; the uterine tube, endometrium, and vagina. This chapter does not adopt the page's estimates for tubal transit time or the length of time an ovum remains capable of fertilization.

[4] OpenStax, Anatomy and Physiology 2e, Section 27.2: Anatomy and Physiology of the Ovarian Reproductive System; uterine sections, wall layers, and cervix.

[5] National Cancer Institute, SEER: External Genitalia; external organs and orifice locations.

[6] World Health Organization, Office of the United Nations High Commissioner for Human Rights, and UN Women, Eliminating Virginity Testing: An Interagency Statement, 2018; the examination has no scientific ability to establish a history of sexual intercourse.

Chapter 18: The Formation of Sperm and Ova

Before the Beginning We See

When a child is born, we know the date of birth, but the path to that day did not begin when the mother's womb grew, nor when the two cells met. Each cell came after a history of division and maturation. In this chapter, we go back a step: to the preparation that makes the meeting capable of initiating a new creation.

Gametes are the reproductive cells: the sperm and the egg. A mature gamete carries a single set of chromosomes, unlike the usual diploid set in somatic cells with a nucleus. In the typical human pattern, each gamete has 23 chromosomes, increasing to 46 upon fertilization. This is a description of the typical pattern, not a denial of the variations in chromosome number we have discussed. [1]

Half That Doesn't Mean Half a Human

When we say "half a chromosome set," we are specifying the number of chromosome sets, not the value of the father or mother, nor half of the future personality. There is no ready-made miniature human in the sperm to which nourishment is added, nor is there a complete human waiting to be activated in the egg. These are specialized cells, and subsequent development opens a new level of organization.

We learned in the chapter on cell division that meiosis is not an arbitrary division of genetic material: chromosomes are distributed through organized processes, and crossing over contributes to recombination of their material. Gametes from the same person are therefore not necessarily genetically identical copies. We recall this principle here to understand differences between siblings, rather than to repeat the earlier chapter's details. [2]

How do sperm cells originate?

At the wall of the seminiferous tubules are spermatogonia capable of continuing to divide. Some of their descendants enter a pathway of differentiation, forming a primary spermatocyte, then two cells after the first meiotic division, and then four haploid cells after the second division. These final cells, called spermatids, have not yet acquired the final shape of sperm cells. [3]

The divisions are followed by changes in shape and internal organization: the nucleus condenses, the acrosome forms in the head, the mitochondria organize in the midpiece, the tail forms, and a large amount of cytoplasm is released. The cells then exit into the ducts, and maturation continues in the epididymis. [4]

The tail is not an ornament attached to the cell, nor is the head an ordinary box. The head contains the concentrated genetic material, the acrosome contributes to the reaction stages necessary for fertilization, and the tail serves movement. The structure here is linked to the function; it is not right to expect this cell to have the same extensive cytoplasmic structure as other cells and then consider its difference a deficiency. [4]

The large number of cells does not mean that each one will fertilize an egg. Production is one thing, and transfer, survival, preparation, and interaction with another cell are quite another. We will leave the details of the encounter for the chapter on fertilization so as not to attribute to the mere presence of a cell the guaranteed ability to complete the journey.

The egg carries an earlier history.

The female pathway differs in its timing. During prenatal development, primary oocytes arise and enter meiosis, then arrest in prophase of its first division. From this reserve established before birth, some cells continue toward maturation during the reproductive years, while many degenerate without reaching ovulation. [5]

In this sense, one of the preparations for reproduction began before the woman herself was born. This does not mean that the future child existed fully formed at that time; that would confuse the origin of a cell with the existence of a human being. Understanding the sequence preserves wonder without adding to science a story it has not told.

Prior to ovulation, the selected oocyte can complete the first meiotic division. The cytoplasm divides unequally, resulting in a large secondary oocyte and a small polar body. The secondary cell then enters the second meiotic division and stops at metaphase; this division is usually not completed until fertilization. [3]

Therefore, the term "ovum" in general terms is more widely used than the precise term in cytology. The cell released during ovulation is usually a secondary oocyte. It is haploid after the first division, although each chromosome remains composed of two chromatids until the second division is complete. The number of sets is not the amount of DNA at any given moment. [3]

Difference in structure, not order of value

Unequal division preserves most of the cytoplasm in one large cell, instead of distributing it equally among four similar cells. The pathway of sperm formation, by contrast, produces many smaller cells. This is a functional difference between two pathways, not a competition for dignity between the sexes.

We should not turn the words "active" or "stationary" in descriptions of a cell's movement into judgments about men and women. Movement under the microscope does not describe a person's will; the oocyte is not merely inert matter, nor is the sperm cell a conscious decision-maker. A metaphor that helps understanding becomes misleading when we forget that it is a metaphor.

Let man consider from what he was created.

God Almighty said: “Let man consider from what he was created.” [At-Tariq: 5]

God Almighty said: “He was created from a fluid gushing forth.” [At-Tariq: 6]

God Almighty said: “It emerges from between the loins and the ribs.” [At-Tariq: 7]

And God Almighty said: “Indeed, He is Able to return him.” [At-Tariq: 8]

The verses should not be detached from their larger argument: recalling the beginning in the context of God's power to bring back. Yet that context does not exempt us from asking about the words. In Majma' al-Bayan, al-Tabarsi reported several views on al-tara'ib, including an interpretation referring to the man's loins and the woman's chest bones. He also noted that the well-known Arabic usage refers to the bones of the chest and upper chest. These are transmitted interpretive views, not laboratory descriptions of reproductive cells. [6]

Al-Tabataba'i favored the view that the location mentioned is the part of the body between the bones of the back and the chest. When citing a report from Tafsir al-Qummi that links the loins to the man and the chest bones to the woman, he noted that the speaker was unspecified and the chain of transmission was incomplete; he did not present it as conclusive evidence on the strength of its chain. This brief citation does not justify attributing the report to a particular Imam. [7]

The anatomical information we presented is clear in its scope: sperm cells are formed in the seminiferous tubules of the testes, and egg cells develop in the ovaries. However, determining the detailed meaning of the Quranic phrase is a matter of interpretation in which there is disagreement. We do not claim that the cells are formed in the rib bones, nor do we consider any interpretation of the verse to be a binding consensus.

Likewise, we do not offer the relocation of the reproductive glands during embryonic development as a definitive interpretive solution simply because it can be discussed scientifically. The accuracy of information about the embryo is not sufficient on its own to prove that it is the intended meaning of the verse. The reader has the right to see the point of inquiry and the limits of the answer, rather than receiving an artificial certainty.

The Small Origin and the Great Responsibility

Reflecting on this beginning does not diminish a person; it brings their pride back into proportion. None of us chose the cells from which we came, nor wrote by hand the stages that preceded our awareness. Yet the story does not stop at the material origin: this human being will come to possess hearing, sight, relationships, and deeds for which they hold themselves accountable.

We now know how the two cells are prepared, but their existence doesn't make every day equally likely to bring about an encounter. There is a rhythm in the ovary and uterus, changing times, and signs that may aid understanding but don't offer absolute certainty. We will turn to this rhythm in the next chapter.

Chapter Sources and Documentation Notes

[1] National Human Genome Research Institute (NHGRI), Gamete; the definition of a gamete, a single chromosome set, and the restoration of diploidy at fertilization.

[2] OpenStax, Biology 2e, Section 11.1: The Process of Meiosis; Reference to the original explanation of crossing over and chromosome distribution in Chapter Twelve.

[3] OpenStax, Biology 2e, Section 43.3: Human Reproductive Anatomy and Gametogenesis; the sequence of meiosis and the stages of oocyte arrest. No other generalizations on the page regarding temperature, sexual differentiation, or transit time were adopted.

[4] OpenStax, Anatomy and Physiology 2e, Section 27.1; the transformation of spermatids and the structure of the head, midpiece, and tail.

[5] National Cancer Institute, SEER: Ovaries; the initiation of oocyte formation before birth and the arrest of the first division. We did not adopt a fixed number for the oocyte stock in this chapter.

[6] Al-Tabarsi, Majma' al-Bayan, commentary on Surat al-Tariq, verses 5–9; The diversity of linguistic and interpretive statements and the context of the ability to resurrect. Refer to the text of the commentary, not the abridgment.

[7] Al-Tabataba'i, Al-Mizan, commentary on Surat al-Tariq, verses 1–17, the explanatory and transmitted-report discussions; his preferred interpretation of al-sulb and al-tara'ib, and his observation that the report has an unspecified speaker and an incomplete chain of transmission.

Chapter 19: The Menstrual Cycle, Ovulation and Fertility

The Body Is Not a Page on a Calendar

In textbooks, there is a colored circle with an arrow that passes over twenty-eight days. The diagram helps to organize events, but it can be misleading if it becomes a rule imposed on every woman. The cycle is a living function, not an administrative appointment; we understand its regularity by observing the changes, not by forcing every body to conform to a single pattern.

The length of the cycle is calculated from the first day of menstrual bleeding to the day before the start of the next period. Twenty-eight days is a common learning average, not a fixed duration; regular cycles can be longer or shorter. Furthermore, the days of bleeding do not represent the entire cycle, but only a part of it. [1]

The difference between the two definitions has an impact on understanding:

someone who says their period lasted five days is not necessarily telling us that their cycle is five days long. Similarly, someone who knows the date of their previous bleeding does not necessarily know the date of their next ovulation with certainty. We will first examine the natural sequence, then define the limits of what can be inferred from it.

Two simultaneous events: in the ovary and in the uterus

In the ovary, follicles develop, and a dominant follicle usually emerges, approaching ovulation. In the uterus, the lining is regenerated in preparation for possible implantation. The uterine lining does not migrate to the ovary to become an egg, nor does the entire follicle migrate to the uterus; each organ has its function, and hormonal signals connect these two processes. [2]

The rise in estrogen during the pre-ovulatory phase helps the endometrium to grow. When the appropriate estrogen surge pattern is achieved, the hormonal axis responds, triggering a strong LH surge that contributes to the release of the egg. After ovulation, the follicle transforms into the corpus luteum, which produces progesterone along with estrogen. [3]

This is an important example of how a hormone cannot be interpreted in isolation from time, level, and context. The name of the substance is not enough to understand its effect, and seeing an upward arrow in a diagram does not negate the need to ask: When did it rise? In which tissue does it act? What other signals are present?

What happens after ovulation?

In the phase after ovulation, progesterone helps prepare the endometrium to receive the embryo. If support for the corpus luteum is not maintained as part of an emerging pregnancy, its activity declines and hormone levels fall; the functional layer of the endometrium then sheds and menstrual bleeding begins. The discharge contains blood and uterine tissue; it is not simply the expulsion of the ovum. [4]

Thus, a cycle of building and changing occurs, not a cycle of "toxin storage" followed by elimination. The medical description of tissue function is one thing, and the rulings of purity in Islamic jurisprudence are another. The jurisprudential description should not be interpreted as a chemical analysis of blood, nor should the explanation of tissues be used to dismiss a jurisprudential question that has its own evidence and methodology.

The absence of pregnancy in a single cycle does not mean that the body has failed, or that the woman has done something wrong. Not every preparation guarantees a result. It is cruel to turn every return of menstruation into an accusation, instead of understanding it within its biological context and the couple's circumstances.

Ovulation does not always occur on the fourteenth day.

General medical explanations state that ovulation occurs in many women approximately ten to sixteen days before the next menstrual period. Setting it on day 14 assumes an example of a 28-day cycle; it cannot be generalized to all cycles. [1]

However, calculating the expected date is not proof that the cell has actually been released. The timing of the fertile window can vary even for those who describe their cycles as regular. The American Society for Reproductive Medicine emphasizes the limitations of calendar-based predictions, including some apps that infer the day of ovulation from the lengths of previous cycles. [5]

The app does not see the ovary. It calculates from information entered by the user and then displays an estimate according to its own method. Therefore, it may be a useful tool for organizing observations, but it does not become a tool of certainty simply by coloring a day green. This estimate alone should not be taken as a guarantee of contraception or proof of ovulation.

Why does the fertile window extend over several days?

Sperm can remain viable for fertilization inside the female reproductive tract for up to five days under suitable conditions. Therefore, intercourse does not necessarily have to occur at the exact moment the egg is released. The meeting of the two cells is also linked to what remains viable from the preceding days. [4]

For guidance purposes, the American Society for Reproductive Medicine defines the fertile window as the six days culminating in ovulation: the day of ovulation and the five days preceding it. This is a probabilistic framework, not a guarantee of pregnancy every time. Nor does it mean that all days within it are equally probable. [5]

Observing changes in cervical mucus or taking urinary LH tests may help estimate the approach of ovulation. However, detecting a hormonal surge is not a direct indication of successful fertilization, nor does it replace a medical evaluation when a problem exists. Each sign answers a specific question, and it is unfair to consider it the answer to the entire sequence of events. [5]

Between Normal Variation and the Need for Care

Menstruation may be accompanied by cramps, headaches, bloating, or mood swings, and their intensity varies among women. Disruptive pain, heavy bleeding, or troubling menstrual irregularities are not issues to be dismissed with the phrase "This is normal for all women." The World Health Organization emphasizes the importance of listening to and assessing these complaints, and heavy bleeding may be linked to iron deficiency and anemia. [6]

This chapter does not offer a diagnosis to the reader. Complaints may be similar, but their causes may differ. The general knowledge is intended to help the reader seek care and describe the problem, not to lead them to choose a disease from a list.

It is essential for a girl to know, before her first period, what to expect and how to manage it, and to have access to appropriate supplies, water, privacy, and accurate information. These are health and human needs, not privileges. Access to information, care, and appropriate facilities falls under the World Health Organization's concept of menstrual health. [6]

They ask you about menstruation.

God Almighty says: “They ask you about menstruation. Say, ‘It is a discomfort, so keep away from women during menstruation. And do not approach them until they are pure. And when they have purified themselves, then come to them from where God has ordained for you. Indeed, God loves those who repent and loves those who purify themselves.’” [Al-Baqarah: 222]

The verse does not present a hormone chart; it answers a question about conduct and boundaries. In Majma' al-Bayan, al-Tabarsi explains that the abstention concerns intercourse at the site of menstruation, not excluding a woman from shared meals, company, and everyday life. He presents differing views on the details of purification and the cessation of bleeding; we therefore do not convey this historical discussion as a single fatwa binding on every reader today. [7]

What we emphasize here is that the term "harm" does not make the woman herself a harm to be rejected. She is addressed with dignity and care during menstruation and at other times. The practical matters of prayer, fasting, ritual purification, and marital relations have detailed jurisprudential rulings that can be consulted in their authoritative sources. These rulings will be compiled in the section on rights and rulings, not in a footnote to hormonal information.

From Preparation to Encounter

We have learned how preparation matures, how to interpret time without hasty judgment, and how knowledge can be a gateway to mercy, not surveillance and humiliation. In the following chapter, we will examine what happens when a sperm cell meets an egg cell: not as a fictional race where the "strongest" wins, but as a series of interactions that initiate a new stage of development.

Chapter Sources and Documentation Notes

[1] UK National Health Service (NHS), Periods and Fertility in the Menstrual Cycle; Cycle Calculation, Temporal Variation, and Approximate Timing of Ovulation.

[2] US National Cancer Institute, SEER: Female Sexual Response & Hormone Control; Synchronization of Ovarian and Uterine Phases, with anatomical details referred to Chapter 17.

[3] OpenStax, Biology 2e, Section 43.4; the LH surge and corpus luteum. This source is used here only for the sequence of these signals, not to assume a fixed day for all women.

[4] National Institute of Child Health and Human Development (NICHD), About Menstruation; Endometrial Change, Hormone Decline, and Sperm Survival. The approximate charts were not used to establish a personal timing.

[5] American Society for Reproductive Medicine (ASRM), Optimizing Natural Fertility: A Committee Opinion, 2022; the fertile window, limitations of calendar-based predictions and apps, and signs of ovulation.

[6] World Health Organization, Menstrual Health, June 18, 2026; Symptoms that warrant evaluation, access to knowledge and care, and menstrual health supplies. This chapter does not include descriptions of treatment or dosages.

[7] Al-Tabarsi, Majma' al-Bayan, Tafsir al-Baqarah: 222, sections on revelation and meaning. The general interpretive approach is conveyed, and the jurisprudential details are referred to their

respective sources.

Chapter 20: Fertilisation and the Beginning of Embryonic Development

An Encounter Is Not Just a Collision

We like to summarize the beginning in one sentence: A sperm met an egg, and a human being began. But a concise sentence does not explain everything. Between approaching the cell and uniting with it are stages of preparation, recognition, and interaction. Then divisions and organization begin that are not like adding one ready-made piece to another.

Fertilization, in its biological description, combines the materials of the two reproductive cells at the beginning of a new formation. As for the discussion of the soul, rights, and rulings, that is another topic related to this beginning and cannot be derived from the microscope alone. From now on, we will preserve the difference between what we observe in cellular events and what we infer in religion, philosophy, and jurisprudence.

The Journey and Preparation

Sperm travel through the female reproductive tract, and some reach the fallopian tube, where fertilization usually occurs. Along the way, they undergo changes known as capacitation, or the acquisition of fertilizing ability, involving their membrane and function. Maturation in the epididymis does not replace this later step, which is necessary for interaction with the oocyte. [1]

Herein lies the error of the image that portrays the journey as merely a race. Reaching the cell isn't the whole story, and the moving cell doesn't operate outside the constraints of its environment. We don't need to describe it as "brave" or "smarter" to appreciate the precision of what's happening; these are psychological attributes that aren't supported by imaging a moving cell.

Envelopes and Cellular Recognition

The oocyte is surrounded by accompanying cells and a glycoprotein layer called the zona pellucida. The acrosome reaction, associated with the structure of the sperm head, contributes to passage through these coverings. Following the necessary sequence of interactions, the sperm membrane can meet and fuse with the oocyte membrane. [1]

Molecular research has identified proteins involved in recognition between the two cells. Studied examples include IZUMO1 on the sperm and its receptor JUNO on the oocyte. A paper published in Nature in 2016 presented the molecular structures of the two human proteins separately and together in a bound complex, helping clarify one aspect of the basis of this recognition. [2]

Knowing these two names does not mean we have grasped all the conditions for fertilization, nor does it provide a ready-made test to explain every case of delayed

conception. Research that explains a molecular structure is not the same as a clinical examination for a specific individual, and moving from discovery to treatment requires further evidence.

The Zygote: A New Organization

Fertilization is accompanied by activation of the oocyte, completion of its meiotic division, and changes that help prevent fertilization by multiple sperm. The paternal and maternal chromosome sets come together in the new cell, called the zygote. We should not imagine this as merely pouring two fluids together: it is a cellular union followed by an organized course of early divisions. [1]

This beginning does not definitively determine the entirety of human futures. While genetic makeup is an important foundation, it does not determine the language a child will learn, the books they will love, or every moral choice they will face. We have already distinguished between genetic contribution and reducing a person to a code in the chapter on heredity.

Nor should the expression "half from the father and half from the mother" be turned into a claim that every trait will appear as an arithmetic average. We are speaking of the two nuclear chromosome sets in the usual pattern, not of dividing every appearance, function, and influence of upbringing into two equal halves.

Divisions without a corresponding increase in size

The zygote begins successive divisions known as cleavage. The number of cells increases in these early divisions without a corresponding increase in overall size; the cells become smaller within their surrounding boundaries. With compaction, the morula forms, followed by the blastocyst, which contains a cavity, an inner cell mass, and outer cells. [3]

The inner component contributes to the formation of the embryo, while the outer cells contribute to supporting structures, including the fetal component of the placenta. The child and the placenta are not a mass given the same name without distinction: their pathways begin to differentiate early, and their cooperation continues throughout pregnancy. We will discuss this structure in detail in the next part. [3]

This image helps to broaden the understanding of the word "growth": growth is not simply an increase in size. There is cell proliferation, changes in their relationships, rearrangement of their positions, and specialization of their functions. This increased organization may be the most significant development at a stage when the naked eye cannot yet discern a human form.

Fertilization Is Different from Implantation

The blastocyst reaches the stage of hatching out of the zona pellucida, then interacts with the uterine lining and begins implantation near the end of the first week after fertilization in the usual course of development. Fertilization and implantation are distinct events in both place and time, and their names should not be used interchangeably. [3]

Saying that fertilization has occurred is not the same as establishing that a pregnancy will continue. Likewise, transferring an embryo during a medical procedure does not guarantee its implantation or birth. We will need this distinction when discussing medically assisted reproduction, so that large promises are not built upon small medical terms.

As early pregnancy develops, the hormone hCG is produced, and home pregnancy tests detect it in urine. The test does not display an image of the embryo or measure its faith or worth; it detects a specific chemical signal. The National Institute of Child Health and Human Development recommends contacting a healthcare provider after a positive result to arrange follow-up. [4]

A Mingled Sperm-Drop

God Almighty says: “Indeed, We created man from a mixed sperm-drop that We might try him; and We made him hearing and seeing.” [Al-Insan: 2]

The root meaning of amshaj concerns mixing. In his commentary on the verse, al-Tabarsi cited a view that it means a mixture of the man's and woman's fluids, as well as other views concerning stages and the properties of the sperm-drop. This diversity matters: we should not present a single contemporary term as though it were the only interpretation known to the language or agreed upon by commentators. [5]

Some older interpretations detail the colors or mixtures, while others link the resemblance to the predominance of one parent’s fluid. We do not present these details to the reader as established genetic knowledge, nor do we attribute every statement in a book of exegesis to the Ahl al-Bayt (peace be upon them). Exegesis gathers language, opinions, and traditions from various sources, and the title of the book does not erase the differences among its authors and chains of transmission.

Today's reader may reflect on the meaning of a shared origin in light of what is known about the contribution of the two cells. Yet this reflection must be distinguished from claiming that the word amshaj exclusively identifies chromosomes or a particular protein. Protecting the text from strained interpretation is no less important than protecting information from error.

From the Cell to the Responsible Human

The verse combines creation, trials, hearing, and sight. This perspective prevents the human story from ending with a purely physical description, without negating the value of such descriptions. The person who is born and grows is not merely a file of divisions; they will love, fear, learn, oppress, or be just, and their organs will have a story related to their actions.

In this chapter, we do not determine the time of the ensoulment by inferring it from a cellular pulse or the appearance of a structure under a microscope. The subject of the soul has its own texts and discussions, and it is only fair to examine it in its proper place, not to borrow a sign for which there is no evidence of equivalence.

We have approached the first continuous formation of the embryo. Before proceeding to its development and organs, we need to dispel another oversimplification: how do

sexual characteristics develop, and why is it sometimes insufficient to read a single chromosome or observe a single organ to understand the entire human condition?

Chapter Sources and Documentation Notes

[1] OpenStax, Anatomy and Physiology 2e, Section 28.1: Fertilization; capacitation, interaction with the cell's coverings, and formation of the zygote. The page's generalizations about the first sperm's precedence or the necessary participation of hundreds of cells were not reproduced, and the fast electrical block was not attributed to human fertilization.

[2] Molecular Architecture of the Human Sperm IZUMO1 and Egg JUNO Fertilization Complex, Nature, 2016, DOI: 10.1038/nature18595. The summary was based on the original research abstract available in PubMed, not on a review of all of its experiments.

[3] OpenStax, Anatomy and Physiology 2e, Section 28.2: Embryonic Development; cleavage, morula, blastocyst, and the beginning of implantation. General estimates of implantation failure were not used, nor was the inner cell mass described without qualification as totipotent.

[4] National Institute of Child Health and Human Development (NICHD), How Do I Know If I’m Pregnant?; urine tests, the hormone hCG, and healthcare follow-up after a positive result.

[5] Al-Tabarsi, Majma’ al-Bayan, Commentary on Surat al-Insan, verses 1–10, Language and Meaning; Origin of the word “amshaj” and the multiplicity of opinions. Ancient medical details were not adopted as contemporary scientific evidence, and not all opinions were attributed to imams.

Chapter 21: Sexual Differentiation and Diversity in Sex Development

When We Go From the Norm to the Specific Human

In school, we learned about two common images of sex chromosomes: XX and XY. This is a useful introduction to genetics, but it is not a complete medical profile for every individual. Between the chromosome and the anatomical appearance lie genes, hormonal signals, tissue responses, and stages of development. When we see a case that does not match the simple diagram, the goal is to broaden our understanding, not to deny the individual's existence.

Sex development here means the development of biological characteristics: chromosomes, gonads, ducts, organs, and traits that appear later. We do not conflate this discussion with descriptions of a person's morals, inclinations, or sense of self; these are not other names for a chromosome test, and their details cannot be inferred by looking at an organ.

Chromosomes are an important starting point, but not the entire explanation.

In the most common pattern, females have XX sex chromosomes and males have XY. The Y chromosome carries genes related to reproductive development and fertility, including SRY. However, mentioning the most common pattern does not preclude cases where the number or structure of chromosomes changes, or where parts are translocated between them. [1]

The SRY gene provides instructions for making a protein that regulates the activity of other genes and contributes to the initiation of the testis development pathway. This gene can be located on the X chromosome, resulting in testicular tissue in individuals with an XX chromosome pattern. Alterations in its function can also lead to different gland development in some individuals with an XY chromosome pattern. These examples demonstrate that the location and function of the gene are important, not just the letters. [2]

However, we do not consider SRY to be the sole explanation for all the details. In ovarian development, there are also active gene pathways; for example, the role of WNT4 in the formation of the female reproductive system and the development of the ovaries and oocytes. Female development is not simply a void created by the failure of another pathway. [3]

Hormone requires a responsive tissue.

The embryonic testis produces AMH, which affects the Müllerian ducts and contributes to their regression along the typical male pathway. In another pathway, these structures develop into organs such as the uterus and fallopian tubes. The effect depends on the presence of the hormone, its receptor, and the tissue's ability to respond, not just the name. [4]

The type II 5-alpha reductase enzyme converts testosterone to dihydrotestosterone (DHT), which is important in the development of some external genitalia. A deficiency in this enzyme can lead to an external appearance different from what is expected from an XY chromosomal pattern, and other changes may appear with puberty. [5]

These examples bring us back to a fundamental principle we know about the cell: a message cannot work without a receptor and a response pathway. The hormone may be present, but its effect may differ because the tissue does not respond to it as usual. This is not a contradiction; it is part of explaining how hormones work.

Example: Androgen Insensitivity

In androgen insensitivity syndrome, the tissues have a reduced or absent ability to respond to these hormones, with an XY chromosomal pattern. In the complete presentation, the external genitalia have a typical female appearance, with undescended testes and no uterus. Partial presentations vary depending on the degree of residual response. [6]

We are not giving this example to help the reader diagnose someone based on their appearance, but rather to understand why external observation alone is not always sufficient. The similarity of one symptom does not mean that everyone who exhibits it has the same syndrome. The medical name is the result of an evaluation, not a label we attach to others.

Example: Congenital Adrenal Hyperplasia

The variation may arise from the adrenal gland, rather than solely from a sex chromosome or gonad. Deficiency of the enzyme 21-hydroxylase, a common cause of

congenital adrenal hyperplasia, alters the synthesis of certain hormones and increases androgen production. This may affect the appearance of the external genitalia in some female newborns with an XX chromosome pattern, with clear differences among types and levels of severity. [7]

There is a salt-wasting form that can threaten an infant's life through disturbances of electrolyte and fluid balance. The medical question is therefore not merely one of classification by appearance; the first duty may be to identify and treat a health risk. This chapter does not address doses or procedures, because these conditions require specialist assessment according to the diagnosis. [7]

These two examples do not encompass all differences in sexual development, nor should they be attributed to a single cause. Some differences relate to chromosomes, others to glandular development, and still others to hormone production or response, and these levels may overlap. Some differences become apparent at birth, while others are revealed at puberty or during fertility assessment. [8]

Diagnosis is not a cursory glance.

A specialized assessment may combine medical history, appropriate physical examination, hormone and genetic testing, and ultrasound imaging. The need for treatment varies from case to case; some cases require specific medical treatment, while others primarily require understanding, follow-up, and support. The observation of this difference does not mean that surgery is the first step or the only solution. [9]

A multidisciplinary team is beneficial in addressing hormonal, genetic, reproductive, and psychological aspects. A person does not live with only the results of a laboratory test; they also grapple with questions of family, school, marriage, and body image. Specialized services, such as University College London Hospitals Service, offer this type of integrated care. [10]

Decisions that are difficult to reverse should not be driven by the haste of those around the person or their fear of what others will say. The diagnosis, alternatives, benefits, and risks should be explained; the person whose body is involved should be respected, their privacy protected, and their participation in the decision supported according to their age and capacity. We emphasize this as an ethical principle, not as a uniform prescription for a particular treatment decision.

Classical Terminology and Contemporary Diagnosis

Readers may encounter the term khuntha and rulings concerning it in books of Islamic jurisprudence. The term has its own historical and jurisprudential context and should not be applied automatically to every condition now included under "differences in sex development." Medical classification brings together diverse conditions, while the boundaries of the subject addressed by a jurist may differ.

We therefore do not derive a ruling on inheritance, marriage, or worship from the name of a syndrome alone, nor make this chapter a fatwa for an individual case. The condition must be established through reliable information, and the ruling then examined in its specialized sources. A book that brings several fields together is

more precise when it makes clear where it moves from one field to another.

Dignity Does Not Wait for Classification to Be Completed

God Almighty says: {And We have certainly honored the children of Adam and carried them on land and sea and provided for them of the good things and preferred them over much of what We have created, with [clear] preference.} [Al-Isra: 70]

We recall this principle in how we treat a person with such a condition, not as a text that names a modern diagnosis. A bodily difference must not become an object of spectacle or public shaming, nor should a child grow up believing that their worth depends on matching a diagram in a book.

It is not the doctor's role to justify bullying, nor is it the family's role to turn the question into a humiliating secret. Privacy can be preserved while providing age-appropriate and truthful information. Privacy is protection, whereas the notion that the body is at fault adds unnecessary pain to the medical issue.

Understanding the variation complements understanding the rule.

These cases do not invalidate the description of the common structure with which we began; rather, they prevent us from making the educational simplification broader than its evidence. We have seen how genes, hormones, and tissues cooperate in formation, and how a variation in one link can alter the outcome.

We now arrive at another question that profoundly affects family life: What if the apparent readiness is complete and pregnancy does not occur? Here begins the story of waiting, tests, and treatment, and science needs compassion to match its precision.

Chapter Sources and Documentation Notes

[1] MedlinePlus Genetics, Y Chromosome; Common chromosomal pattern and chromosomal variations. Simplified descriptions were not used to eliminate exceptions.

[2] MedlinePlus Genetics, SRY Gene; Gene function and examples of its translocation or altered activity.

[3] MedlinePlus Genetics, WNT4 Gene; active pathways in the development of the female reproductive system and ovary.

[4] MedlinePlus Genetics, AMH Gene; Anti-Müllerian hormone and its role in embryonic development.

[5] MedlinePlus Genetics, 5-Alpha Reductase Deficiency; Conversion to DHT and developmental differences in enzyme deficiency.

[6] MedlinePlus Genetics, Androgen Insensitivity Syndrome; The complete and partial picture and the limits of hormonal response.

[7] MedlinePlus Genetics, 21-Hydroxylase Deficiency; different types, disruption of hormone production, and risk of salt loss in some cases.

[8] NHS Genomics Education Programme, Differences in Sex Development, Knowledge Hub; the variety of levels, causes, and stages at which differences become apparent.

[9] NHS, Differences in Sex Development; testing and care as needed. Country-specific

administrative guidelines are not presented to the reader as a general rule.

[10] University College London Hospitals (UCLH), Differences in Sex Development; a model for multidisciplinary care; no recommendation of a specific treatment provider.

Chapter 22: Delayed Conception and Assisted Reproduction

The Unseen Wait

It might begin with a casual question in a gathering: "When will we celebrate the arrival of your child?" The question then becomes a burden for a couple who know the number of appointments, tests, and sleepless nights that the questioner is unaware of. Because a person's story is not just about their organs, we shouldn't approach the topic of delayed childbearing solely through statistics and ignore this burden.

This chapter presents general concepts, not a treatment plan for any specific individual. The first principle is that delayed childbearing is not a crime, nor is it evidence of a lack of masculinity or femininity, nor is it proof of any hidden fault. Searching for the cause is a shared health responsibility, not a trial of either partner.

What is meant by infertility in the medical definition?

The World Health Organization defines infertility as the inability to conceive after 12 months or more of regular, unprotected intercourse. The causes may be related to the man or the woman, and may remain unexplained by available tests. This definition does not mean that everyone who meets this timeframe will never be able to have children. [1]

The defining interval should not become an instruction to wait in every case. General CDC guidance describes evaluation after one year for couples with no known problems when the woman is under 35, and after six months when she is 35 or older. Earlier evaluation may be needed after 40, or when a known problem or relevant symptoms are present. [2]

The important thing is not to set a time limit and apply it to everyone, but to understand that age, medical history, menstrual cycle regularity, and previous experiences influence the decision. Anyone with a reason for concern should discuss it with a professional instead of waiting for a number they read in a book to be fulfilled.

The cause isn't always where the blame lies.

Delayed conception may be related to problems with sperm production, count, motility, or transport, hormonal disturbances, or an obstruction along the pathway. In women, it may involve ovulation, the fallopian tubes, the uterus, or hormonal regulation. Factors from both partners may contribute, so the search for a "culprit" is not a medical question in the first place. [1]

Therefore, the evaluation begins with a medical history of both partners, followed by

appropriate tests. These may include semen analysis, evaluation of the fallopian tubes, and assessment of ovarian function or reserve, without assuming that every test is necessary for every individual. The information is gathered to interpret the picture, not to assign blame based on the first unusual result. [2]

If the cause is said to be "unexplained," it doesn't mean that the suffering is an illusion, or that it must be attributed to some supernatural force. It describes the limits of what the available evaluation has revealed. Honest science acknowledges these limits instead of filling the void with a diagnosis lacking evidence.

Medical assistance is not a single procedure.

Treatment options vary depending on the cause: it may be sufficient to treat a specific disorder, or medications may be used under supervision, or surgical procedures in selected cases, or assisted reproductive technologies. The popularity of a technique does not mean it is the right starting point for everyone; the choice depends on the diagnosis, benefits, risks, and alternatives. [2]

In intrauterine insemination (IUI), prepared sperm are introduced into the uterus, while fertilization still takes place inside the body. In vitro fertilization (IVF) brings the reproductive cells together in the laboratory; early embryos are monitored, and an embryo is then transferred to the uterus according to the medical plan. Embryos may be frozen for later transfer. These are different procedures, even when everyday language groups them under a single name. [3]

In ICSI (intracytoplasmic sperm injection), an embryologist injects a single sperm directly into an egg cell as part of an in vitro fertilization procedure. This may be appropriate for certain sperm-related problems or after previous failed fertilization attempts. However, it is not a necessary upgrade in every case, and a successful injection does not guarantee pregnancy or birth. [4]

The explanation here outlines the functional differences between the techniques and does not provide steps for their implementation or the medications used to stimulate them. These are procedures that require specialists, equipment, monitoring, and safe sample identification and preservation. A description in a book does not replace informed consent or individual consultation.

What success are the advertisements referring to?

When we hear a success rate, we should ask what event is being measured: Is it fertilization, a positive test result, a continued pregnancy, or the birth of a live baby? Then we should ask about the denominator: Is the rate per cycle initiated, per egg retrieval, or per embryo transfer? These terms are not equivalent, even if the number appears to be the same.

The British Human Fertilisation and Embryology Authority (HFEA) explains that the success of ICSI in assisting fertilization does not negate other factors that affect the continuation of pregnancy, including age and fertility status. Therefore, success in one step should not be marketed as a guarantee of the end goal. Adding an unnecessary procedure may also increase costs without a proven benefit for the individual. [4]

This is not an invitation to despair, but rather to hope based on information. A person who understands the probability of benefit and the limitations of the evidence can make an informed choice, while an absolute promise only makes disappointment more painful and may lead them to attempts whose costs they do not understand.

Risks and Follow-up

Risks discussed with some fertility treatments include ovarian hyperstimulation syndrome (OHSS), multiple pregnancies, and ectopic pregnancy, among others. These problems do not occur in everyone undergoing treatment, and their likelihood varies depending on the individual, the technique, and the treatment plan. The HFEA emphasizes the importance of understanding these risks and discussing them with the treatment team. [5]

Good care does not lie in concealing these possibilities, nor in overwhelming the family with vague anxieties. What is required is a clear explanation of the concepts: What is expected? What are the signs that warrant communication? Who is responsible for follow-up? What are the alternatives if the procedure fails? These are questions that safeguard participation in the decision-making process.

Medical capability and Islamic legal ruling are two separate issues.

Assisted reproduction may involve preserving gametes or embryos, using gametes from another person, or a woman carrying a fetus not derived from her own egg. These scenarios have medical differences and raise jurisprudential questions concerning lineage, rights, privacy, and the limits of the procedure.

We do not consider the possibility of the procedure in the laboratory as proof of the permissibility of every form of it, nor do we issue a general ruling in this chapter that covers the differences in cases and legal opinions. The aim is to first establish the scientific framework, then present the jurisprudential issue in its correct form and from its authoritative source. The book will dedicate a section to it alongside issues related to the fetus and the family.

The gift is not the measure of superiority.

God Almighty says: “To God belongs the dominion of the heavens and the earth; He creates what He wills. He bestows upon whom He wills daughters, and He bestows upon whom He wills sons.” [Ash-Shura: 49]

God Almighty also says: “Or He bestows both males and females, and He renders barren whom He wills. Indeed, He is All-Knowing, All-Powerful.” [Ash-Shura: 50]

These verses refer the matter to God's knowledge and power, and mention daughters and sons as gifts. This context should not be used to demean those blessed with daughters or those who have not been blessed with a child. Nor do the verses give us knowledge of the unseen that permits certainty that a particular person's delayed conception is punishment for a particular act.

Belief in God's will does not mean abandoning practical means: understanding bodily function and seeking suitable treatment do not place a person outside the created

world. Yet using those means gives no one the right to promise a guaranteed result, just as unsuccessful treatment does not establish a deficiency in a person's faith.

Supplication and Care

God Almighty said: {Thereupon Zechariah called upon his Lord, saying, "My Lord, grant me from Yourself a good offspring. Indeed, You are the Hearer of supplication."} [Al Imran: 38]

In supplication, there is a request for good offspring, not merely for a specific number. In Imam al-Sajjad's (peace be upon him) supplication for his children, as recorded in al-Sahifa al-Sajjadiyya, the phrase is: “And help me in raising them, disciplining them, and being kind to them.” [6] We present this in its educational context, not as a prescription for treatment or a guarantee of conception.

These words open a door that goes beyond achieving pregnancy: if a child is born, the responsibility of caring for them begins, not ends. And if they are not born, the doors of mercy and giving, and the value of married life, do not disappear. Society has no right to reduce the success of a home to the presence of a child, nor to force the couple to disclose the details of their treatment.

They may need psychological support, time to reconsider, or a decision to stop exhausting attempts. Our duty is to respect their conscious decision and to prevent hope from becoming a gateway to financial exploitation or blame between them.

Conclusion of Part Three: From Preparation to Pregnancy

We began with the map of the organs, then moved on to the gametes and their maturation, learning how fertilization occurs and the various paths of development. At each step, one truth emerged: no part functions in isolation, and human life cannot be understood from a single part.

Now we turn to the womb: implantation, the placenta, amniotic fluid, the embryonic layers, and the formation of organs, followed by the verses on the stages of creation and narrations about ensoulment. We will need to distinguish times and terms carefully, so that we do not confuse medically calculated gestational age with age since fertilization, or equate a spiritual meaning with a medical sign without evidence.

Chapter Sources and Documentation Notes

[1] World Health Organization, Infertility, updated November 28, 2025; definition and causes in men and women. The definition does not mean that having children in the future is impossible.

[2] Centers for Disease Control and Prevention (CDC), Infertility: Frequently Asked Questions; timing of assessment according to age and condition, couple testing, and general treatment options.

[3] National Institute of Child Health and Human Development (NICHD), Assisted Reproductive Technology; practical differences between IUI and IVF, embryo transfer, and preservation. No general success rates or stimulation doses were reported.

[4] Human Fertilisation and Embryology Authority (HFEA), Intracytoplasmic Sperm Injection (ICSI); definition of ICSI, its limitations, and the difference between fertilization and pregnancy.

The older timeline on the page regarding the ages of the first babies born with this technology was not adopted.

[5] HFEA, Risks of Fertility Treatment; presentation of risks and the need to discuss them on a case-by-case basis, without converting general rates into a personal estimate.

[6] Al-Sahifa al-Sajjadiyya al-Kamila, his supplication (peace be upon him) for his children, p. 135 in the referenced edition; the phrase about raising, disciplining, and treating them kindly. The passage's location was established; an independent study of all chains of transmission of the Sahifa was not undertaken here.

Part 4: The Human Being in the Womb

In the days when no one yet knows that a new life has begun, tiny cells have entered into a continuous process of division, differentiation, and attachment to the mother's body. No complete face is captured in a family photograph, nor a tiny hand grasping a finger, yet the foundations upon which the entire body will be built are formed.

We will examine this stage carefully: Where does contact with the uterine lining begin? How do the placenta and membranes arise? How do cell layers develop into body axes and organs? We will then consider this alongside the verses on the stages of creation and the narrations about the soul, preserving the distinction between describing an event, interpreting a text, and drawing conclusions from its meaning.

Chapter 23: From Fertilisation to Implantation

Two Events Separated by a Path

In Chapter 20, we reached the blastocyst and its initial attachment to the uterine lining. Here, we will not revisit fertilization, but rather focus on the transition from movement along the path to attachment to the mother's tissue. The word "pregnancy" in everyday usage can encompass disparate events, while scientific understanding requires separating and then connecting them.

Distinguishing between events does not diminish their connection. Just as separating the letters in a word does not disrupt its meaning, distinguishing between fertilization, cell division, and implantation helps us see the story in its entirety and understand why the success of one step does not guarantee the success of all subsequent steps.

Before Every Date: Where Do We Start Counting?

Doctors usually calculate gestational age from the first day of the last menstrual period, not from the observed or estimated day of fertilization. In the common example, gestational age is therefore about two weeks greater than age since fertilization; the woman was not actually pregnant during those first two counted weeks. The difference changes when the timing of ovulation differs. [1]

The days we mention here in describing early development are days from the time of conception, unless otherwise stated. Without this clarification, the reader might think there are two contradictory sources, when in fact one is based on menstruation and the other on fertilization.

The dates remain approximate to help understand the sequence, not a clock by which to measure the development of each embryo. Medical care uses the menstrual cycle date along with ultrasound to estimate gestational age and due date; not a date in a book as a substitute for this assessment. [2]

Leaving the Covering and Approaching the Lining

The zona pellucida surrounds the early developmental stages; the blastocyst then

emerges from it through a process called hatching, or leaving the covering. This permits continued growth and direct contact with the uterine lining. The word "hatching" here should not be understood as the birth of a child: it names a microscopic event occurring long before birth. [3]

Implantation involves approaching the uterine epithelium, adhering to it, and then entering the endometrial tissue in an organized manner. Adhesion molecules, signals between cells, growth factors, enzymes, and regulation of the extracellular material all participate. The uterus is not an inert wall, nor is the blastocyst an object fixed to it without interaction. [4]

When we use the word "dialogue" between tissues, we mean an exchange of signals, not a consciousness speaking in words. Metaphor helps convey the meaning as long as we remember its limits. Scientific explanation examines what cells and molecules do, not the intentions we imagine them to have.

Trophoblast: A Specialized Surface

Trophoblast cells differentiate into a cellular component with clear boundaries between its cells, and a multinucleated syncytial component in which the boundaries between cells disappear. The syncytial component contributes to penetration of the uterine tissue during implantation, while the cellular component supplies cells that fuse into it. These structures help establish the connection that will develop into a placenta. [5]

The word “invasion,” which sometimes appears in embryology textbooks as a translation of a scientific term, should not suggest that the embryo is an enemy of the mother. It refers to the ability of cells to penetrate tissue in an organized manner. The linguistic similarity between this action and others does not mean that all their biological contexts are the same.

The maternal tissue itself participates in regulation; endometrial cells and their components secrete factors that regulate the interaction. It is incorrect to assume that the mother is merely a resource consumed by an unrelated organism, or that the fetus dissolves into the mother and loses all its distinctiveness. The relationship is based on a connection between two parties, the details of which will be discussed in the section on placental structure. [4]

The endometrium changes, and the messages continue.

Some endometrial stroma cells increase their secretory and metabolic activity under hormonal influence and during early pregnancy, and the decidua tissue associated with pregnancy develops. From the developing structures of the embryo, signals are sent, the most important of which is hCG, which helps maintain the corpus luteum and support its hormonal secretion in the early stages. [6]

The effect does not stop at the implantation site: a message may reach a gland in the ovary, thus continuing the production of hormones that maintain the uterine environment. Therefore, the relationship between the two locations becomes clearer than simply stating that "the embryo has implanted."

But the name of the hormone alone does not give us a complete picture of all aspects of pregnancy. Follow-up and testing will come later; what we want to see now is how a continuous relationship develops, one that requires ongoing connection, not a fleeting contact that is then severed.

Inside the Blastocyst: An Early Two-Layered Disc

During the second week, the inner cell mass becomes organized into two layers called the epiblast and hypoblast—also referred to in some Arabic terminology as the upper and lower layers. Together they form the bilaminar embryonic disc. Through a later process, the epiblast will give rise to the embryonic body and its primary germ layers. [3]

These two layers are not the three layers we will study later, and not all names beginning with the Arabic term adim should be treated as synonyms. The beginnings of the amniotic cavity and yolk-sac structures also appear at this stage. Understanding these relationships will later clarify the arrangement of the membranes and structures adjoining the embryo. [5, 7]

Here we do not see a fully formed head and limbs, but rather an arrangement that paves the way for those structures. One of the most beautiful aspects of embryology is that it trains the eye to see the potential for organization before the final form: the absence of a complete form does not mean the absence of work, nor does the simplicity of appearance indicate the simplicity of what is happening.

How do we know about a stage we do not witness in everyday life?

Understanding early development relies on multiple methods, including the study of human specimens, developmental imaging, and the study of tissues and cells, while distinguishing between what is observed in humans and what is studied in animal models. An example of original research is a 2016 study by Shahbazi and colleagues that allowed the monitoring of the organization of early human embryos in a laboratory setting without maternal tissue, and observed the formation of some early structures and layers. [7]

This example demonstrates the ability of some early organization events to occur under specific experimental conditions. However, it does not prove the possibility of a complete human pregnancy occurring outside the uterus, nor does it negate the role of the mother and placenta in a normal pregnancy. Moving from a limited finding to a broad claim is a mistake, even if the original finding was significant.

Furthermore, the scientific benefit derived from a study does not mean that every ethical or legal question related to its methodology is resolved. Research on embryos has limits and responsibilities, and we cannot treat everything technically possible as automatically permissible. Here, we mention what helps in understanding knowledge and its limitations, postponing the normative details to their appropriate place.

In a secure lodging

God Almighty said: {Did We not create you from a fluid despised?} [Al-Mursalat: 20].

God Almighty said: {Then We placed it in a secure lodging.} [Al-Mursalat: 21].

And God Almighty said: {To a known measure} [Al-Mursalat: 22].

And God Almighty said: {So We determined, and how excellent a Determiner We are!} [Al-Mursalat: 23].

These verses invite reflection on the beginning, the secure lodging, and the determination of development. We read them here as an invitation to reflect on creation, not to make every stage of implantation a necessary linguistic counterpart to each word. A comprehensive comparison of the verses on the stages of creation will follow in a separate chapter.

We do not understand the meticulous preparation in the womb as a promise that every pregnancy will be completed without hardship; the book itself will address miscarriage and its problems. Knowledge of the system may coexist with the acknowledgment that it has conditions and that errors may occur. Compassion for the mother who has lost her pregnancy cannot bear the explanation of her tragedy by some unseen decree beyond our comprehension.

The Beginning of a Longer Connection

We have entered the stage where growth becomes dependent on a renewed connection with the mother's tissues. We have seen a surface that specializes, layers that differentiate, and signals that travel between organs. Implantation is not the end of development, but rather the establishment of a sphere in which development continues.

In the following chapter, we will examine the temporary organ where the needs of the mother and fetus will converge: the placenta. How does it develop? And how does oxygen and nutrients pass through it without the mother's and fetus's circulations becoming one?

Chapter Sources and Documentation Notes

[1] NHS 111 Wales, Pregnancy Guide: You and Your Pregnancy at 1 to 3 Weeks; the principle of calculating gestational age from the last menstrual period and the approximate difference from the time of conception.

[2] NHS, Pregnancy Due Date Calculator; the date of the last menstrual period and the clinical estimate of the due date. The calculator was not used to estimate an individual pregnancy.

[3] University of New South Wales, Embryology: Blastocyst Development; the blastocyst's emergence from the zona pellucida and differentiation of the inner cell mass. The selected human information was distinguished from animal-model findings presented on the page.

[4] Swiss University Course embryology.ch, Molecular Aspects of Implantation: Introduction; adhesion and interaction between the trophoblast and endometrium. The list of molecules on the page has not been translated into an approved examination or treatment.

[5] embryology.ch, The Trophoblast; differentiation of the trophoblast, beginnings of the embryonic disc, and amniotic cavity. Days are approximate and not an independent individual standard.

[6] embryology.ch, Early Development and Implantation; changes in maternal tissue and early hormonal support. The hormones mentioned on the page were not all treated as equivalent in their

role in supporting the corpus luteum.

[7] Shahbazi et al., Self-Organization of the Human Embryo in the Absence of Maternal Tissues, Nature Cell Biology, 2016, 18:700–708, DOI: 10.1038/ncb3347. Use of this source was limited to the available abstract; its findings concern early stages and do not establish the possibility of a complete pregnancy outside the womb.

Chapter 24: The Placenta, Umbilical Cord and Fetal Membranes

The fetus in the womb is not a small, self-contained body, nor is it a boundless, dissolved part of its mother's body. It is a being that grows in a profound connection that preserves its distinctiveness and ensures its survival. Between its body and the mother's, the placenta forms, the umbilical cord extends, and the surrounding membranes are organized. These structures are not marginal additions to the human story; before we even see facial features, the fetus's life depends on their function.

1. A Temporary Organ Whose Function Cannot Be Reduced to One Role

The placenta is an organ that develops for pregnancy, functionally connecting the mother and fetus. It facilitates the transfer of oxygen and nutrients to the fetus and the transfer of carbon dioxide and some waste products from the fetus to the mother. It also produces hormones that contribute to the continuation of the pregnancy. Therefore, it is insufficient to compare it to a cushion or a static filter. It is a living tissue that grows, changes, and performs multiple functions simultaneously. [1]

The placenta's structure brings together tissues of fetal and maternal origin. On the fetal side are the chorionic plate and placental villi; on the maternal side is the decidua basalis, the transformed uterine lining at the site of attachment, together with maternal blood vessels and glands. The boundary is not a cleft separating two independent organs, but an organized anatomical interface where tissues of different origins meet. [2]

Here, the meaning of the term "relationship" becomes clearer than that of "reservoir": the embryo does not receive a ready-made supply sufficient until birth and then become independent, but rather continues to depend on a renewed exchange. It is a mistake to let talk of the independence of its genetic material make us forget this physical dependence, just as it is wrong for dependence to negate its distinctiveness.

2. Microscopic Trees within the Placenta

The chorionic villi branch out, increasing the area available for exchange as the embryo's needs grow. On the maternal side, modifications occur in the spiral arteries associated with the placenta, involving cells from the trophoblast, thus preparing an adequate blood supply. The issue, therefore, is not simply an increase in the size of the placenta, but rather the growth of the exchange surface and the adaptation of the blood supply route to it. [3]

This description does not imply that every pregnancy proceeds without complications. Placental development can be disrupted, and some pregnancy problems are related to placental function. These problems will be addressed in their medical section, without turning the explanation here into a diagnosis, or making anatomical complexity a promise that disease is impossible.

3. Two Adjacent Circulations, Not One Pool of Blood

Fetal blood flows within its own vessels, including the capillaries in the villi. Maternal blood reaches the space surrounding the villi, then returns through the uterine veins. In the usual pattern of exchange, the two blood supplies do not mix directly as one stream; tissues separate them while permitting certain substances to pass. Saying that the fetus is nourished from its mother's blood therefore does not mean that her blood enters its vessels as water enters an open pipe. [4, 5]

The placental barrier changes during development, and the effective distance for exchange becomes thinner in some areas as the villi develop and the capillaries move closer to their surface. Here, the barrier is an anatomical and functional term, not a solid wall, nor a guarantee that all harmful substances will remain outside it. The separation of the two circulations does not imply the complete absence of cellular passage under all circumstances; rather, it describes the basic organization of circulation and exchange. [5]

4. The Umbilical Cord: A Route for Blood Vessels, Not for Food

A typical umbilical cord contains two umbilical arteries and one umbilical vein. The arteries carry blood from the fetus to the placenta, and the oxygen-rich blood returns from the placenta to the fetus via the vein. The vessels are called arteries or veins according to their direction of flow relative to the heart, not according to a rule stating that every artery is rich in oxygen and every vein is poor. Therefore, the names here appear reversed to those who have memorized only the simplified rule. [4]

The cord forms as the connective tissues develop, the fetus folds, and the amniotic sac expands around them. Its vessels are surrounded by a gelatinous connective tissue known as Wharton's jelly, which helps protect them from compression and folding. In its early stages, there are structures that later regress, including connections to the yolk sac and allantois; therefore, the image of the cord near birth should not be generalized to all its early stages. [7]

The cord is not a tube that delivers the mother's food to the fetus's stomach. Understanding it as a vascular pathway eliminates this perception: nutrients become available to the fetus through exchange and circulation, not through a meal passing from the mother's mouth to the baby's.

5. The Placenta Speaks the Language of Hormones

In addition to exchange, there is an endocrine function. At the beginning of pregnancy, human chorionic gonadotropin (hCG) is involved in supporting the corpus luteum and its continued hormonal secretion. The placenta's contribution to hormone

production, including progesterone and estrogens, then increases. These functions are part of a collaborative process between maternal, placental, and fetal tissues, not the activity of an organ working in isolation from the rest of the body. [6]

We can borrow the word "communication" to approximate the meaning, provided that this metaphor is not taken as an independent scientific explanation: cells do not exchange sentences, but rather are affected by chemical signals, receptors, and responses. And the wonder does not need to disregard these details; Rather, it matures when we understand what we mean.

6. Surrounding Membranes, Supporting Structures, and Then Regressing

The amnion is the membrane bounding the amniotic cavity around the fetus. Outside it are the chorionic structures, and the chorion contributes to the fetal side of the placenta. As cavities and membranes develop, their spatial relationships change: a structure distinct at an early stage may become smaller or merge with another later. The amniotic and chorionic cavities should not be confused or treated as two names for the same space throughout pregnancy. [8, 2]

The yolk sac appears among the early supporting structures. Its name alone is insufficient to determine its function in humans. In a 2023 study, researchers mapped the cellular atlas of the human yolk sac between the third and eighth weeks after fertilization, demonstrating, in addition to early hematopoiesis, roles related to metabolism, coagulation, angiogenesis, and the regulation of hematopoietic cells. Developing organs within the embryo then take over functions that this structure initially contributed to. This is a summary of the findings presented in the study abstract, not a claim to review all the details of the experiments. [9]

The allantois is described among the early structures associated with the connecting stalk; it should not be imagined as a large sac remaining alongside the fetus until birth. Following what appears and what regresses teaches us that development is not the assembly of pieces that all remain forever: some structures perform a temporary function and then change form. [7]

7. Protection does not mean abandoning care

Many medicines cross the placenta. Crossing the placenta does not automatically mean that a medicine is harmful, just as leaving a condition untreated is not always safe. NHS guidance recommends consulting a doctor, pharmacist, or midwife before taking medicine during pregnancy, and not stopping prescribed medicines without consulting a doctor, because stopping may harm both mother and fetus. This is a principle of responsible care, not a list of medicines permitted or prohibited for every pregnant woman. [10]

We will return to medicines, nutrition, infection, and the environment in the chapter on mother and fetus. What matters here is that the word "barrier" should not create false reassurance, and that knowing some substances cross it should not create fear that leads a woman to abandon treatment she needs.

8. A Mother Who Carries a Child, Not Merely a Temporary Function

God Almighty says: “And We have enjoined upon man [care] for his parents. His mother carried him, [increasing her] weakness upon weakness, and his weaning is in two years. Be grateful to Me and to your parents; to Me is the [final] destination.” [Luqman: 14]

The verse does not mention the names of villi or hormones, nor do we need to burden it with these names to grasp the depth of its guidance. It reminds man, in describing his beginning, of his mother's toil and her rights. The ethical lesson we derive here is that knowledge of the details of pregnancy should increase respect and care for women, not reduce them to a body that provides nourishment to others.

Gratitude that remains mere words and does not alleviate hardship is incomplete. Honoring the mother does not mean demanding her silent patience in the face of every pain, nor blaming her for every pregnancy-related complication; rather, it means listening to her needs, supporting her, and facilitating her care.

We have learned about the exchange site, the bloodstream, and the surrounding membranes. It remains for us to delve into the fluid environment in which the fetus moves: Where does the amniotic fluid come from? How is it renewed? And what is its relationship to movement, lung development, and a healthy pregnancy?

Chapter Sources and References

[1] National Institute of Child Health and Human Development (NICHD), introductory material on the placenta and its exchange and hormone-producing functions. This source is used here only for those general functions.

[2] Swiss University Textbook of Embryology, “Connections between Maternal and Fetal Tissues”: The chorionic and basal plates and components of the maternal side.

[3] NICHD, “How is the placenta formed?”: Villi growth and remodeling of spiral arteries. General diagrams were not used to establish the day of implantation.

[4] Swiss University Course, “Fetal Circulation”: Direction of flow in umbilical cord vessels and its relation to the maternal circulation.

[5] Swiss University Course, "The Placental Barrier": separation of the two circulations and changes in the barrier's tissues as development progresses.

[6] Swiss University Course, “The endocrine function of the placenta”: Support of the corpus luteum and hormonal cooperation during pregnancy.

[7] Swiss University Course, "Development of the Umbilical Cord": the connecting stalk, membranes, regressing structures, and Wharton's jelly. The description is not intended to summarize every cord disorder.

[8] Swiss University Course, "The Embryoblast": distinguishing the amniotic and chorionic cavities and their surrounding structures. The page's disputed timings for early development were not adopted.

[9] Goh et al., study of the human yolk-sac cell atlas, Science, 2023, volume 381, eadd7564; DOI: 10.1126/science.add7564. The reference is to the abstract published in PubMed.

[10] NHS, “Medications During Pregnancy”: Crossing the Placenta and the Need to Consult a Specialist Before Taking Medications or Discontinuing Prescribed Treatment.

Chapter 25: Amniotic Fluid and the Uterine Environment

Before a human being can walk on land, they develop in a fluid environment. This environment is not a still lake that has been sealed off since the beginning of pregnancy, nor is it excess water with no function. Amniotic fluid is part of the environment in which the body becomes capable of movement and growth. Its quantity, sources, and relationship to the fetus change as the weeks progress.

1. Where is this fluid located?

The fluid is located within the amniotic cavity, which is surrounded by the amniotic membrane. As the fetus grows and the cavity expands, the fluid surrounds its body, providing space for movement and mitigating the effects of mechanical pressures. The space surrounding the fetus is not a neglected space; the surrounding environment is part of the conditions for its growth, just as the ground that supports a tree is not entirely separate from its life story. [1]

This analogy may help to clarify the meaning, but it does not transform the womb into soil or the fetus into a plant. We use images to understand the relationship between the organism and its environment, then we return to the precise terms: membranes, fluids, vessels, cells, movement, and growth.

2. Where does it come from?

Amniotic fluid has both maternal and fetal components, and the contribution of each varies with the stages of pregnancy. It is mostly water and salts, but also contains other substances, including proteins, fats, and cells shed from fetal tissues. Fetal tissues, including the kidneys and lungs, contribute to its dynamics. Therefore, it cannot be reduced to "water that the mother drinks and that goes directly into the sac," nor to a substance with a single, fixed source. [1]

As pregnancy progresses, fetal urine becomes a major source of the fluid, which the fetus ingests. This is not analogous to an adult being in water contaminated with their own waste; fetal physiology is different, and the placenta, as we have seen, remains a key site for exchange with the mother and for the elimination of metabolic waste products. The familiar name "urine" alone is insufficient to draw conclusions about the fetal environment. [2] [See Chapter 24]

The key point to retain is change rather than stagnation: formation, exchange, swallowing, and secretion—not a reservoir filled once and left until the day of birth.

3. Space for Growth and Movement

The fluid helps cushion impacts and allows fetal movement, reduces compression of the umbilical cord, and contributes to the conditions needed for development of the muscles, bones, and digestive and respiratory systems. These functions are interconnected: room for movement is not merely a space for comfort, but part of the environment in which the body is built. Protection here is relative, not a promise to prevent every injury or disorder. [2]

The fetus does not breathe air inside the womb. Describing breathing movements before birth does not mean that oxygen is extracted from air filling the lungs: gas exchange at this stage depends on the placenta. When discussing organs and birth, we will distinguish the lungs' preparation for function from the beginning of air breathing. This distinction prevents confusion between movement of an organ and the full performance of its function outside the womb.

4. Why Does the Doctor Measure It?

Estimating amniotic fluid volume by ultrasound can provide important information about a pregnancy. The amount is not a fixed figure required of every fetus at every week; it is interpreted in light of gestational age and the rest of the examination. A volume below the expected range is called oligohydramnios, while an excess is called polyhydramnios, or excess amniotic fluid. Neither is diagnosed simply by looking at the shape of the mother's abdomen. [3, 4]

Possible causes of low fluid include leakage following rupture of the membranes, fetal urinary-system disorders, and problems with placental function. The importance of the reduction depends on its severity, cause, and timing. Severe reduction early in pregnancy may affect lung development and limb movement; a reference to "low fluid" in a medical report should therefore be understood with the treating team's explanation. [3]

An increase may be associated with gestational diabetes, multiple pregnancies, or a problem affecting fetal swallowing, or it may have no known cause. Many cases do not require direct intervention with the fluid, but rather monitoring and evaluation of the cause, if any. While more severe cases require a suitable care plan, mentioning the possibilities is not an announcement that every increase means serious illness in the fetus. [4]

When parents hear unexpected news, they need to know what has and has not been established: Has the measurement been repeated? Is there another sign? Why is follow-up being requested? What might change in the plan? Calm questioning is part of care and does not undermine faith or trust in the doctor.

5. When the water breaks

Fluid may emerge in a noticeable gush or leak slowly, and it can sometimes be difficult to distinguish from urine. NHS guidance recommends urgently contacting the midwife or maternity unit when the waters break, without postponing the call until the next day. Assessment is particularly important if the fluid's color or smell changes, there is bleeding, or the baby's usual movements decrease. Do not wait for regular contractions to begin before seeking advice. [5]

This is a general safety sign, not a home method for diagnosing or managing ruptured membranes. Drinking water does not replace the assessment of a possible leak, nor can a birth plan be determined by reading a paragraph in a book. The decision depends on the gestational age, the mother's and fetus's condition, and the examination.

6. When the fluid becomes a sample for testing

A sample of amniotic fluid may be taken in a medical procedure called amniocentesis to test for certain genetic conditions. This is performed by a specialist under ultrasound guidance, after explaining the reason for the procedure, its benefits, and its risks. Among the risks discussed are the possibility of miscarriage or infection; therefore, the test is not a necessary procedure for every pregnant woman indiscriminately. [6]

The result pertains to the tests that were actually performed, not a certificate stating that the laboratory knows everything about the person. The value of the child is not reduced to a genetic report. Knowing some of their characteristics can help with preparation and care, but it does not give anyone the right to insult them or subject their family to accusations.

7. God's Knowledge and Human Knowledge

God Almighty says: “God knows what every female bears and what the wombs fall short of or exceed, and everything with Him is by due measure.” [Ar-Ra'd: 8]

At-Tabarsi, in his commentary on this verse, mentions several interpretations of the meaning of decrease and increase, some of which relate to the duration of pregnancy. The context of the commentary emphasizes the comprehensiveness of God's knowledge. Therefore, we should not limit the verse, on our own authority, to the decrease or increase of amniotic fluid, nor should we present imaging as the sole key to its meaning. [7]

There is no contradiction between believing in God's knowledge and humans discovering certain aspects of the fetus using instruments. Limited acquired knowledge, which requires examination and interpretation, is not the same as God's all-encompassing knowledge. One of the fruits of this understanding is that we seek useful knowledge without claiming to know everything, and that we are humble before what is unclear, without considering ignorance a virtue.

8. What this beginning gives us

We emerge from this chapter with a deeper understanding of dependence: the body does not develop in isolation and then seek a suitable environment, but rather develops within an environment that influences its growth from the very beginning. This is a reflection on the meaning of nurturing, not an independent proof of a medical judgment: providing a suitable environment is not a secondary act that comes after the human being is complete, but rather one of the first things they need.

After the placenta, the umbilical cord, the membranes, and the amniotic fluid, we now approach the body itself: how do the first cell plates transform into layers that contribute to the formation of skin, nerves, muscles, and internal organs? And how are their orientations determined before they acquire the form we recognize?

Chapter Sources and References

[1] Swiss University Course, "Physiology of Amniotic Fluid": the fluid's location, composition, sources, and mechanical functions. The volumes and renewal timings given on the page were not treated as constants for every pregnancy.

[2] Cleveland Clinic, “Amniotic Fluid,” Revised 2024: Changing Sources, Contribution of Fetal Urine, and Functions of Movement and Growth. The description of protection is not to be understood as absolute prevention of harm.

[3] Newcastle Hospitals, NHS, leaflet on oligohydramnios: ultrasound diagnosis, causes, and the importance of severity and timing. A simplified measurement criterion was not reproduced for self-application.

[4] NHS, "Polyhydramnios": possible causes, diagnosis, follow-up, and differences in care according to the case.

[5] NHS, "Signs That Labour Has Begun": waters breaking and reasons to contact the maternity team urgently. The reference supports general safety guidance, not an individual birth plan.

[6] NHS, “Amniocentesis,” Revised 2026: The purpose of the examination, its medical procedure, a discussion of risks, and informed choice.

[7] Al-Tabarsi, Majma’ al-Bayan, Vol. 6, pp. 17–18, Commentary on Ar-Ra’d: 8–9: Aspects of deficiency and excess, and the generality of divine knowledge. Interpretive statements about gestational periods should not be translated into a contemporary clinical schedule.

Chapter 26: The Beginnings of Body Formation

When we look at the human body after its formation, we find the outside and the inside, the head and the feet, the right and the left. These directions seem self-evident until we go back to the beginning, where we see that the body was not a miniature version of an adult human. The form we know arises during development, from changes in cell positions, shapes, and connections, not from the amplification of a pre-existing image hidden within the sperm.

1. From the Two-Layer to the Three-Layer Disc

We have identified the epiblast and hypoblast in the early embryonic disc. Around the third week after fertilization, a profound reorganization called gastrulation begins, giving rise to the three basic embryonic layers. These are not the four tissue layers we described earlier; that is a histological classification, while this is a classification based on embryonic origin. [1]

The primitive streak appears on the disc's surface. Cells from the epiblast move toward it and pass inward. Migrating cells contribute to the definitive endoderm, replacing the previous lower layer; others spread to form the mesoderm, while the remaining epiblast gives rise to the ectoderm. It is therefore incorrect to say that the hypoblast simply becomes the entire lining of the embryo's internal organs: definitive embryonic endoderm arises from cells migrating from the epiblast. [2]

During this transition, the relationship of some cells to their neighbors changes, and their ability to migrate increases. The process is not simply placing an additional plate between two fixed plates, but rather a coordinated movement that reconstructs the relationships between the parts of the embryo. [2]

2. Three Beginnings, Not Three Organs

Through different pathways, the ectoderm gives rise to the skin's epidermis and components of the nervous system. The mesoderm contributes to a wide range of tissues, including parts of the skeleton, muscles, and urogenital structures. The endoderm contributes to the lining of the digestive tube and its derivatives. These examples provide orientation; they are not a complete inventory of every cell in the body. [3–5, 7]

It is important to pay attention to the word “contributes.” An organ does not have to be entirely composed of a single layer: the lining of the intestine is not the muscle of its wall, and the epidermis is not all of the skin. When we say that a layer gives rise to a tissue, we are talking about the pathway of its development, not about separate islands that cannot possibly cooperate within a single organ.

3. Where Does the Head Begin, and Where Does the Back Begin?

As the primitive streak and node arise, the cranial and caudal directions become clearer, and the disc's sides can be described in relation to its axis. The embryological term "caudal" specifies a direction; it does not mean that the embryo passes through a complete version of another animal. At this stage, the surface facing the amniotic cavity is the dorsal side, distinguished from the ventral side. [1]

The notochord extends along the midline. It is an axial structure involved in organizing development and inducing the neural tissue above it. It is not the spinal cord or a ready-made chain of small vertebrae. Its derivatives contribute to the nucleus pulposus of the intervertebral discs, while the vertebral components arise through another pathway involving the somites. [6]

Similar names can confuse the reader: the umbilical cord is a vascular route between embryo and placenta; the notochord is an embryonic axial structure; and the spinal cord is part of the central nervous system. Distinguishing them safeguards the meaning before we learn the details.

4. The Plate That Will Become the Nervous System

Part of the ectoderm differentiates into a neural plate. Its edges then rise and fold, converging and closing to form the neural tube. The brain develops from its cephalic portion, and the spinal cord from its caudal extension. Signals from adjacent tissues, including the axial tissue, are involved in regulating this differentiation. [3]

Migratory neural crest cells form at the borders of the neural tissue and contribute to parts of the peripheral nervous system, pigment cells, and some tissues of the head. The rule that "all bone comes from mesoderm" is therefore insufficient without recognizing exceptions in the head. The neural crest is important and gives rise to many derivatives, but it is not added to the three germ layers as an independent fourth layer in the same sense. [3]

5. Small rows bearing the beginnings of the back and muscles

Part of the mesoderm on either side of the axis becomes organized into body

segments called somites. They contain cells that will contribute to the axial skeleton, skeletal muscles, and parts of the dermis. Their sequential arrangement is an important feature in describing early embryonic stages: stage is not determined by size alone. [4]

But the somatic segment is not a fully formed, definitive vertebra, nor a ready-made muscle waiting to grow. Cells separate from it, differentiate, and move, and their organization changes during tissue formation. Herein lies the difference between the “organ precursor” and the formed organ: the former possesses potential and growth pathways, while the latter is the result of a longer-term organization process.

6. An internal cavity and a surrounding wall

Lateral to the paraxial mesoderm is the intermediate mesoderm, associated with the origin of urinary and reproductive structures. Farther out is the lateral plate, which divides into two layers: one associated with the body wall and the other with the viscera. Between them forms the intraembryonic coelom, whose later subdivisions contribute to the pericardial, pleural, and peritoneal cavities. [5]

The point is not that the thorax and abdomen appear simultaneously as complete chambers, but rather that the basic spatial relationships begin here, and then the boundaries and barriers become more specific. This is why embryology can explain some aspects of anatomy: what appears disparate in the adult may have been closely related initially.

7. When the disc folds

Growth is accompanied by folding along the cranial–caudal axis and from the sides. Through these changes, the endoderm becomes part of an internal tube, the sides of the body wall approach each other, the amnion expands around the embryo, and the external connections narrow to the umbilical region. The disc thus becomes a three-dimensional body with a clearer inside and outside. [7]

The word "folds" does not mean that a hand folds an inert sheet inside the womb. It describes a change in form produced by the growth, movement, and interaction of tissues. Nor does the order of successive paragraphs mean that each process waits for the previous one to end: many events overlap.

8. The Forming Image

God Almighty says: “He created the heavens and the earth in truth and formed you and perfected your forms, and to Him is the final destination.” [At-Taghabun: 3]

We read the verse as a reminder of creation, the giving of form, and the final return; we do not turn its words into names for the germ layers. Understanding how form develops opens a door to reflection: the person who cares greatly about what they see in the mirror did not personally witness the long process upon which their appearance rests.

Part of this contemplation is not to allow physical differences or disabilities to become a reason for diminishing a person. A person's dignity is not measured by

their conformity to a perfect anatomical drawing, nor is their entitlement to care contingent upon how pleasing their appearance may be to us.

We now have a foundation for understanding the origins of organs: layers, body axes, a neural tube, somites, a cavity, and a body wall. In the next chapter, we will see how the stories of the heart, brain, face, limbs, and internal organs branch out from these beginnings.

Chapter Sources and References

[1] Swiss University Course, "The Trilaminar Embryonic Disc": the origins of the layers, the disc's orientations, and overlapping processes. The approximate week after fertilization was used, rather than the inconsistently specified daily timings in the diagrams.

[2] Swiss University Course, "Formation of the Germ Layers": migration of epiblast cells and formation of the definitive endoderm and mesoderm.

[3] Swiss University Course, "Induction of the Neural Plate and Neurulation": the neural plate, tube, and crest. No numerical proportion for the neuroectoderm, day-specific closure timings, or comprehensive list of historically disputed derivatives was adopted.

[4] Swiss University Curriculum, “Paraxial Mesoderm and Differentiation of Somatic Segments”: Somites and their contribution to the skeleton, muscles, and dermis.

[5] Swiss University Course, "Intermediate Mesoderm": urogenital structures, the lateral plate, and the intraembryonic coelom.

[6] Swiss University Course, "Formation of the Notochord": its location, inductive role, and relationship to the nucleus pulposus. The main text distinguishes it from the spinal cord and umbilical cord.

[7] Swiss University Course, "Lateral Folding": changes in body form, formation of the digestive tube and body wall, and their relationship to the membranes.

Chapter 27: The Development of Organs and Systems

How does a single body become a heart, lungs, brain, limbs, and internal organs? The answer is not simply that cells are divided into piles, and each pile is then called an organ. An organ needs an internal structure, cooperating tissues, blood vessels, nerves, and connections with its surroundings. In the early weeks, the beginnings of these structures are laid, and their growth and maturation continue. This chapter is a map of those beginnings, with the anatomical and functional details to be found in the chapters on human systems.

1. The Heart: Movement Begins Before Structure is Complete

The heart originates from tissue of mesodermal origin in the cardiac region. Two tubular structures converge to form the primitive cardiac tube. This tube then elongates and folds, changing the positions of its regions, and the chambers, septa, and valves develop. Contractile activity and blood pumping begin at an early stage, before the heart becomes a fully formed adult heart. [1]

Therefore, observing cardiac activity does not mean that the septa, valves, and other details are complete. Similarly, the initiation of an organ's function does not equate to the completion of its development. We are dealing with a structure that is

functioning while still growing, and this is one of the characteristics that prevents portraying embryonic organs as fully formed tools that are then activated in a single moment. [1]

We do not equate this medical indicator with the ensoulment simply because they are associated in thought; the matter of the soul has its own textual discussion, and its chapter will be addressed separately.

2. The Brain and Spinal Cord

The cranial end of the neural tube expands into regions known as the primary brain vesicles: the forebrain, midbrain, and hindbrain. These then differentiate into more specific sections; From the forebrain, structures such as the cerebral hemispheres, thalamus, and hypothalamus arise, while from the hindbrain, structures such as the pons, cerebellum, and medulla oblongata develop, and the midbrain remains a distinct region. [2]

In the caudal extension, the spinal cord develops, and areas associated with sensory and motor pathways are organized within it. Nerve and supporting cells proliferate, and their positions and connections change. The emergence of the boundaries of these structures alone is insufficient to judge perception or consciousness; early anatomy is not a complete test of psychological functions. [2]

3. The Vertebral Column: What Surrounds the Neural Axis

The sclerotome regions of the somites, contribute to the formation of the axial skeleton, while other regions of the somites contribute to the muscles and dermis. The positions and relationships of cells change during this process. The spinal cord is nervous tissue, and the vertebrae that surround it are skeletal tissues of different origin and pathway; their proximity does not make them a single structure. [3]

This helps us understand why describing the back requires more than just the word "column": it contains bone, cartilage, ligaments, muscles, and nerves, each with its own developmental history that intersects with the others.

4. The Limbs: From Bud to Fingers

Limb buds appear, and their formation involves the cooperation of cells from the lateral plate with muscle-forming cells originating from the somites. Signals between the ectodermal covering and the underlying tissue regulate proximal-distal extension and determine limb orientation. The arm not only grows to its full length but also establishes the relationships between the shoulder, upper arm, forearm, and hand. [4]

Cartilaginous models form for many limb bones, and ossification then occurs within the cartilage in a gradual process. In the hand and foot, the digits separate as the tissues remodel, including the elimination of interdigital cells through programmed cell death. Biological sculpting is not solely based on addition; the removal of tissue at specific locations and times also contributes to the overall structure. [4]

The existence of a skeletal model does not imply that all the bones of the body were

fully formed before the muscles appeared, or that all the organs are arranged in a single, rigid order. We will return to this point of precision when we read the verses about bones and being clothed with flesh.

5. The Face, the Palate, and the Beginnings of the Senses

The face is formed through the growth, convergence, and fusion of embryonic projections. The maxillary and nasal projections contribute to the lips, nose, and jaws, while the palatine shelves grow, their relationship to the tongue changes, and they eventually meet at the midline. From this history, we understand that the lip and palate are not a single surface that was pierced after completion; some congenital clefts are related to the stages of growth and fusion themselves. [5]

The sensory organs, in turn, have a complex origin: the retina develops from the forebrain, while the pharyngeal pouches contribute to structures such as the middle ear cavity and the auditory tube. This does not reduce the eye to the retina or the ear to its cavity; rather, it opens the door to understanding the interconnectedness of organs that appear entirely independent in adults. [2, 5]

6. The lungs: A tree that grows before the first breath

Respiratory structures begin with a bud connected to the foregut, and the endoderm collaborates with the surrounding mesoderm. The bronchial tree then branches repeatedly, and the tissue in which gas exchange will take place develops. A key element of maturation is the production of surfactant, which reduces surface tension and helps keep the alveoli open after birth. [6]

Simultaneously, the diaphragm is formed from multiple tissue contributions, regulating the relationship between the thorax and abdomen. The appearance of the lung bud does not equate to the ability to breathe outside the womb; there is a maturation gap between the organ's appearance and its functional capacity. The impact of preterm birth and respiratory care will be discussed in their respective places, without reducing the chances of each newborn to a single, outdated table. [6]

7. The intestine, liver, and pancreas

The digestive tract differentiates into foregut, midgut, and hindgut regions, and the lengths and orientations of its segments then change. The stomach region expands and rotates, and the intestines lengthen and their loops become more organized. Part of the midgut temporarily protrudes into the umbilical region during normal development and then returns to the abdominal cavity; therefore, a distinction must be made between a transient embryonic stage and a disorder in which internal organs persist outside their expected location. [7]

From the endoderm of the foregut arise the beginnings of the liver and pancreas. The pancreas develops from two buds that fuse during development, while the liver cells grow amidst a network of blood vessels and supporting tissues. The final form of the organ retains the traces of these relationships; not everything that comes together in one organ originated from a single mass. [7]

8. The Kidneys and the Genitourinary System

Successive renal structures prepare for the formation of the definitive kidney, and its development is based on the interaction of the ureteral bud with the adjacent embryonic renal tissue. The bud contributes to the collecting system and ureter, and the corresponding tissue contributes to parts of the filtering units and tubules. As the body grows, the relationship of the kidneys to the anatomical levels changes, eventually reaching their usual lumbar position. [8]

Reproductive structures and ducts arise in close association with this region, then differentiate according to the pathways of sexual development, which have been described. Sharing a common origin or proximity does not imply identical function; rather, it explains much of the relationship between the urinary and reproductive systems. [8]

9. Glands: One organ may have two origins

The follicular cells of the thyroid gland originate from a precursor in the floor of the pharynx, and the gland's relationship to the tongue and neck changes with growth. Pharyngeal pouches also contribute to the parathyroid glands and the epithelial structure of the thymus gland. [5]

The adrenal gland comprises a cortex of mesodermal origin and a medulla to which migrating cells from the neural crest contribute. Thus, the word “gland” describes a function or structure in anatomy, but it does not impose a single embryonic origin on all glands. [8]

10. The formation of a body is not a static scene.

God Almighty says: “Glorify the name of your Lord, the Most High” [Al-A'la: 1].

“Who created and proportioned” [Al-A'la: 2].

“And He who determined and guided” [Al-A'la: 3].

We reflect on these verses knowing that the human form goes through stages, and that an organ cannot be understood outside of its relationships. The intention is not to make the word “guidance” a substitute name for a specific molecular signal; Rather, the description of creation should awaken in us a sense of praise and humility, while keeping scientific inquiry grounded in evidence.

The more we understand the function of an organ, the more specific human care becomes: it is not enough to admire the heart if the patient is neglected, nor to extol the brain if those with different abilities are humiliated, nor to sing the praises of the harmony of organs if the person with a disability is left alone. The knowledge we seek in this narrative is one that connects description with responsibility.

In the following chapter, we gather these paths in a timeline through the weeks of pregnancy, bearing in mind that the calendar helps us understand, but it does not transform every fetus into an exact replica of a chart.

Chapter Sources and References

[1] OpenStax, Anatomy and Physiology, 2nd edition, Section 19.5, “Development of the Heart”: the cardiac tube, looping, chambers, septa, and valves. Day-specific timings for clinical examination or completion of every septum were not adopted.

[2] Duke University School of Medicine, “Development of the Nervous System”: Cerebral vesicles and their basic derivatives and the spinal cord. The entire derivative table was not transmitted, and the stage of consciousness was not inferred from it.

[3] Swiss University Course, “Differentiation of the Somites”: contributions of the sclerotome, myotome, and dermatome to the skeleton, muscles, and dermis.

[4] Duke University, “Development of the Limbs”: Tissue sources, regulation of growth, ossification, and finger separation. Completion of basic planning is not understood as the end of maturation or ossification.

[5] Duke University, “Craniofacial Development”: Facial projections, palate, pharyngeal pouches, and the beginning of the thyroid. Use was limited to these basic relationships.

[6] Duke University, “Development of the Lung and Diaphragm”: Budding, branching, and surfactant. The old page estimates for prognosis of prematurity or viability thresholds were not adopted.

[7] Duke University, “Gastrointestinal Development”: division of the gut and changes in its position and the beginnings of the liver and pancreas. The occlusion-and-recanalization hypothesis was not generalized to all parts.

[8] Duke University, “Genitourinary Development”: reciprocal induction in kidney development and the sources of urinary, reproductive, and adrenal tissues.

Chapter 28: The Fetus through the Weeks of Pregnancy

Parents like to know what is happening this week: Has the hand appeared? Are facial features becoming clear? Is the baby starting to hear? The answer helps make waiting a more intimate relationship, provided the calendar is a window into development and not a source of anxious comparison. Here, we will proceed in successive periods, not assuming that each event begins at midnight of a new week.

1. What age are we calculating?

The weeks referred to in this chapter are the medical gestational age calculated from the first day of the last menstrual period, not the age since fertilization. In the typical example of a cycle of approximately 28 days, this calculation precedes conception by about two weeks; therefore, saying "pregnant at six weeks" does not mean six weeks after the egg and sperm met. The difference may vary depending on the timing of ovulation. [11]

The date is reviewed using ultrasound imaging and pregnancy data. The due date is a medical estimate, not a definitive prediction of the day labor will begin. The due date may be adjusted based on early scan measurements, and subsequent growth is interpreted within this framework. [2]

The names of the trimesters may vary in their specific boundaries between educational materials; therefore, we will use the same number of weeks when describing a stage or medical boundary, rather than simply saying "sixth month" or

"beginning of the third trimester."

2. Weeks 1–4: Counting Before the Scene

In the first two weeks of the usual count, fertilization has not yet occurred. Then comes fertilization, cell division, and the formation of the blastocyst, and implantation with the uterine lining begins; the woman may not yet be aware of the pregnancy. [1; see chapters 20 and 23]

3. Weeks 5–8: Rapid Development in a Tiny Body

The beginnings of the nervous system, heart, and digestive tract accelerate; limb buds appear and elongate; and the features of the eyes and ears begin to take shape. The embryo at this stage is not a fully formed, tiny baby; many parts are still undergoing fundamental changes in their organization. [1]

Hence the need to distinguish between observing cardiac activity and the heart's full development, and between the appearance of a limb bud and the completion of the hand. We have already detailed the nature of this interwoven development in the previous chapter; we will not reduce it here to a rigid sequence where the formation of one organ ends before another begins.

4. Weeks 9–12: The form becomes clear, but growth does not end.

The facial features and limbs gradually become more defined. Around the end of the tenth week of pregnancy, the embryonic stage (embryo) ends, in common embryological terminology, and the fetal stage (fetus) begins; that is, about eight weeks after fertilization. This is a scientific division of stages, not a religious legal ruling on the soul or rights. [1]

By the twelfth week, the organs and muscles have progressed significantly in their development, and the skeletal structure continues to form and ossify. Examination can reveal more details, but some things that parents want to know, such as determining the sex via ultrasound, may not yet be clear. [3]

In the book’s general Arabic usage, the word janin refers to the developing human before birth. We clarify the specific technical distinction between embryo and fetus when needed, so that a change in scientific terminology is not mistaken for a break in development.

5. Weeks 13–16: Movement Precedes Maternal Sensation

Limb movement and nervous system development continue, and the hand can clench. However, the presence of movement does not necessarily mean the mother will immediately feel it; visible movement on examination is one thing, and feeling it through the uterine and abdominal walls is another. Furthermore, a facial expression resembling a smile is not sufficient to demonstrate a feeling akin to the smile of a conscious person after birth. [4]

We will elaborate on the difference between movement, response, and perception in the next chapter, as grouping them together under one term oversimplifies the

picture.

6. Weeks 17–20: A Clearer Picture of the Baby

At this stage, the mother may begin to feel the baby's movements, although the timing varies among women. A protective, greasy layer called vernix caseosa appears on the skin. Some guides at this age now use crown-to-heel measurement, instead of crown-to-rump measurement; therefore, the transition between the two numbers may appear larger than the actual increase if the measurement method is not carefully considered. [5, 9]

A detailed scan is performed mid-pregnancy in many care programs. In the NHS, for example, it is usually offered between 18 and 21 weeks. It can detect some physical problems, but it does not reveal every disorder, nor does it guarantee every aspect of the baby's future health. [2]

7. Weeks 21–24: Recognizable Features and Incomplete Maturity

The fetus's appearance becomes increasingly similar to that of a newborn, but this external resemblance does not eliminate the need for a womb. Some babies born at 24 weeks may be able to survive with specialized care that assists with breathing, feeding, temperature regulation, and infection resistance. This is a probability that requires individual assessment, not a promise of survival or safety for every child, nor does it definitively state that the possibility of survival begins in this week alone. [6]

Distinguishing between appearance and maturity is important for the family: what the eye sees in terms of fingers and face does not tell them, on its own, how ready the lungs, nervous system, and other functions are for life outside the womb.

8. Weeks 25–28: Continued Functional Development

Brain development continues, and opening and closing the eyelids becomes possible in this late second trimester and beyond. The lungs are still maturing, with surfactant production occurring before full respiratory readiness. The final weeks are not just about weight gain; they are also a continuation of functional development. [1; see Chapter 27]

9. Weeks 29–32: Limited Space Does Not Justify the Absence of Movement

The fetus grows, and the relative space available to it decreases. The movements a mother feels may change, but a decrease or cessation of the baby’s usual movements should not be assumed to be normal simply because the space has become more confined. Guidelines recommend contacting the birthing team if the movement pattern changes or decreases; this assessment should not be replaced by home guesswork. [7]

The body continues to grow, and its tissues are still at varying stages of maturation. Just because the shape is clear does not mean that all body systems have reached their final form. [9]

10. Weeks 33–36: Approaching birth does not eliminate prematurity

Readiness for feeding and breathing after birth increases, and the lungs may be able to function without assistance in many babies by 36 weeks; however, this is not an individual guarantee. Birth before 37 weeks is considered preterm, and babies born between 34 and 36 weeks are usually described as late preterm. [8, 9]

We do not use these terms to frighten the family, but rather to explain why it is sometimes necessary to monitor breathing, feeding, temperature, and other vital signs even in a baby who appears very close to full term.

11. From 37 weeks to past due date

The classification adopted by the American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal Medicine distinguishes between: early term (37 to 38 weeks and 6 days); full term (39 to 40 weeks and 6 days); late term (41 to 41 weeks and 6 days); and post-term (42 weeks and beyond). These boundaries indicate that not all near-term births are medically equal. [10]

This classification does not provide a birth plan for any particular individual. The mother's or baby's condition may necessitate an earlier delivery, and post-term care may require discussing different options. The decision is clinical, not a conclusion drawn from the stage name alone.

12. How do we interpret this journey?

We don't memorize the chart to test each fetus like a clock, but rather to understand what we see, what we expect, and what we ask about. We don't confuse the calculated age with the age since fertilization, nor the beginning of development with its maturation, nor a single measurement with a judgment on the entire developmental trajectory.

Beyond the weeks, a mother's life changes, and a family learns to wait. Good care combines knowledge with realistic reassurance: it explains what to expect, allows for questions, and takes seriously what requires examination. After this journey through time, we move to a question closer to the parents' hearts: What is the fetus doing, what does it hear, and what does it respond to before birth?

Chapter Sources and References

[1] MedlinePlus, "Fetal Development," Rev. 2025: Calculating gestational age, some early milestones, the conventional transition to the fetus stage, and the development of the brain and eyelids. Not all page dates or general provisions have been reproduced.

[2] NHS, "Ultrasound in Pregnancy": pregnancy dating, detailed examination, and detection limits. The UK program dates are an example; no system is imposed on every country.

[3] NHS, Week 12 Guide: Organ, muscle, and skeletal development and the limits of sex visibility in early screening.

[4] NHS, Week 16 Guide: Continued neurological development and limb movement. The simplified version does not take “begins” to imply that the fetus was immobile before this week.

[5] NHS, Week 20 Guide: vernix caseosa and differentiation between length measurements used in the guides.

[6] NHS, Week 24 Guide: Some premature babies require specialist care. No survival rate or absolute limit of viability is given.

[7] NHS, Week 32 Guide: Continued movement and the need to review changes in its pattern. The simplified version that reduces the following weeks to weight gain is not adopted.

[8] NHS, 36th week guide: Respiratory and nutritional readiness near birth, keeping in mind the variability in maturation between babies.

[9] NICHD, 'On pregnancy': General features and definition of preterm and late preterm birth. The older survival rate on the page was not used to predict a contemporary situation.

[10] ACOG, Committee Opinion No. 579, 'Definition of full term pregnancy', 2013, abstract published in PubMed; the limits were compared with current information published by the NICHD.

[11] NHS 111 Wales, 'Weeks 4-8': Dating pregnancy from last menstrual period and the approximate difference between that count and age since fertilization.

Chapter 29: Movement and the Senses before Birth

The mother places her hand on her belly, waiting for movement. The father speaks nearby, and wonders: Can the baby hear me? A fetal ultrasound image shows a mouth movement resembling a yawn or a smile, prompting the heart to interpret it. This desire for communication is understandable and beautiful, but it requires precise language: What have researchers actually observed? What have they concluded? And what is our experience still unable to directly ascertain?

1. Four Words That Don't Mean One Thing

Movement is a change in the position of the body or a part of it. A response is a change related to a stimulus and can be tested by comparison. Perception refers to the processing of information, the level of which cannot be established by a single observation. Conscious experience is the most difficult question: How does the organism feel what is happening to it? Distinguishing between these levels is not a denial of fetal life, but rather a protection of research from jumping to conclusions beyond its current scope.

A review by the Royal College of Obstetricians and Gynaecologists confirms that early fetal movements may occur spontaneously and do not require a sensory stimulus. Therefore, the presence of movement after a passing sound does not, by mere concurrence, prove that the sound caused it; the researcher needs to use repetition, controls, and comparison. [1]

2. When the Mother Feels Movement

Most pregnant women begin to feel movement between the 16th and 24th weeks of pregnancy, although in a first pregnancy, it may be delayed until after the 20th week. If no movement is felt by the 24th week, the healthcare team should be informed. This is the timing of the mother's sensation, not the first appearance of fetal movement. [2]

Each fetus has its own typical pattern; there is no single number that can describe all fetal movements. It is important to pay attention to any change in the pattern, a

decrease in movement, or its cessation, and to contact the midwife or the maternity ward immediately, without waiting until the next day. Hearing a heartbeat with a home Doppler device is not sufficient to ensure the well-being of the fetus or to postpone further examination. [2]

If the medical team provides a specific follow-up plan, it should be followed as needed. This paragraph is not a substitute for care, nor is it an invitation to make every minute of pregnancy a stressful experience.

3. The womb is not a complete sound barrier.

Sound can travel through the mother's body, although the intrauterine environment alters its characteristics and reduces some of its volume. The US National Institute for Occupational Safety and Health states that fetal response to sounds appears around the 24th week of pregnancy. However, the recording of the response is affected by the method of measurement, and this date does not represent a sharp turning point at which hearing matures all at once. [3]

Because sounds are not completely blocked, loud noise is not a useful means of communicating with the fetus. Furthermore, protecting the mother's ears does not completely protect the fetus's ears from loud noise transmitted through the body. High occupational exposure warrants a review of safety measures with professionals. [3]

The family can talk and read in a calm atmosphere, without turning the relationship into a program of forced sounds or a test of response. They don't need to place sound-amplifying devices against the abdomen to prove their love.

4. Does language familiarity begin before birth?

In 2023, Mariani and colleagues studied the electrical brain activity of 49 newborns, aged one to five days, who had been exposed to French by their mothers before birth. The researchers compared the organization of brain activity before and after listening to speech in different languages and observed an effect specifically associated with the language heard before birth. The result supports the existence of an early effect of auditory experience on the organization of neural activity. [4]

However, this is not evidence that the fetus understands sentence meanings in the same way as a speaking child, or that it memorizes a book consciously, or that certain recordings guarantee higher intelligence. The measurement was taken after birth; the link to prior experience is an empirical inference within the study design, not a direct observation of the fetus's thoughts.

5. Touch and Movement: What Does a Small Experiment Say?

In a 2015 study by Marx and Nagy, researchers monitored 23 fetuses between the 21st and 33rd weeks of gestation, comparing movement in response to the mother's voice, her touching her abdomen, and a control condition. Differences in arm, head, and mouth movements emerged between the conditions, and in some responses, they also varied depending on the fetus's age. This is an interesting behavioral observation, but the sample size and the nature of the measurement do not allow for

a complete description of emotion or interpersonal relationships within the womb. [5]

A mother touching her abdomen is not the same as directly touching the fetus's skin. Furthermore, increased movement does not always signify pleasure, and decreased movement does not always signify rejection; these are emotional labels that require evidence beyond the movement itself.

6. Sight: Between Light and the Image of the World

A 2017 experiment investigated the responses of third-trimester fetuses to light arrangements similar to facial features and suggested a preference for certain arrangements. Then, in 2018, Scheel and colleagues published a methodological and analytical critique questioning the strength of this conclusion. This is a useful example of how a striking result does not become definitively true simply by being widely reported. [6]

We do not infer from light experiments that the fetus sees the faces of those around its mother through the abdominal wall. The stimulus it can receive, the measured response, and the visual picture of the world that a person develops after birth are different things. It is only fair to leave the questions open.

7. Taste and Smell: Flavor Before the Table

Flavor is composed of overlapping senses, including taste and smell, and the components of the mother's diet may influence the chemical environment to which the fetus is exposed. In a 2022 study, Ustun and colleagues compared the facial movements of fetuses between 32 and 36 weeks of gestation after their mothers were exposed to the taste of carrots or kale with a control group and found differences in facial movement patterns. [7]

Some of these patterns were labeled with terms like “laughing face” and “crying face.” These are descriptions of motor constructs, not direct evidence that the fetus liked or disliked a food in the full psychological sense. The experience does not become a recipe for determining the child’s taste or personality. What we have is limited evidence of possible responses and discriminations, not a complete internal history.

8. The Question of Pain

Pain is not simply the act of pulling a limb away from a harmful stimulus; receiving harmful signals and reflexes is one thing, and experiencing pain is another. The study of this issue depends on the maturation of neural networks and behavioral and brain responses, with clear limitations on inference. [1]

The RCOG review published in December 2022 concluded that the possibility of pain perception before the 28th week of pregnancy is unlikely, based on the evidence reviewed. This is a scientific formulation limited by evidence, not a definitive determination of the moment when pain begins in all fetuses. The review also emphasized caution in interpreting facial movements and reflexes as proof of a painful experience. [1]

This does not constitute a religious legal ruling on abortion, nor does the absence of evidence for a specific experience negate the dignity of the fetus. Assessing pain relief in a specialized medical procedure is the responsibility of the treating team, not a prescription derived from a general chapter.

9. Hearing, Sight, and the Heart in the Discourse of Gratitude

God Almighty says: “Then He fashioned him and breathed into him of His spirit and made for you hearing, sight, and hearts. Little are you grateful.” [As-Sajdah: 9]

At-Tabarsi interprets the mention of hearing and sight as enabling humans to hear and see, and explains al-af’ida as the hearts with which people reason, in the context of reminding us of blessings and our lack of gratitude. Therefore, the verse should not be read here as a weekly schedule detailing the development of each sense, nor can a detailed chronological order for all parts of the brain and heart be derived solely from the arrangement of the words. [8]

The ethical conclusion we draw is that the capacity for receiving and understanding is a responsibility: What do we hear? What do we believe? And how do we view people? The sense that begins its development before birth then enters a process of learning and choice, a process that cannot be explained simply by the growth of an organ.

10. A relationship that needs no pretense

A mother doesn't need to prove that her unborn child understands every word to love him, nor does a father need to measure a reflex to begin his responsibility. Prayer, recitation, and kind words can be part of a family's life, faith, and peace of mind, without attributing any neurological effect or behavioral guarantee to them that hasn't been proven.

We emerge from this chapter with the joy of knowledge and the tranquility of boundaries: the fetus is moving and its sensory abilities are developing. Science can observe some of this, but it cannot claim to know everything that is happening inside. The next stage is caring for the environment in which these transformations take place: the mother's health, nutrition, treatment, and surroundings.

Chapter Sources and References

[1] Royal College of Obstetricians and Gynaecologists (RCOG), Review of Evidence on Fetal Consciousness, December 2022, particularly the Summary and Section 6. The distinction between reflexes and conscious pain has been taken into account, and the estimate for week 28 is attributed to the Review.

[2] NHS, “Your baby’s movements”: the onset of habitual sensation, pattern change, urgent contact, and non-reliance on home Doppler.

[3] CDC/NIOSH, “Noise and reproductive health”: sound transmission and the limits of fetal protection from loud noise. The passage was not used to describe individual exposure limits.

[4] Mariani et al., Studying the effect of prenatal language experience on neonatal neural activity, Science Advances 9, eadj3524, 2023; DOI: 10.1126/sciadv.adj3524. The article is available in the University of Amsterdam repository.

[5] Marx and Nagy, “Fetal behavioral responses to maternal voice and touch,” PLOS ONE 10(6), e0129118, 2015; DOI: 10.1371/journal.pone.0129118. Reference is made to the study design and its reported results, not to emotional generalizations.

[6] Scheel et al., “Methodological problems in the study of fetal visual perception,” Current Biology 28, R594–R596, 2018; DOI: 10.1016/j.cub.2018.03.047. The abstract in the Eindhoven University repository describes Reid’s earlier experiment and the limitations of inferring from it.

[7] Ustun et al., study of responses to flavor in the womb, Psychological Science 33(10), 1651–1663, 2022; DOI: 10.1177/09567976221105460. The abstract in the Wageningen repository was used, with reservations about interpreting facial movements as emotions.

[8] Al-Tabarsi, Majma' al-Bayan, vol. 8, p. 102, commentary on Surah As-Sajdah: 7–9: fashioning, hearing, sight, hearts, and gratitude. The issue of the soul is completed in its chapter.

Chapter 30: Mother and Fetus

It is easy for someone looking at a picture of a fetus to forget the person carrying it. They see it growing on a small screen and ask about its heartbeat, size, and fingers, while its mother has spent the night nauseous and anxious, or arrived at her appointment after a long day at work. The story of a human being is incomplete if we reduce the womb to an abstract place and neglect the woman whose womb it is: her body, her inner life, and her right to knowledge, comfort, and care.

A mother is not merely a static vessel for the growth of another person. She is a human being with full dignity, whose body undergoes extensive adaptations, and during this process she needs someone to listen to her, respect her choices, and support her. Preserving the fetus does not necessitate erasing the mother; rather, in many ways, it begins with preserving her health and well-being.

First: Pregnancy reminds man of his fundamental need.

God Almighty says: “We have enjoined the human being to treat their parents with kindness. Their mother carried them with hardship and gave birth to them with hardship, and their bearing and weaning last thirty months. Then, when they attain full strength and reach forty years, they say: ‘My Lord, inspire me to be grateful for Your blessing which You have bestowed upon me and my parents, and to do righteous deeds that please You; and grant me righteousness in my offspring. Indeed, I turn to You in repentance, and indeed, I am among those who submit to You.’” [Al-Ahqaf: 15]

This verse connects the human being in their initial weakness with the human being at the height of their strength, not allowing the subsequent strength to erase the memory of need. It transforms this memory into action: kindness to parents, gratitude, righteousness, and supplication for one's offspring. We should not interpret the mention of hardship as an invitation to abandon the woman to suffer; rather, we should read in it a reminder of what we should respond to with mercy and service.

Secondly: The mother's body adapts

Blood volume increases during pregnancy, and the burden on the heart increases.

This is not merely an increase in abdominal size, but a change in the demands of the circulatory system. Those with pre-existing heart conditions or pregnancy-related blood pressure disorders require monitoring tailored to their condition, and postpartum follow-up may also be important. [1]

However, the prevalence of fatigue or discomfort does not make every complaint normal. Severe chest pain, shortness of breath, or fainting should not be dismissed with the phrase "this is pregnancy" without evaluation. Knowledge of typical changes aids understanding, but it does not give permission to ignore what a woman is saying about her body.

Third: Follow-up is an ongoing relationship, not a one-off.

Care begins early, based on medical history, medications, and previous pregnancies, followed by monitoring of blood pressure and growth, and appropriate examinations. These may include blood and urine tests, screening for anemia, and certain infections. The specifics vary depending on the country and the individual case; a woman's schedule is not necessarily the same as all women's. [2]

The woman has the right to understand why the examination was ordered, what it can reveal, and the limitations of its results. It is compassionate to explain the results to her in understandable language, to respect her privacy, and to ensure that the presence of family members does not overshadow her voice. Informed consent is not a luxury added to treatment; it is part of respecting the person receiving treatment.

Fourth: A varied diet, not random doubling of food

Pregnant women need a varied diet that provides protein, energy sources, fiber, vitamins, and minerals, taking into account what is available and what they can tolerate. Vegetables, fruits, grains, protein sources, and calcium-rich foods are included in this variety. Nourishing the fetus does not mean the mother should eat twice as much, nor does it mean following a magic menu that will produce a smarter or more beautiful child. [3]

Food safety deserves special attention: washing vegetables, separating raw and prepared foods, cleaning utensils, and cooking safely. This is simple, everyday care that doesn't require alarmist rhetoric. Women who cannot afford sufficient food need real support, not more lectures about food they cannot buy. [3]

NHS general guidelines recommend 400 micrograms of folic acid daily when planning a pregnancy and during the first 12 weeks. Some cases require a higher dose, which should be determined by a doctor. The need for iron and vitamin D is reviewed according to guidelines and the individual case. The benefit of supplementation does not mean that more is better; preparations containing retinol, a form of vitamin A, should not be taken indiscriminately during pregnancy. [4]

These are examples of guidelines, not personal prescriptions. Dosage and product selection are influenced by medical history, medications, laboratory results, and local guidelines. If pregnancy is discovered after the first few weeks, the focus should be on initiating follow-up care and discussing the next steps, rather than belatedly blaming the mother.

Fifth: Medicine is not the enemy, and “natural” is not a guarantee.

Prescribed medications, over-the-counter products, herbs, and supplements should be reviewed with a doctor or pharmacist. Some substances may be dangerous, and stopping necessary treatment can also be risky. Therefore, a new medication should not be started, nor should a chronic treatment be discontinued, simply based on a circulating message. The name of a plant or the description of a product as “natural” does not negate the need to verify its safety. [2]

It is important to disclose the nature of work and any household or occupational exposures, such as to certain solvents, pesticides, and toxic metals, so that exposure can be assessed and appropriate protective measures taken. Not every chemical name indicates actual harm, and the absence of a warning on the packaging is not sufficient to guarantee safety. [2]

Sixth: Prevention of Infection and Harmful Substances

Examples of preventing toxoplasmosis include cooking meat to a safe internal temperature, washing fruits and vegetables, washing hands and utensils, and wearing gloves when handling potentially contaminated soil. Do not judge whether meat is cooked thoroughly by its color alone. The goal is to understand and minimize transmission routes, not to create a life of constant fear of every contact. [5]

Smoking increases risks such as low birth weight and premature birth, and nicotine products and e-cigarettes are not safe during pregnancy. There is no known safe amount of alcohol during pregnancy. Women who need help quitting deserve treatment and support without stigma; medications related to addiction treatment should be reviewed with a healthcare professional and not stopped unilaterally. [6]

Seventh: Mental Health Needs Care Too

Depression can occur during pregnancy, not just after childbirth. Persistent sadness, loss of interest, or despair warrants a professional consultation. Help may include psychotherapy, and sometimes medication, the benefits and risks of which should be discussed, or a combination of both. Pregnancy does not preclude a woman from seeking appropriate psychological treatment. [7]

Not all fear indicates a lack of faith, nor does every tear signify harm inflicted on the unborn child. Prayer, supplication, and the support of loved ones can be sources of comfort, but they should not become an excuse to avoid treatment. Those around her should ask: What can we do to ease her pain? Not: Why aren't you as happy as we expect?

Eighth: When should we not wait?

Warning signs that require immediate medical attention include: chest pain or difficulty breathing, severe and persistent headaches or headaches accompanied by blurred vision, fainting, fever, severe abdominal pain, bleeding or leakage of fluid, severe vomiting that prevents fluid retention, and a decrease in the baby's usual movements. These are examples, not an exhaustive list, and significant complications may also arise after delivery. [8]

The intention is not for the family to diagnose the illness from a list, but rather not to delay seeking professional help when a warning sign appears. If a woman feels that something unusual is happening, her description should not be dismissed simply because a previous examination was reassuring.

Ninth: The Mother's Right in the Heritage of the Ahl al-Bayt

In the “Treatise on Rights” attributed to Imam Zayn al-Abidin (peace be upon him), in the text of “Tuhaf al-Uqul,” it states: “She carried you where no one else carries anyone,” and in it: “Her womb was a vessel for you, her lap was a haven for you, her breast was a source of nourishment for you, and her very being was a shield for you.” This text appears in the book without a detailed chain of transmission in its proper place; therefore, we cite its ethical meaning while clarifying this point, and we do not claim to authenticate its chain of transmission here. [9]

This language revives the concept of human concern for human beings. Its terminology is not an anatomical description of the placenta, nor do we interpret the phrase "the fruit of her heart" as referring to the direct transfer of nourishment from the heart muscle. It is a language of sacrifice and tenderness, reminding the reader that their life was initially sustained by a care they were unable to repay.

Applying this meaning today means that the father and family share the burdens, that the mother has access to rest, care, and transportation to her appointments, and that her pain is acknowledged. It is wrong to glorify sacrifice to justify depriving her of food, treatment, or sleep; acknowledging her exhaustion should alleviate it, not sanctify it and leave her to bear it alone.

Chapter Summary

Fetal development is a story of profound dependence on the mother, but it is not an erasure of her individuality. Mature care combines science and compassion: monitoring without exaggeration, prevention without blame, treatment without superstition, and kindness translated into action. In the next chapter, we examine a pregnancy involving more than one fetus, where the picture becomes more complex and understanding the placenta and membranes becomes even more crucial.

Chapter Sources and References

[1] Australian Heart Foundation, Pregnancy and Heart Disease; increased circulatory workload and the Importance of Monitoring Pregnancy-Related Blood Pressure Disorders. Risk ratios are not conveyed as an individual estimate.

[2] US Office for Women's Health, Antenatal Care; Follow-up, Review of Treatment and Exposures. General page statements on radiation or infertility are not taken as a blanket judgment.

[3] NHS, Healthy Eating in Pregnancy; Variety and Safe Preparation, No Doubling of Foods Required.

[4] NHS, Vitamins and Supplements During Pregnancy; General Folic Acid Dose and When to Review Dose, Retinol Caution. Individual guidance should be sought from a healthcare professional.

[5] CDC, Prevention of Toxoplasmosis; Food, Soil, hand and utensil hygiene.

[6] CDC, Use of Substances During Pregnancy; Tobacco, nicotine, and alcohol; seek help and review treatment.

[7] NHS, Depression in Pregnancy; Symptoms and Psychological and Pharmaceutical Assistance as Assessed.

[8] CDC, Hear Her Campaign, Urgent Maternal Warning Signs; Examples Requiring Immediate Care During and After Pregnancy.

[9] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, Risalat al-Huquq, The Rights of Kinship: The Mother's Right, p. 263, edited by Ali Akbar al-Ghaffari. The quotation is taken from the text without claiming to verify its attribution.

Chapter 31: Twins and Multiple Pregnancy

Parents may go for an ultrasound with one bed in mind, only to learn that there are two fetuses in the womb. Joy expands, and with it, questions arise: Are they alike? Do they share food? Why does their mother need more frequent appointments? The answer is not a single word; the term "twin" encompasses different forms of development and relationship to the placenta.

First: Two Different Beginnings

Dizygotic twins develop from two separate eggs, each fertilized by a different sperm. Monozygotic twins, on the other hand, develop from a single fertilized egg, resulting in two embryos. This is why the second type is commonly referred to as "identical" twins, and the first as "fraternal" twins. Dizygotic twins may be of the same sex or different sexes. [1]

"Fraternal" does not mean they are dissimilar, just as "identical" does not mean they are the same person repeated. The terminology describes the origin of the conception, not the degree of affection between the two children, their future personalities, or the value of one compared to the other.

Second: The Placenta Question Is Not the Origin Question

During pregnancy follow-up, we also ask about the chorion, the outer fetal membrane, and the amnion enclosing the fluid around each fetus. The most common arrangements are dichorionic diamniotic, monochorionic diamniotic, and monochorionic monoamniotic. In the first, each fetus has its own placental unit and sac; in the second, the fetuses share a placenta but have separate sacs; in the third, they share both placenta and sac. [2]

A monozygotic pregnancy can also be dichorionic; therefore, the statement "they have two placentas" is not sufficient to rule out a single origin. Furthermore, two placental masses may be adjacent and appear as one. The determination depends on a set of imaging markers in the membranes and their connection to the placenta, not solely on the apparent count of masses. [2, 3]

This differentiation is important because the pathways through which blood and nutrients reach each fetus may create different monitoring issues. The practical question is not: How similar are their faces in the family photograph? Rather: How is

their blood circulation connected to the placenta, and what should be monitored for each?

Third: Why is early screening important?

The updated ISUOG guidelines of 2025 recommend identifying the chorionicity in the first trimester, keeping a photograph to document it, and seeking a specialist opinion if the classification remains unclear. In uncomplicated monochorionic pregnancies, they recommend scans every two weeks starting at 16 weeks to monitor for complications, with adjustments to the plan if a problem arises. [3]

Each fetus has its own measurements and record. Growth, amniotic fluid, and blood flow are monitored as needed, and monitoring both fetuses is not replaced by an average that combines their weights. It is important to consistently label each fetus in scans to avoid attributing observations related to one to the other. [3]

Fourth: Twin-to-Twin Transfusion Syndrome

Vascular connections may exist in a shared placenta, and an imbalance in blood flow through them leads to twin-to-twin transfusion syndrome. One twin, in terms of blood circulation, is called the donor and the other the recipient. There may be less fluid around the donor and more around the recipient, and changes may occur in bladder function, blood flow, or heart function. It is not simply a matter of one twin being larger. [4]

This syndrome requires specialized fetal medicine. One treatment option for selected cases is laser ablation of the vascular connections via fetal endoscopy; the decision depends on the stage of the disease, gestational age and its details, and the center's experience. This section is not intended to prescribe individual treatment, but rather to clarify that identifying the problem may open the door to intervention, and that treatment does not guarantee a single outcome for everyone. [4]

The terms "donor" and "recipient" do not carry ethical connotations. One fetus does not withhold from its sibling, nor does one willingly deprive the other. These are medical terms for blood flow patterns; it is wrong to later use them as a source of blame to tell a child about the beginning of their life.

Fifth: Multiple Pregnancy Requires Extra Care

Multiple pregnancies increase the likelihood of premature birth and low birth weight, and the mother is more prone to problems such as anemia and preeclampsia. A pregnancy where twins share a single sac requires specialized monitoring due to the risk of umbilical cord entanglement and its complications. The increased risk does not mean that harm is inevitable, but it justifies the need for more intensive follow-up. [2]

As the number of fetuses increases, the pregnancy becomes more complex. The plan for twins is not automatically transferred to triplets. The nature of the placenta and sacs, the condition of each fetus, and the mother's health are all reviewed, and the place and timing of delivery are planned accordingly. We will return to the topics of delivery and premature infant care in their respective sections, without prescribing a

single timeline suitable for every pregnancy.

Sixth: Number is not a criterion for the success of fertility treatment

The birth of twins after a long wait may seem like a shortcut to the treatment journey, but transferring more than one embryo in assisted reproductive technology increases the likelihood of multiple pregnancies and their associated risks. Therefore, a strategy of transferring a single embryo is discussed in appropriate cases, with the possibility of freezing other embryos for later attempts. The decision is based on the individual case, the cumulative chances of success, and the safety of the mother and children, not on the desire for the largest number in a single attempt. [5]

Explaining the risks is not meant to diminish the value of twins or the joy of their parents. There is a difference between welcoming an existing life with care and love and choosing a medical procedure whose benefits and risks must be weighed before being undertaken.

Seventh: Genetic similarity is not absolute identity

A study published in Nature Genetics in 2021 showed that monozygotic twins may differ in mutations that arose during early development. The phrase “genetically identical” is a useful educational simplification in some contexts, but it doesn't mean that every cell is identical in every detail. The reference here is to the study's summary result, not to the claim that all differences between twins are due to a single cause. [6]

Furthermore, the genome is not a pre-written biography of a person. Each child has their own experiences, relationships, education, and responses, and genetic research should be discussed within the limits of its tools, not as a judgment on choice and responsibility. A family should not confine one twin to the image of the other, or make the success of one a testament to the shortcomings of the other.

Eighth: The Gift Does Not Erase the Individuality of the Child Given

God Almighty says: “To God belongs the dominion of the heavens and the earth; He creates what He wills. He bestows upon whom He wills daughters, and He bestows upon whom He wills sons.” [Ash-Shura: 49]

God Almighty also says: “Or He bestows both males and females, and He renders barren whom He wills. Indeed, He is All-Knowing, All-Powerful.” [Ash-Shura: 50]

We invoke these two verses in the context of the gift and the diversity of people's circumstances, without applying them to a medical classification of twins, nor restricting the combination of sons and daughters to a single pregnancy. Having many children is not a mark of superiority among families, nor is having few a sign of diminished dignity. A newborn is a gift that entails responsibility, not a number that elevates one's status above others.

If two faces are similar, each retains a name, rights, and a voice. Fairness between twins begins with acknowledging each child's needs, not with insisting on complete

uniformity. One twin may require more medical care; providing care according to need is not a form of favoritism.

Chapter Summary

We understand twins from two complementary perspectives: their origin and their relationship to the placenta and membranes. This understanding makes increased testing more relevant, clarifies the causes of certain complications, and reveals how to manage them. Beyond classifications, there are two or more children, not abstract educational cases, and a mother who needs support that expands with her growing responsibilities.

Chapter Sources and References

[1] US National Human Genome Research Institute (NHGRI), Identical Twins; Definition of Monozygosity and Dizygosity. The concept of absolute match was restricted by the results of the study referenced in reference 6.

[2] NHS, Twin Pregnancy Care; placental and amniotic-sac arrangements, and Maternal and Fetal Risks. Schedules or absolute statements about the origin of twins were not transmitted as rules without exceptions.

[3] Khalil et al., Updated ISUOG Guidelines for the Role of Imaging in Twin Pregnancy, 2025, DOI: 10.1002/uog.29166; Chorionicity Identification, Documentation, and Follow-up. Refer to the relevant sections on these issues.

[4] ISUOG, Twin-to-Twin Transfusion Syndrome, Specialist-led educational material; mechanism, assessment, and laser treatment in appropriate cases. No classification system or treatment decision was offered as a substitute for a specialist center.

[5] Newcastle NHS Hospitals, Multiple Pregnancy and Single Embryo Transfer; discuss the risks of multiple pregnancies and alternatives with the treatment team, without generalizing older rates to individuals.

[6] Differences between germline genomes of monozygotic twins, Nature Genetics, 2021, DOI: 10.1038/s41588-020-00755-1; result taken from indexed abstract, not from full-text review.

Chapter 32: Congenital Disorders, Pregnancy Loss and Preterm Birth

Not every pregnancy journey is a smooth climb towards delivery. Parents may receive unexpected news: a discrepancy in the fetus's ultrasound image, a halt in its development, or premature labor. In such cases, precise terminology alone is insufficient; we need knowledge that clarifies what is known, and compassion that doesn't equate ignorance of the cause with accusations against the affected individual.

This chapter brings together different topics because they may present the family with a fear for their life, not because they are all the same. A congenital anomaly is not synonymous with death, prematurity is not a malformation, and pregnancy loss is not automatic proof of maternal error. Distinguishing between these meanings has implications for treatment and the language we use to communicate with people.

First: What is meant by a congenital disorder?

The Arabic term khalqi, pronounced with an “a” after the initial kh, means congenital: it describes a condition arising before birth, which may be recognized during pregnancy, at birth, or later. It may be structural, such as certain heart defects or cleft lip and palate, or functional, such as some metabolic or hearing disorders. The difference need not be visible to the naked eye. [1, 2]

Conditions vary widely in severity, treatment, and impact on life. Therefore, a general term like “malformation” does not adequately describe a child’s future. We need to identify the organ and its function, and to make a specialized assessment of what can be treated or supported, while acknowledging what remains unknown. It is more accurate to describe the condition without reducing the individual to it.

Second: Congenital conditions are not always inherited.

Some conditions may be related to a genetic or chromosomal change, while infections, nutritional or environmental factors, or maternal illnesses may contribute to others. In many cases, the specific cause is unknown. Prevention is possible for some disorders, but it is not a guarantee against every disorder, no matter how good the care. [1, 2]

This prevents two hasty inferences: that every congenital condition must be an inherited disease in the family, and that its occurrence proves parental negligence. Nor should it be assumed that a daily incident or a fleeting emotion caused a difference in a child's face or limbs. Searching for the cause requires evidence, while blaming the mother may stem from an unfounded myth.

Appropriate general prevention includes preconception care, managing certain diseases, reviewing medications, proper nutrition, folic acid supplementation, and preventing specific infections with timely and appropriate measures and vaccinations. It is also a health and social responsibility, related to providing services, food, and a safe environment, not simply requiring the woman to avoid all risks alone. [1]

Third: Screening Is Not a Definitive Diagnosis

Some pregnancy tests estimate the probability of a particular condition, but do not definitively confirm it. If the result indicates a higher probability, further testing and specialist consultation may be recommended. Conversely, a low probability result does not rule out all diseases. It is important to understand what the test specifically looks for and what it cannot tell us. [3]

When a finding is present, the degree of certainty, alternatives, and the need for further imaging or diagnostic testing are explained. The family should not reduce the news to a single alarming word picked up from the report. Early diagnosis may be beneficial in choosing a place of birth or preparing for the child's treatment, but it does not allow for general judgments about the child's quality of life.

Medical and religious legal decisions related to serious conditions require a precise medical description, expert advice, and consultation with the relevant religious

authority. This book does not derive a personal judgment from the name of a disease, nor does it assume that estimating probability equates to knowing the outcome.

Fourth: Early Pregnancy Loss

Early pregnancy loss may be related to a chromosomal abnormality that impedes further development, or the cause may remain undetermined. It is not appropriate to attribute every loss to a passing fear, marital intercourse, or a daily activity. Bleeding or pain alone do not necessarily mean that the pregnancy has ended; medical evaluation is necessary, and confirming the diagnosis may require follow-up rather than a single early image. [4]

A pregnancy may cease without obvious symptoms and be discovered through examination. After confirmation, care varies depending on whether the pregnancy tissue has been completely expelled and the mother's condition: supervised expectant management, medication, or surgical intervention. This chapter does not determine the course of action, and a woman experiencing heavy bleeding, severe pain, or a deterioration in her condition should not wait at home. [4]

The term "abortion" may be used medically for spontaneous pregnancy loss, so it is inappropriate for the reader to hear it and accuse the woman of intentionally terminating the pregnancy. The intended meaning should be clarified before any moral judgment is made. Many families grieve a loss they did not choose.

Fifth: Ectopic Pregnancy is a Different Condition

The fertilized egg may implant outside the normal place of pregnancy, most often in the fallopian tube. A tubal pregnancy cannot continue normally and can be life-threatening if it ruptures and causes internal bleeding. Possible signs include lower abdominal pain, especially on one side, with bleeding or pain at the shoulder tip. Sudden, severe pain with dizziness or fainting requires immediate emergency medical attention. [5]

Imaging and laboratory tests are used to determine the diagnosis and management. This condition should not be treated with home remedies or indefinite waiting, and seeking help should not be delayed until a positive pregnancy test is obtained if the symptoms are concerning. [5]

Sixth: Differences in Definition Do Not Change the Reality of Loss

The time limits used to classify loss vary among healthcare systems: the NHS currently uses a 24-week limit to define miscarriage, while the CDC uses a 20-week limit, common in the United States. These are conventions of recording and care, not a measure of the family's grief or the dignity of the life lost. [6, 7]

These medical limits are not equivalent to the ensoulment of the fetus, nor are they automatically transferred to religious rulings. If the fetus dies at an advanced stage, the family needs a calm explanation of the findings, care for the mother, and a discussion of potentially helpful tests with her consent. Even after investigation, no conclusive cause may be found; this should be stated honestly, without resorting to fabricated answers to fill the silence.

Seventh: When Birth Precedes Maturity

Premature birth is defined as the birth of a live baby before the completion of 37 weeks of gestation. It may begin spontaneously, or the team may decide on earlier delivery for a medical reason related to the mother or fetus. The need for support varies for premature infants depending on age, condition, and available resources; the term "premature" does not represent a single future for all children. [8]

Specialized prenatal care may include, in appropriate cases, medications to help the lungs mature or reduce certain complications, followed by support for breathing, feeding, warmth, and infection management. The choice and timing of intervention are the responsibility of the medical team, and not every treatment is suitable for every age or condition. [8]

Kangaroo care, which combines prolonged skin-to-skin contact with the caregiver and support for feeding with breast milk, is a prominent aspect of care for premature and low birth weight infants. The World Health Organization issued an updated practical guide for this in 2025. Its application involves instruction and supervision by the team, depending on the child's stability; it is not intended as a substitute for resuscitation or respiratory support when needed. [9]

The family is a partner in care, not a visitor always standing behind glass. Learning to hold, feed, and observe the child's needs can restore some of the parents' role amidst the machines. Comparing children or making definitive predictions about growth prospects based solely on weight does not help in understanding the individual case.

Eighth: What do we say to someone who has lost a pregnancy?

Perhaps the first thing a grieving person needs is for us to acknowledge their loss. We shouldn't demand a specific timeframe for their recovery, nor should we replace our condolences with phrases like "someone else will come along" or "they weren't old enough yet." A father's expression of grief may differ from a mother's, and both need support. Psychological counseling should be made available when the pain becomes severe or disrupts daily life. [6]

God Almighty says: {And We will surely test you with something of fear and hunger and a loss of wealth and lives and fruits, but give good tidings to the patient.} [Al-Baqarah: 155]

And Allah Almighty says: {Those who, when afflicted with a calamity, say, “Indeed, we belong to Allah, and indeed, to Him we will return.”} [Al-Baqarah: 156]

And Allah Almighty says: {Those are the ones upon whom are blessings from their Lord and mercy. And it is those who are the [rightly] guided.} [Al-Baqarah: 157]

These verses offer a horizon of hope and return to Allah, but they do not grant us knowledge of the unseen cause of every event. We do not tell the bereaved that we know why their loss occurred, nor do we make their grief an accusation against their faith. We can remind him of compassion while respecting his tears, and pray with him while helping him with his daily needs.

Chapter Summary

Pregnancy may reveal the fragility of life, but it also reveals the meaning of care. We differentiate between cases, verify diagnoses, uphold the rights of mother and child, and acknowledge the limitations of science. In the following pages, we return to the terminology of creation in the Quran; we read it in its context and meanings, without making it a substitute for medical examination or attributing to science what is not proven.

Chapter Sources and References

[1] World Health Organization, Congenital Disorders, Fact Sheet 27 February 2023; Definition, multiple causes, and partial prevention, without assuming that every case can be prevented.

[2] NICHD, Congenital Differences; Structural and Functional Categories, Genetic and Chromosomal Causes, and Limits of Knowledge

[3] NHS, Prenatal screening tests; distinguishing between probability and certainty, and a woman's right to understand and choose tests.

[4] RCOG, Early pregnancy loss; common causes, the need for confirmation of diagnosis, and pathways of supervised care. No drug dosages or individual risk estimates were conveyed.

[5] NHS, Ectopic pregnancy; tubal implantation, warning signs, and the need for urgent evaluation.

[6] NHS, Pregnancy loss; the definition used on the page, recovery, and psychological support. The conveyed definition is neither a universal definition nor a legal ruling.

[7] CDC, Definition of stillbirth; US classification limits and note of their difference from NHS usage.

[8] WHO, Preterm birth, Fact sheet 10 May 2023; Definition, causes, principles of care, and variability of outcomes. Survival rates were not generalized to any specific case.

[9] World Health Organization, Kangaroo Care: A Guide to Clinical Practice, 2025; the definition of care and the guide's objective were used on the publisher's page, and a review of all chapters of the guide was not claimed.

Chapter 33: The Stages of Creation in the Qur'an

After examining what medical observation reveals about fetal development, we return to the Qur'an with another related question: How does it address humanity about its origins, and to what meaning does it seek to awaken us? It is not enough to take a word from a verse and place an enlarged image alongside it; the image requires scientific interpretation, the word requires language and context, and the verse needs to be read in its entirety.

The intention is not to separate faith from knowledge of creation, but rather to establish a clear path between them. We affirm the text as it is, distinguish the interpreter's explanation from the wording of revelation, and then present scientific knowledge within its limitations. One field may illuminate a question in the other, but comparison does not become proof simply because the visual similarity is pleasing.

First: From the Beginning of Creation to Resurrection

God Almighty said: {And We have certainly created man from an extract of clay} [Al-Mu'minun: 12].

God Almighty also said: {Then We placed him as a sperm-drop in a secure lodging} [Al-Mu'minun: 13].

And Allah Almighty said: {Then We created the sperm-drop into a clinging clot, and We created the clinging clot into a lump of flesh, and We created the lump of flesh into bones, and We clothed the bones with flesh; then We produced it as another creation. So blessed is Allah, the best of creators.} [Al-Mu'minun: 14]

And Allah Almighty said: {Then indeed, after that you will surely die.} [Al-Mu'minun: 15]

And God Almighty said: “Then indeed, on the Day of Resurrection you will be resurrected.” [Al-Mu’minun: 16]

This chain of events culminates in death and resurrection, not merely in the completion of the embryonic stage. It connects the origin and destiny of humankind, compelling one to view life as broader than the present moment. Anyone who focuses solely on the embryonic stage and ignores its conclusion misses a fundamental aspect of the verses' message.

In discussing the meanings of sulala (an extract) and “the human being,” Majma’ al-Bayan presents views relating to Adam and his descendants. It explains the secure lodging as the womb prepared for the sperm-drop to remain until its term. In the part on the beginning of creation, we distinguished Adam’s origin from the reproduction of his descendants; we therefore do not treat every verse about clay as a direct description of the stages of every pregnancy. [1]

Second: Nutfah Is Not One Laboratory Term in Every Context

Al-Tabarsi explains nutfah in the context of the verse in Surat al-Hajj as a small amount of water, mentioning the fluid of the male and female. This is a linguistic and interpretive explanation, not a list of the components of sex cells. Distinguishing seminal fluid from sperm, and the ovum from the fertilized egg, is a scientific necessity; it is incorrect to use these terms interchangeably and then attribute the confusion to the Quran. [2]

The verse addresses humankind from the perspective of its weak origin and transformation, while the microscope separates cells and structures not named by their technical terms in the text. It is permissible to use science to understand the reality of reproduction, but assigning a specific modern term as the sole meaning for every occurrence of the word "nutfah" requires an argument that goes beyond the desire to establish a correspondence.

Third: The 'alaqah and the mudghah between language and description

In "Majma' al-Bayan," the 'alaqah is explained as a piece of congealed blood, and the

mudghah as something resembling a piece of chewed meat or the amount that is chewed. We mention this faithfully as a traditional interpretation, and we do not conceal it because the expression does not conform to the language of contemporary medical texts. At the same time, we do not consider the interpreter's statement to be a histological measurement proven by the laboratory. [2]

As for the embryonic description presented, it deals with organized living cells and a disc in which layers, axes, and differentiated structures are formed; The embryo is not presented as a blood clot that simply transforms into a body. This is a difference between describing the structure and providing a linguistic image or historical interpretation of it. [3]

The analogy to a chewed piece does not imply actual chewing. Furthermore, a resemblance in a chosen image is not sufficient on its own to establish a precise date for the beginning and end of a stage. We must distinguish between using analogy as a point of reference and claiming that every scientific detail is explicitly stated in the word.

Fourth: Formed and Unformed

God Almighty said: “O mankind, if you are in doubt about the Resurrection, then indeed, We created you from dust, then from a sperm-drop, then from a clinging clot, then from a lump of flesh, formed and unformed - that We may make it clear to you. And We settle in the wombs whom We will until a specified term, then We bring you forth as a child, and then [We develop you] that you may reach your maturity. And among you is he who is taken in death. And among you are those who are brought back to the most decrepit stage of life so that they know nothing after having had knowledge. And you see the earth barren, but when We send down rain upon it, it stirs [to life] and swells and produces [something] of every kind of beautiful growth.” [Al-Hajj: 5]

And Allah Almighty said: “That is because Allah is the Truth, and that He gives life to the dead, and that He is over all things competent.” [Al-Hajj: 6]

And God Almighty said: “And that the Hour is coming, there is no doubt about it, and that God will resurrect those in the graves.” [Al-Hajj: 7]

In explaining “formed and unformed,” al-Tabarsi reports the interpretations of completeness and incompleteness, and of having or not having a discernible form, mentioning a miscarried conceptus in which no outline had become apparent. These are views cited in the commentary; they are not terms directly equivalent to categories of chromosomal disorders or stem cells in modern medicine. [2]

The description of creation does not permit belittling a person living with a physical difference or disability. The discussion here concerns the development of creation and its conditions, not assigning degrees of humanity to people. Furthermore, a pregnancy’s failure to continue does not, in itself, reveal a specific hidden cause, nor does it entitle us to accuse its parents.

The long verse combines the embryo, the child, reaching maturity, and old age, then the barren earth and its return to vegetation. This extension shows that its subject is

not an isolated stage; it confronts doubt about resurrection with verses about creation, transformation, and revival.

Fifth: Bones and their covering with flesh

“Majma’ al-Bayan” explains the covering of bones as the growth of flesh upon them, like clothing. This depicts the construction of the body and the completion of its form. However, the word “bones” in a general discourse should not be transferred without examination to a highly specific histological definition, as if it always refers to fully mineralized bones like those we see in an adult skeleton. [1]

Developmental biology describes pathways of ossification; some bones form directly in mesenchymal tissue, while others are preceded by a cartilaginous model, parts of which are gradually replaced by bone. Growth and ossification continue after birth. Therefore, it is incorrect to depict an embryo as a fully formed, solid skeleton and then, in a subsequent step, clothe it with all the tissues, and call this a verified medical description. [4]

When making comparisons, it is essential to specify what we are comparing: the beginning of tissue differentiation, the emergence of the cartilaginous model, the onset of mineralization, or the completion of the organ? Ignoring these distinctions can lead to a hasty, superficial agreement that lacks rigor. Recognizing the interconnectedness of developmental processes does not detract from contemplating the intricate design of the body.

Sixth: What does the "other creation" mean?

Al-Tabarsi conveys the interpretation of the "other creation" as the blowing of the soul, and mentions alongside it statements related to the growth of hair and teeth and the bestowal of understanding, or to being male or female. Presenting these statements reminds us that interpretation is a scholarly endeavor with a history, and that the existence of a well-known statement does not negate the rest of what has been transmitted. [1]

In "Al-Mizan," Al-Tabataba'i focuses on the shift in expression from creation to origination, seeing in it the emergence of the human being with life, knowledge, ability, and identity, which he expresses by saying "I," not merely a change of one physical form to another. This is a philosophical and interpretive statement of his understanding of the verse, not a report on the moment when measuring devices can register consciousness. [5]

Hence, we postpone the detailed discussion of the timing of the blowing of the soul to the next chapter; for the meaning of the verse, the text of the narration, the assessment of its chain of transmission, and the determination of the principle for calculating the duration are distinct issues. Don't sum it up with a popular phrase like "Science has proven the moment of entry of the soul."

Seventh: Creation after creation in three darknesses

God Almighty says: “He created you from a single soul, then made from it its mate, and He sent down for you eight mates from among livestock. He creates you in the

wombs of your mothers, creation after creation, in three darknesses. That is God, your Lord; to Him belongs dominion. There is no deity except Him, so how are you turned away?" [Az-Zumar: 6]

Majma' al-Bayan mentions the interpretation of darkness as the darkness of the abdomen, uterus, and placenta, attributing it to a group of commentators and stating that it is narrated from Imam Abu Ja'far (peace be upon him). It also mentions another interpretation. This is an interpretive transmission, and the passage does not contain a detailed chain of narration upon which we can assign an independent degree of authenticity to the narration. [6]

We do not replace the word "placenta" in an old commentary with the modern term "embryo membrane" without investigating its usage. We have distinguished between the placenta, amnion, chorion, and uterine wall; these terms are not synonymous. The aforementioned interpretation remains worthy of consideration. However, the claim that the verse exclusively names three specific microscopic layers requires evidence that mere enumeration does not provide.

The end of the verse returns our attention to lordship, sovereignty, and divine oneness. The darknesses are not an obscure scene at which thought comes to a halt, but the setting of a development that a person neither controlled nor consciously witnessed, yet upon which their life was founded.

Eighth: The stages do not stop at the womb.

God Almighty says: "It is He who created you from dust, then from a sperm-drop, then from a clinging clot, then He brings you forth as a child, then [He develops you] so that you may reach your maturity, then [He develops you] so that you may become elderly. And some of you die before that, and [He develops you] so that you may reach a specified term, and perhaps you will understand." [Ghafir: 67]

God Almighty says: "Why do you not accord God due reverence?" [Nuh: 13]

And God Almighty said: "And He has created you in stages." [Noah: 14].

These verses call us to see ourselves in a state of flux and need, not to be arrogant in our current state of power. It is also important not to make the word "stages" alone decisive in a detailed dispute about the history of species; proposing or refuting a scientific theory requires its evidence, and determining the meaning of a verse requires its context. We have addressed the limits of this comparison in the chapter on the origin of humankind.

Ninth: The First Creation and Human Responsibility

God Almighty said: "Does man think that he will be left neglected?" [Al-Qiyamah: 36]

God Almighty says: "Was he not a drop of semen emitted?" [Al-Qiyamah: 37]

God Almighty said: "Then he was a clinging clot, and He created [him] and proportioned [him]." [Al-Qiyamah: 38]

God Almighty said: "Then He made of him the two sexes, male and female." [Al-Qiyamah: 39]

And God Almighty said: “Is not He Who created man able to give life to the dead?” [Al-Qiyamah: 40].

The context begins by questioning whether humanity is left without purpose and ends with the ability to resurrect the dead. In between, there is a reminder of creation and its formation. Therefore, contemplation of creation is incomplete if one remains merely impressed by its form and does not ask: What am I doing with the life I have been given? How do I accept my responsibility for myself and others?

Chapter Summary

The verses on creation present a network of meanings: a weak origin, a predetermined transformation, nurturing in the womb, then life, a lifespan, and resurrection. We read the words faithfully, present the different interpretations, and benefit from scientific knowledge without equating the levels of expression. The following chapter begins with the question that remains behind the physical image: What do the narratives say about the soul, and what are the limits of what we know about its connection to the body?

Chapter Sources and References

[1] Al-Tabarsi, Majma' al-Bayan, vol. 7, p. 180, Commentary on Al-Mu'minun 12–16; sulala (an extract), the secure lodging, covering of bones, and multiple opinions on the “other creation”.

[2] Al-Tabarsi, Majma' al-Bayan, Commentary on Al-Hajj 1–5; explanation of nutfah, ‘alaqah, and mudghah, the formed and unformed, with attribution of the opinions to their respective authors.

[3] Swiss University Curriculum, The Three-Layer Embryonic Disc; an organized embryonic structure, as previously explained in Chapter 26.

[4] OpenStax, Anatomy and Physiology 2e, Section 6.4, Bone Formation and Growth; Differentiation between Cartilaginous Models, Osteogenesis, and Skeletal Growth.

[5] Al-Tabataba'i, Al-Mizan, Tafsir al-Mu'minun 12–22; The reading of creation and human identity is attributed to the author, not presented as an experimental result.

[6] Al-Tabarsi, Majma' al-Bayan, Tafsir al-Zumar 6; interpretations of the three darknesses and the transmission from Abu Ja'far (peace be upon him). The verification of the chain of transmission for this attribution has not been completed here.

Chapter 34: The Breathing of the Spirit in the Narrations

An image of the embryo can show us a developing head, a beating heart, and moving limbs. But the image does not contain a definition of the soul beneath these scenes, nor does it indicate the time of its ensoulment. Here, the inquiry reaches a point that must be approached with the appropriate tools: we read the religious text as a text requiring understanding and verification, and we read the medical observation as an observation with its own conditions and limitations. We should not let our ignorance of a detail become proof for every proposed interpretation.

A Question That Cannot Be Reduced to Laboratory Findings

God Almighty said: {And they ask you, [O Muhammad], about the soul. Say, "The soul is of the command of my Lord. And you have been given only a little knowledge."} [Al-Isra: 85].

This verse teaches us the humility of knowledge and does not provide a timeline for the ensoulment of the fetus. Furthermore, the word "soul" in the Quran requires contextual reading in each instance. Therefore, it is incorrect to encompass all its uses in a single medical definition, nor to assume that every difference between explanations represents a difference in the nature of a particular organ. A more comprehensive discussion of the soul, spirit, and intellect will follow in its proper place.

Among the verses of creation is the Almighty's statement: {Then He fashioned him and breathed into him of His spirit and made for you hearing, sight, and hearts. Little are you grateful.} [As-Sajdah: 9]. This verse does not specify a day during pregnancy, nor does it name a test by which the soul can be seen.

A created soul, not a part of the Divine Essence

Al-Kulayni narrated that Al-Ahwal asked Imam As-Sadiq (peace be upon him) about the soul in Adam, and he replied: “This is a created soul, and the soul in Jesus is also created.” Al-Majlisi deemed this hadith authentic in Mir'at al-'Uqul, vol. 2, p. 82. Here is an explicit text that prevents us from understanding the attribution of the soul to God as meaning the separation of a part of His essence and its incarnation in the body. [1]

We have previously presented the interpretation of this attribution as honorific. As for the blowing, it does not transform the Creator into a breathing body, nor the soul into air entering the lungs. The discussion of a divine act does not necessitate that its nature be like the nature of human actions. It is also a mistake to make the soul a new name for DNA; the two descriptions are not equivalent simply because both are related to human life.

The Forty-Day Narration: What Does It Actually Say?

In al-Kafi, in the chapter on the beginning of human creation and its development in its mother's womb, al-Hasan ibn al-Jahm narrates from Imam al-Rida (peace be upon him), on the authority of Abu Ja'far (peace be upon him), mentioning the nutfah for forty days, then the ‘alaqah for forty days, then the mudghah for forty days, then the sending of two angels at the completion of four months. Al-Majlisi described this report as “muwaththaq” (a technical hadith grading) in Mir'at al-'Uqul, vol. 21, p. 22. [2]

This is a specific attribution to a hadith critic, not a claim of consensus on every detail of the report. More importantly, the phrase "the soul is breathed into the body" is not explicitly mentioned in this hadith itself; therefore, it is not permissible to place the phrase "the soul is breathed into the body on the 120th day" in quotation marks and attribute it to him. It may be cited as part of a set of evidence, but drawing an inference is one thing, and quoting the literal text is another.

The calculation of the duration from conception differs from the medical gestational age, which usually begins from the first day of the last menstrual period. Therefore, the phrase "months" should not be translated into weeks in an ultrasound report without explaining the basis of the calculation. Furthermore, four lunar months are not always equal to 120 days. These numerical differences alone do not resolve the interpretation of the narrations, but they prevent the establishment of certainty based solely on a mechanical conversion of numbers.

The narration that explicitly mentions the blowing

In the same chapter, there is a lengthy narration from Zurarah on the authority of Imam al-Baqir (peace be upon him) that mentions the stages and forty-day periods, then the flesh and veins, then the sending of the two angels, in which it says: “Then they will breathe into it the spirit of life and existence.” Al-Majlisi judged the narration to be “authentic” in Mir’at al-‘Uqul, vol. 21, p. 23. [3]

This text does indeed contain the act of blowing, but it comes within a longer narration that uses metaphysical language and details about the angels, the covenant, and the decree. It is not accurate to extract a word from it and present it as if it were a laboratory report that only includes a specific date. Its sequence mentions what follows the mudghah stage, without specifying the time of each subsequent event; therefore, we should not impose on it a clock-like precision it does not state.

The hadith uses the expression “the ancient soul transferred in the loins of men and the wombs of women.” The term “ancient” here is not automatically interpreted as referring to the eternity exclusive to God, given the explicit text stating that the soul is created. Determining the precise meaning of this expression and its relation to life or the stages of the soul requires compiling the texts and their commentaries. We are not presenting a possible interpretation as an infallible text or a confirmed fact.

Are all the narrations timed the same way?

Al-Majlisi, in Bihar al-Anwar, quoting Qurb al-Isnad, relates a hadith from al-Bazanti on the authority of Imam al-Rida (peace be upon him), which states that there are thirty days for the nutfah, thirty for the ‘alaqah, thirty for the mudghah, and thirty for the formed and unformed stages. Then, the two angels are sent at the completion of four months. Thus, the division of these stages in this narration differs from the division of forty days, even though they all mention four months. [4]

This difference is included for faithful reporting, not to accumulate narrations without distinction. We examined the quotation in Bihar al-Anwar here, but did not collate manuscripts of Qurb al-Isnad or investigate the transmission of its text. Sheikh Muhammad Asif al-Muhsini discussed this report, distinguishing the soundness of its listed chain of narrators from his objection to the route by which the book reached those quoting it. This is his methodological view, attributed to him, not a judgment we apply to all copies of the book or every scholar’s methodological principles. [5]

Other reports in the same chapter of al-Kafi do not all have the same standing. They

include the report of Salam al-Mustanir, which al-Majlisi graded majhul (“unknown”), and a report whose chain includes an unnamed narrator described as “from someone he mentioned.” The whole chapter does not become sound merely because it contains a sound report. Nor does repeated quotation in later books create multiple independent transmission routes to the Imam. [2]

When the apparent timing does not correspond to observation

In previous chapters, we discussed cell division, implantation, stratification, and the beginnings of organs during the first few weeks. Accordingly, the literal description of three successive stages, each lasting forty days, does not correspond to the observed embryonic sequence if its terms are considered precise medical names for the same conditions. Concealing this discrepancy serves neither science nor the integrity of transmitting the hadith.

Al-Muhsini himself drew attention to the problem of some of the apparent meanings in these reports when their contradiction is proven by reliable observation. He mentioned interpretation or referred the knowledge of the intended meaning to those qualified to interpret it, while cautioning against forced interpretations. We present this approach as the position of an Imami scholar who discussed the issue, not as a sole, binding solution. [5]

The methodology of this book does not invent a new meaning for the word "day" to become "hour," nor does it convert numbers into symbols simply for the sake of conformity. It establishes the text and the degree of transmission of the hadith, then states that understanding some details of the text is still under investigation. The soundness of the chain of transmission, according to a specific framework, does not exempt us from studying the meaning, context, and contradictions, nor does it make the hadith a modern experimental measurement.

Cellular life is not another name for the ensoulment.

The sperm was a living cell, and the ovum was a living cell. Then the embryo began to form and its cells divided. Therefore, it is incorrect to depict the embryo before the supposed ensoulment as a dead mass devoid of vital processes. This is a confusion between the life studied by biology and the religious meaning under discussion.

Likewise, the appearance of a heartbeat alone does not indicate the ensoulment, nor does the mother's first sensation of movement indicate that moment. We have shown in the chapter on the senses that movement, sensory response, and consciousness are not synonymous terms. Furthermore, none of the sources we have consulted here contain a medical test defined as measuring the soul itself.

These limitations do not imply that a human being is nothing more than what instruments reveal, nor do they imply that an instrument is deficient because it cannot answer a question it was not designed to measure. The value of a laboratory lies in improving what it can examine, and the value of religious research lies in distinguishing what its text affirms from what the commentator or recipient adds.

Predestination does not permit judging a child.

Some of these narrations mention sustenance, lifespan, happiness, and misery. The narration of Zurarah himself includes a reservation concerning bada’ regarding what the two angels record. Therefore, it is not permissible to reduce it to a popular expression that absolves a person of their choice or makes them compelled to every action. The discussion of choice, divine decree, and bada’ will follow, along with the distinction between prior knowledge and compulsion to act.

In some versions of the lengthy narration, there is a description of the fetus turning over coupled with rebellion. We do not derive from this a medical or ethical basis for judging a specific child. No one has the right to describe a newborn as miserable because their position in the womb was different, or because their birth was difficult. The position of the fetus is monitored for its protection and the protection of its mother, not as a test of its conscience or future behavior. Understanding this expression remains one of the issues of textual interpretation that cannot be resolved by taking it out of context.

Scope of Research and Limits of Issuing Fatwas

The rulings concerning the fetus, pregnancy loss, and abortion are not derived from a single page on ensoulment. Mentioning the ensoulment stage does not imply that the fetus before it has no inviolability or protection, nor that the medical decision afterward is identical in all cases. Determining the actual situation is the domain of specialists, and deriving a ruling requires its evidence, details, and the methodological framework of the religious authority followed.

This chapter therefore does not supply a date authorizing a reader to decide to terminate a pregnancy, or a table that replaces consultation with a doctor and the relevant religious authority. Its purpose is to frame the question and the transmitted material accurately, protecting families from abbreviated information used beyond its limits. A separate chapter in the part “The Body: A Trust and a Dignity” will address pregnancy and reproductive decisions.

On the Threshold of the Next Part

We have emerged from the journey of the womb having learned something of the precision of its structure, and something of the limits of our knowledge. We do not need to discard one to preserve the other. The developing body deserves care, the text we transmit deserves faithful handling, and the human being whose story we write is far too vast to be hastily reduced to a number or an image.

And with this, the journey of formation in the womb concludes. In the next part, we will examine the body after its basic blueprint is complete: Where are its organs located? How do they coexist and connect? And how do the skin, bones, blood, heart, and brain function in a unity where no function can exist without the others?

Chapter Sources and Documentation Notes

[1] Al-Kulayni, Al-Kafi, vol. 1, Book of Tawhid, Chapter on the Spirit, Hadith 1; the text of Imam al-Sadiq's (peace be upon him) response, along with al-Majlisi's ruling in Mir'at al-'Uqul 2/82.

[2] Al-Kulayni, Al-Kafi, vol. 6, Book of 'Aqiqah, Chapter on the Beginning of Human Creation and its Development in the Mother's Womb; especially Hadiths 1-3 and 7. We consulted the Arabic texts and al-Majlisi's rulings presented, not just the translations.

[3] The same source, Hadith 4, the long narration of Zurarah; the wording of the blowing of the spirit of life and survival, and al-Majlisi's ruling: authentic, Mir'at al-'Uqul 21/23. The authenticity of the chain of transmission does not definitively resolve all issues of the text's interpretation.

[4] Al-Majlisi, Bihar al-Anwar, vol. 57, p. 365, Hadith 59, quoting Qurb al-Isnad; al-Bazanti’s report and its division into thirty-day periods. Documentation here is limited to the quotation in Bihar al-Anwar; no independent investigation of the transmission of Qurb al-Isnad or collation of its manuscripts was undertaken.

[5] Muhammad Asif al-Muhsini, Jurisprudence and Medical Issues, pp. 56–57, according to the digital version; discussion of the chain of transmission and the significance of the timing reports. We limited ourselves to his methodological views and did not rely on the old medical information contained in his footnotes as a reference for the embryo.

Part 5: Mapping the Human Body and Its Anatomy

We recognize our faces in the mirror, but we do not see most of what makes these faces truly alive. Beneath the skin, there is ceaseless movement: blood flows, nerves transmit signals, muscles respond, and cells maintain their balance. What we see as boundaries between organs in a diagram are, in life, points of cooperation and connection.

In this part, we will proceed from the body's surface to its deeper systems, not to reduce the human being to a list of parts, but to understand how the part serves the whole. Each organ has its own story, but its story only becomes clear within the narrative of the body that houses it.

Chapter 35: The Body as an Integrated Whole

When you lift a glass of water to your mouth, your hand doesn't perform the action alone. The movement requires judging distance, coordinating your grip, maintaining balance, and supplying the tissues with the necessary elements to function. None of this may come to mind because the regularity of these functions makes the familiar action seem simple. The study of anatomy begins when we question this simplicity, whose familiarity conceals a great deal of precision.

From Position to Function

Anatomy studies the structure of the body and the relationships between its parts, while physiology studies how they function. Some aspects of anatomy can be seen with the naked eye, while others require a microscope. One can study a single region, including its vessels, nerves, and muscles, or trace a specific system throughout the body. These two approaches are complementary: one inquires about what is adjacent, and the other about what shares a function.[1]

Thus, it is not enough to know the name of a heart valve; we need to understand its location and the direction of blood flow through it. Nor is it sufficient to name a nerve if we do not know what it reaches. Names are gateways to understanding, not destinations that exhaust the journey. We will use those that clarify the picture, then return to the human being in whose life these structures operate.

A Language Defining Directions

Directions are described in relation to a reference anatomical position: the body is upright, face forward, arms to the sides, and palms facing forward. Right refers to the right side of the person being described, not the right side of someone standing in front of them. The designation of the anterior surface does not change simply because the person is lying on their stomach.[2]

Superior means closer to the head, and inferior means closer to the feet; anterior means toward the front of the body, and posterior toward its back. Medial means

closer to the midline, and lateral farther from it. In the limbs, proximal means closer to the point of attachment to the trunk, and distal farther from it: the elbow is proximal to the wrist. Superficial means closer to the body surface, and deep farther from it. [2]

This language helps to describe a location precisely without relying on vague phrases like "there" or "a little above." Its terminology may seem numerous at first, but its benefit lies in enabling two readers to understand the same place from the same description. It is a language of communication before it is material to be memorized.

The Body in Sections

Three main planes can be visualized as passing through the body: the sagittal plane separates right from left, the coronal or frontal plane separates front from back, and the transverse plane separates top from bottom. If the sagittal plane passes through the midline, it is called the median plane. These visualizations help in reading tomographic images instead of imagining each image as a front view of the body.[3]

A cross-section is not a new organ or an actual boundary erected in the body; it is a way of looking. Just as you can describe a house from its facade or from its floor plan, an image can reveal a relationship that would be hidden from another direction. But reading a complete medical image also requires training and knowledge of the context, not just knowing the name of the plane.

Major Positions That Protect Organs

Inside the skull is the brain, and in the vertebral canal is the spinal cord. In the chest is the heart and lungs, along with parts of the airways, esophagus, vessels, and nerves. The diaphragm separates the chest from the abdomen; The abdominal region includes digestive and other organs, and extends to the pelvis, which contains the bladder, rectum, and internal reproductive organs. This is a general map, not a list of everything in each region.[3]

Serous membranes, such as the pleura, pericardium, and peritoneum, are connected to the organs of the thorax and abdomen. These membranes have surfaces that meet, and a small amount of fluid between them helps reduce friction during movement. We cannot imagine the heart and lungs as free pieces rolling in a vast space, nor can we imagine the membranes as rigid boxes that prevent movement.[2]

Body Systems: A Division for Understanding, Not Isolation

Organization progresses from cells to tissues to organs and systems. An organ contains various types of tissue, not necessarily just one. Furthermore, assigning it to one system in the book does not preclude it from serving other systems. Therefore, references present systems such as the nervous, circulatory, and digestive systems, emphasizing that their classification does not separate their functions from one another. [4]

When we read the chapter on the kidney, we see its role in urine production and regulating the internal environment, and when we read the chapter on blood, we will

trace what it carries between the organs. These are not independent stories gathered under one cover; they are different facets of life itself. We will sometimes move from the organ level to the cell level, then return to the effect of this on the whole human being.

Form does not define value.

God Almighty says: {We have certainly created man in the best of forms} [At-Tin: 4].

We read the verse in its discourse on the creation of man and his destiny, not as an anatomical drawing that necessitates the uniformity of all bodies. Nor do we make it a criterion for excluding someone who has lost an organ or was born with a physical difference from the circle of honor. A person does not become less deserving of justice and care simply because their physical form does not conform to the image we have created in a book.

Educational illustrations choose a form to facilitate explanation, while care is provided to a specific individual, with their body's history, needs, and limitations. It is a misuse of science to learn to describe differences and then use them as a pretext for ridicule. Precision in naming does not replace care in moral conduct, and knowing the source of pain does not mitigate the cruelty of the one who hears it.

How will we approach the following chapters?

We will begin with the main structure of the organ, then inquire about its function and connections, and examine some of its malfunctions to highlight the importance of its regularity. We will not attempt to include every minor anatomical branch; that is the task of atlases and specialized reference works. Nor will we equate a brief explanation with a diagnosis or training in a medical procedure.

As we move to a new organ system, we should carry with us one question: What does this system need from the rest of the body, and what does it provide to it? This question keeps the map alive, preventing it from becoming a collection of names. The first thing we encounter on the journey is the surface we mistake for a mere covering: the skin.

Chapter Resources

[1] OpenStax, Anatomy and Physiology 2e, Section 1.1, Introduction to Anatomy and Physiology; the difference between the study of structure and function and regional and systemic approaches.

[2] Ibid., Section 1.6, Anatomical Terminology; reference position, directions, and serous membranes.

[3] National Cancer Institute, SEER Training, Anatomical Terminology; body planes and major cavities.

[4] OpenStax, Anatomy and Physiology 2e, Section 1.2, Structural Organization of the Body; levels of organization and the overlap of system functions.

Chapter 36: Skin, Hair and Nails

Our connection to the world begins with a surface that we touch and are touched. We

wash our hands, feel the roughness of a piece of cloth, and see the marks of a long day on our faces, without always remembering that this surface is a functioning organ. Skin is not a garment separate from life; it is part of it, participating in protection, sensation, and balance, and bearing on its surface some of the traces of what is happening within.

Two Layers and What Lies Beneath

The skin has two main layers: the outer epidermis and the dermis beneath it. The epidermis is keratinised epithelial tissue containing no blood vessels; its cells are renewed from the deeper layers towards the surface. The dermis is connective tissue containing blood vessels, nerves, glandular structures and hair follicles. Beneath the skin lies tissue containing varying amounts of fat and connective tissue, contributing to anchorage, insulation and cushioning.[1]

The epidermis is not uniform everywhere; the palms of the hands and soles of the feet have an extra layer compared to most other areas. The surface, keratinized cells are shed and replaced. Therefore, touching a layer of dead cells does not mean that all of the skin is dead; the deeper living structure is what produces and maintains this barrier.[1]

A Barrier, Not a Sealed Wall

The skin's surface structure helps reduce water loss and the entry of harmful agents, and it participates in resisting microbes. However, it is not an impenetrable barrier; it can be damaged by friction, heat, irritants, or cuts. This function explains why skin integrity should not be viewed solely as a cosmetic issue.[2]

What we call a small scar may be a source of pain, itching, or social embarrassment for the person who has it. A patient should not have to prove that their suffering is "significant enough" to be treated with respect. The outward appearance of the body is highly visible to people, and this visibility increases the responsibility we bear in the language we use when addressing those whose skin has changed.

Where does color originate?

Melanin is produced by pigment cells, and its granules are then transferred to the epidermal cells. The visible shade of color is affected by the amount and distribution of the pigment, as well as by other factors, including blood pigments and carotenes. A difference in color is not evidence of a difference in inherent worth, nor is it a testament to a person's character or level of merit. [1]

God Almighty says: {And among His signs is the creation of the heavens and the earth and the diversity of your languages and your colors. Indeed in that are signs for those of knowledge.} [Ar-Rum: 22]

This verse places the difference in perspective. We do not add to the meaning of pigment a judgment of people's worth, nor do we make the explanation of melanin a substitute for resisting prejudice. One may know the science of color and still remain captive to discrimination; science provides a description, but justice also requires a will that adheres to what one knows of the rights of others.

From Touch to Sensation

The skin contains sensory endings and structures that respond to touch, pressure, vibration, heat, and harmful stimuli. These signals are then transmitted to the nervous system. Their density and functions vary between locations; therefore, our response on the fingertips is not the same as our response on every other surface. [2]

The phrase "the skin senses" does not summarize the whole process; the experience we call sensation involves neural processing, which we will return to in the chapter on the senses. It is useful to note now that touch is not only an outward movement of information from the body into the world, but also a return of information from the world to the body.

Heat and Water

The evaporation of sweat contributes to cooling the body, and the amount of blood reaching the skin changes to facilitate heat exchange or reduce heat loss. These responses work in conjunction with the nervous system and other regulatory mechanisms. The skin also participates in the initial synthesis of vitamin D under the influence of ultraviolet radiation, but this does not mean that all sun exposure is safe or necessary.[2]

Beneficial functions do not negate their limitations. Not everything a tissue can tolerate should be deliberately subjected to. We will discuss the regulation of temperature and fluids in the section on life-sustaining functions, where the skin's connection to what we drink, the effort we exert, and the surrounding environment becomes apparent.

Hair: Above and Below the Surface

A hair originates from a follicle that extends into the skin, and the cells of the growth zone produce its keratin. The visible part is not a living nerve; therefore, cutting it differs from pulling the follicle, which is surrounded by sensory endings. Hair has a cycle of growth, transition, and rest, so not all hairs are in the same phase at the same time. A small muscle is attached to the hair follicle; its contraction causes the hair to stand on end and produces goosebumps. [3]

Hair may hold significant personal and social meaning, but its value in a person's identity does not justify making it a measure of acceptance or rejection. Those who have lost their hair due to treatment or illness need not be scrutinized by stares as much as they need to be accepted as they are, without embarrassing questions or unwanted advice.

Nails and Glands

The nail plate is composed of tightly packed keratinized cells, and its growth originates from the matrix. It protects the fingertips and helps in handling small objects. The tissues beneath and around the nail are living and may become painful or inflamed; the hardness of the nail plate does not mean that the surrounding tissues are less sensitive. [3]

Sebaceous glands secrete a substance that helps lubricate the skin and hair. One type of sweat gland opens to the surface and contributes primarily to cooling, while another type is often associated with hair follicles in specific areas; an odor may arise from the interaction of bacteria with the components of its secretions. Not all of these two types of glands are identical.[3]

What the Sign Says and Doesn't Say

A change in the shape or color of the nail may be minor, or it may warrant examination. The American Academy of Dermatology specifically notes a new or changing dark line, emphasizing that it is not always cancerous. The practical advice is to seek a proper evaluation, not to self-diagnose using a phone photo or to ignore persistent changes.[4]

The lesson we learn here goes beyond the nail: the sign invites us to question, but it doesn't provide a single, definitive answer. Fear of every change is exhausting, and absolute reassurance without examination can delay what needs attention.

Care Instead of Chasing the Image

Sun protection combines shade, appropriate clothing, and sunscreen; it doesn't rely on sunscreen alone. The UK's National Health Service (NHS) recommends a sunscreen with an SPF of at least 30 and adequate UVA protection, using a sufficient amount and reapplying it. Children's skin requires special care, and infants under six months should be kept out of direct sunlight. [5]

These are preventative recommendations, not a prescription for changing one's skin tone. Body care should alleviate discomfort, not instill shame about every wrinkle, blemish, or sign of aging. We will leave skin to bone, but the meaning remains: what we carry is not an image on display for constant evaluation, but a body we live in and are entrusted with.

Chapter Sources

[1] OpenStax, Anatomy and Physiology 2e, Section 5.1, Layers of the skin and pigmentation. Focused on the basic structure without the inaccurate simplifications in some diagram descriptions.

[2] Ibid., Section 5.3, Functions of the integumentary system; protection, sensation, temperature regulation, and vitamin D synthesis.

[3] Ibid., Section 5.2, Skin appendages; hair, nails, and glands.

[4] American Academy of Dermatology, Nail changes that warrant investigation; discoloration alone is not sufficient for diagnosis.

[5] NHS, Sun protection and the use of sunscreen; general guidance. This does not replace specific advice if you have a skin condition or drug allergy.

Chapter 37: Bones, Joints and Cartilage

When we see a dry bone, we might assume that the skeleton in a living human being is similar: solid, unchanging columns, supported by flesh and surrounded by life on

the outside. But the bone within the body is alive; it has its own cells, nourishment, and renewal. Its stability, upon which we lean, is not stillness, but the result of continuous, unseen activity.

More Than a Support

Bones provide the body with support and work with muscles and joints to enable movement. Parts of them protect delicate organs; the skull surrounds the brain, the rib cage protects the heart and lungs, and the spine surrounds the canal through which the spinal cord passes. Bone also contains an important store of minerals and marrow, which participates in the formation of blood cells.[1]

These functions combine what appears to be mechanical with what is cellular and chemical. Protection is not a function independent of nutrition, and the rigidity of the skeleton is not separate from the life of the marrow. We will dedicate a chapter to blood, but its beginning reminds us now that some of what occurs in the vessels originates within the structure that appears to us to be the most silent part of the body.

Axial and Appendicular Skeleton

Anatomy divides the skeleton into axial and appendicular. The axial skeleton includes the skull, spine, and rib cage, along with the hyoid bone and the ossicles of the ear. The appendicular skeleton includes the bones of the limbs and the girdles that connect them to the axis. The typical educational count of an adult skeleton is 206 bones: 80 axial and 126 appendicular; however, during growth, some of the parts that were separate fuse.[2]

The rib cage contains twelve pairs of ribs and the sternum. The spine, in the typical adult division, consists of 24 separate vertebrae, in addition to the sacrum and coccyx. Behind these names lies a distribution of functions: protection, support, connection, and enabling movement, which varies from region to region.[2]

The reader does not need to memorize every number to grasp the concept. It suffices to observe that the body does not rest on a single column, and that the limbs are not haphazardly attached to it. As for the numbers, they are part of describing the usual anatomical model, and are not a criterion by which we judge a person's worth or well-being without examination.

From the Solid Exterior to the Organized Interior

A long bone contains a shaft, two ends, and a medullary cavity. The distribution of dense and spongy bone differs within it; the dense bone is more compact, while the spongy bone is a network of trabeculae separated by spaces. The term "spongy" does not mean that it is a soft material like a cleaning sponge, but rather describes the arrangement of its structure.[3]

Bone matter combines collagen fibers with a mineral component and is not reduced to calcium alone. This composition contributes to a combination of rigidity and a degree of fracture resistance. Blood vessels and nerves reach the bones through ports and canals; a solid appearance does not prevent the passage of what the tissue

needs in terms of nourishment and connection.[3]

Bone formation and breakdown that maintain structure

Bone-forming cells produce new bone material, while resorbing cells break down some of the old tissue. Resident bone cells participate in regulating this activity. The process of tissue removal and replacement is called remodeling. It is a natural process, and not a disease term whenever breakdown is mentioned.[4]

The balance changes throughout life: bone formation predominates during growth stages, and in a healthy young adult, bone formation and resorption may approach equilibrium, but this balance is disrupted with age or certain diseases. Therefore, it is not enough to simply increase one nutrient in the diet and assume we understand all the factors contributing to bone strength; bone health is linked to nutrition, movement, and tissue regulation factors.[4]

How does bone lengthen?

In long, immature bones, cartilage growth plates contribute to length increase; cartilage forms in certain areas and is replaced by bone in a systematic sequence. As the skeleton matures, these plates close, so length growth does not continue in the same way throughout life, while regeneration and remodeling remain possible.[5]

It is therefore important to distinguish between bone length increase, changes in density, repair, and remodeling. These are interconnected processes, but they are not a single entity. When we talk about a child's body, we do not automatically apply the principles that govern the adult body, nor do we treat aging as a complete cessation of all vital activity.

A joint is not synonymous with a wide range of motion.

A joint is a point of contact between bones, or between a bone and cartilage, and its structure and range of motion vary. Some joints are fibrous, some are cartilaginous, and some are synovial. Functional classification describes whether the joint is relatively immobile, fixed, or relatively free. Some immobility is protective, and some movement is necessary; it is not ideal for all joints to move to the same degree.[6]

In a synovial joint, a capsule surrounds the articular space, and the opposing surfaces are covered with a layer of cartilage. Fluid is present to facilitate movement. Ligaments help maintain the connection between the bones and prevent excessive movement. Stability is not solely dependent on the ligaments; the surrounding muscles and the shape of the surfaces are also part of the functional picture.[7]

Articular cartilage does not contain blood vessels within it, and synovial fluid helps nourish it. Therefore, we do not imagine it as a dormant layer placed between the bones and then forgotten, nor do we equate its structure with that of the bone it covers. The importance of this distinction will become apparent when we read about illness, injury, and rehabilitation. [7]

Weakness in the Language of Supplication

Zechariah, peace be upon him, said: “He said, ‘My Lord, indeed my bones have weakened, and my head has turned white with age, and I have never been disappointed in my supplication to You, my Lord.’” [Maryam: 4]

This verse combines the description of weakness with the persistence of hope. We do not use this expression to assign Zechariah, peace be upon him, a specific modern diagnosis, as not every mention of bone weakness is a report of osteoporosis in the medical sense. The point is that a person can acknowledge their weakness before their Lord without losing faith in Him.

In the supplication of Kumayl, attributed to the Commander of the Faithful (peace be upon him), it is said: “O Lord, have mercy on the weakness of my body, the thinness of my skin, and the fragility of my bones.” We cite this phrase in its devotional sense, while acknowledging that a full assessment of the chain of transmission of this supplication has not been completed in this chapter.[8] It is an expression of need, not a statement that every delicate bone is diseased, nor a substitute for investigating the cause of pain.

Protecting What Carries Us

Bones may weaken without obvious symptoms until a fracture occurs; this is what distinguishes osteoporosis from a mere passing sensation of pain. Its assessment and treatment are determined by risk factors and examination, and a feeling of strength or the absence of pain is not sufficient to rule it out.[9]

Appropriate movement, including weight-bearing activity, resistance exercises, and balance exercises, helps support bone health and reduce the risk of falls. However, those with osteoporosis or limited mobility need to choose safe options that suit their condition in consultation with a specialist. The intention is not to push the body into a competition it cannot handle, but rather to help it persevere.[10]

We will emerge from this chapter with a different picture than the first dry bone: a living skeleton that protects, regenerates, and cooperates, and joints that make both stability and movement possible. The forces that pull the bones and control joint movement will be discussed in the next chapter.

Chapter Sources

[1] OpenStax, Anatomy and Physiology 2e, Section 6.1, Functions of the Skeletal System.

[2] Ibid., Section 7.1, Division of the Skeleton into Axial and Appendicular and Common Educational Numbers.

[3] Ibid., Section 6.3, Bone Structure and Nutrition, Dense and Spongy Bone.

[4] National Institute of Arthritis and Musculoskeletal Diseases (NIAMS), What is Bone? Remodeling, bone cells, and age-related changes in the balance between bone formation and resorption.

[5] OpenStax, Anatomy and Physiology 2e, Section 6.4, Growth of long bones and growth plates; a limited continuation of what was used in Chapter 33.

[6] Ibid., Section 9.1, Structural and functional classification of joints.

[7] Ibid., Section 9.4, Synovial joints, cartilage, capsule, ligaments, and synovial fluid.

[8] Dua Kumayl, Arabic text published in the Thaqalayn Library; a devotional example from the well-known supplication, not an authentication of its chain of transmission.

[9] NIAMS, Osteoporosis; Definition and the possibility of asymptomaticity before fracture.

[10] NIAMS, Physical activity for bone health; Types of exercise and the need for customization when there is osteoporosis or health limitations.

Chapter 38: Muscles, Tendons and Ligaments

A muscle reveals its presence when we lift something heavy, but it also works when we hold our head steady, smile, swallow, and maintain a hand position while writing. Motor life is not merely a series of visible movements; much of what appears to be stillness involves organized effort that maintains posture and prevents falls.

Three Types of Muscle Tissue

Muscle tissue is divided into skeletal, cardiac, and smooth tissues. Skeletal and cardiac tissues appear striated under a microscope due to the regularity of their contractile proteins, while smooth tissues do not exhibit the same striations. Skeletal fibers are multinucleated, cardiac cells typically contain one or two nuclei, and smooth muscle cells have a single nucleus.[1]

Skeletal muscles are involved in many voluntary movements, but their function is not limited to what we think about at any given moment. The heart muscle and smooth muscles operate under a different regulatory system, influenced by nerve signals and local and hormonal factors. The walls of blood vessels and the digestive tract are important examples of smooth muscle, and their name does not imply weakness or inactivity. [1]

It is helpful to distinguish between the type of tissue and the magnitude of the movement it produces. A subtle movement of the eyelid can be crucial, and a contraction invisible to the naked eye in the wall of an internal organ can maintain an essential function. Mass is not a sufficient indicator of a muscle's value in a person's life.

An organ composed of fibers, vessels, and nerves

Skeletal muscle is an organ composed of muscle fibers, along with vessels, nerves, and connective tissue. The fibers are organized into bundles, and connective sheaths surround the fibers, bundles, and muscle. Within the muscle fiber are repeating units called sarcomeres, which contain actin and myosin filaments, among other proteins. [2]

Connective tissue extends at the attachment sites into tendons or flat tendinous sheets (aponeuroses) that transmit force to the attachment points. The fibers require a blood supply and a nerve connection; their function is not a property of a piece of flesh isolated from the rest of the body. Muscles also contribute to heat generation, which is demonstrated by exertion and shivering.[2]

From Signal to Force

At a typical neuromuscular junction, the motor nerve releases the neurotransmitter acetylcholine, initiating an electrical response in the fiber membrane. This response leads to the release of calcium from its intracellular stores, and the repositioning of regulatory proteins allows myosin to react with actin.[3]

The cycle of myosin heads attaching to and detaching from the filaments is repeated and requires energy molecules known as ATP. When the sarcomere shortens, the filaments slide past one another; the length of each filament itself does not necessarily decrease. When calcium ions are returned to their stores, the conditions for the continuation of the reaction decrease, and the response ends. [3]

Relaxation is not simply a cessation of activity; the return of calcium and the release of bonds are part of a regulatory process that also requires energy. Thus, we see that movement and rest within a tissue are not as simple as opening and closing a switch, although this image provides a starting point for understanding. [3]

Contraction does not always mean shortening.

A muscle may produce force while shortening, as in lifting a weight, and it may work while lengthening during the deliberate lowering of a weight. It may also generate tension without a noticeable change in its overall length, as when stabilizing a load. Therefore, the functional meaning of contraction is broader than the word "shrinkage," which suggests that every working muscle necessarily becomes shorter. [4]

The nervous system regulates force by recruiting motor units and varying the frequency of signals. A motor unit is a motor neuron along with the fibers it innervates. This organization allows for varying degrees of action, from subtle movements to greater force, rather than the entire muscle always responding at its maximum capacity.[4]

This explains some of the difference between holding a piece of paper and holding a bag. We don't simply swap one hand for another; rather, the way we operate what we have changes. When we learn a skill, it's not just about acquiring muscles, but about using them at a more appropriate time, in a more appropriate direction, and with a more appropriate degree of force.

Muscles Working Together

In a given movement, some muscles drive the action, others assist or stabilize it, and still others act in the opposite direction. The description varies depending on the intended movement; the group that assists in bending the knee is not the same group that drives its extension. The relationship between the biceps and triceps muscles in the arm illustrates how the roles of flexion and extension are distributed.[5]

This relationship does not amount to conflict within the body; the opposing actions make control, stabilization, and changes of direction possible. Furthermore, some skeletal muscles, such as those involved in facial expression, do not simply pull bone against bone. Therefore, the image of a lever alone is not sufficient to explain all our

movements.[5]

Tendon or ligament?

A tendon transmits the force of a muscle to its attachment point, usually to a bone. A ligament in a joint typically connects bone to bone and contributes to stability and control of the range of motion. Both are connective tissues, but using the two names interchangeably masks the difference in injury and function.[6]

A sprain affects ligaments with varying degrees of stretching or tearing, while a strain may affect a muscle, tendon, or their attachment point. The degree of strain cannot be determined simply by the patient saying, "My leg is tight." Injuries can develop suddenly or gradually with repeated loading, and are not limited to athletes.[6]

These distinctions make the medical question more precise, but they do not turn the reader into a self-examiner. The aim is to understand why two injuries in the same location might require different treatments, and why the injured part should not be forced to continue functioning under the pretext that tolerance is always a virtue.

Strength Required for a Purpose

In the famous supplication of Kumayl, attributed to the Commander of the Faithful (peace be upon him), we read: "Strengthen my limbs for Your service, and fortify my resolve." We quote the passage from the commonly used Arabic text, without claiming to have fully verified the attribution of the supplication.[7]

This supplication combines outward strength and inward resolve, but the connection is ethical and devotional, not a microscopic analysis of muscles. It inspires the reader to ask: What do I want my strength for? Strength can be used to support someone in need and to provide for a dignified livelihood, but it can also be used to harm someone who cannot defend themselves.

The request for strength should not be understood as belittling those whose muscles are weak or whose movement is limited. Worship is not a weightlifting competition, nor is intention measured by the distance the body travels. Upholding the rights of the weak may be more impactful than a display of strength, and using an assistive device may enable a person to participate, not an admission of defeat.

What movement needs to continue

We have referred to the blood vessels within the muscle and to the energy that cannot be sustained without a supply. This leads us to the blood: what does it carry to the tissues? What cells circulate within it? And where are they formed? In the next chapter, we will explore this fluid tissue that makes the connection between organs possible throughout life.

Chapter Sources

[1] OpenStax, Anatomy and Physiology 2e, Section 10.1, Types of Muscle Tissue and Their General Characteristics.

[2] Ibid., Section 10.2, Skeletal muscle structure, fascicles, connective tissue sheaths, blood supply, and the sarcomere.

[3] Ibid., Section 10.3, The Coupling Between Stimulation and Contraction, Sliding Filaments, and the Role of Calcium and Energy.

[4] Ibid., Section 10.4, Contraction Patterns, Motor Units, and Tension Regulation.

[5] Ibid., Section 11.1, Muscle Cooperation, Reciprocal Actions, and Fixation Points.

[6] NIAMS, Musculoskeletal Activity-Related Injuries; Definition of Ligaments, Tendons, Sprains, and Strains, without generalizing a treatment protocol to all injuries.

[7] Dua Kumayl, Arabic text in the Thaqalayn Library; the phrase relating to strengthening the limbs and resolve. The text was not adopted as a source for a medical mechanism.

Chapter 39: Blood and Bone Marrow

We may not pay attention to blood until it appears from a wound or when we extend our arm to draw a sample. In our daily lives, it performs its work unseen, connecting distant organs. It carries to the tissues what they need and returns with what needs to be transported or processed, while simultaneously carrying cells that participate in defense and repair.

A fluid tissue, not a single color.

Blood is a connective tissue distinguished by its liquid component: plasma. It contains red blood cells, white blood cells, and platelets; platelets are cell fragments, not complete cells like white blood cells. Blood's functions include transporting gases, nutrients, hormones, and metabolic waste products, and contributing to defense and regulating temperature and the internal environment.[1]

Most plasma is water carrying salts, nutrients, proteins, and other substances. Its proteins include albumin, which contributes to transporting substances and maintaining water balance between the blood and tissues; antibodies involved in immunity; and fibrinogen, which is involved in clotting. Therefore, plasma is not simply water with added red color.[1]

It is a mistake to reduce the results of a blood test to a common moral label like "strong blood" or "weak blood" without explaining the intended meaning. What the laboratory reads are components, quantities, and properties, each with a meaning that requires context.

Red Blood Cells: A Shape Suited to Passage

The mature human red blood cell is a biconcave disc, lacking a nucleus and mitochondria. Its shape and flexible structure allow it to pass through narrow capillaries. It carries hemoglobin, a protein containing iron-containing heme groups, which binds to oxygen and transports it from the lungs to the tissues.[2]

Oxygenated hemoglobin is brighter red, while deoxygenated hemoglobin is darker; venous blood is not blue. The colors used in educational illustrations should not be understood as literal depictions of the color of blood inside the human body.[2]

Red blood cells typically live for about 120 days, after which the old ones are removed and some of their components, including iron, are recycled. Their production is affected by the body's needs; one of the mechanisms for regulating this is erythropoietin, which the kidneys produce in significant quantities in response to low oxygen levels in their tissues. Thus, the bone marrow is connected to the kidney without them being adjacent in the same location.[2]

White Blood Cells: Names for Multiple Roles

White blood cells are not a single type. They include neutrophils, eosinophils, basophils, monocytes, and lymphocytes, and their functions, lifespans, and pathways differ. They contribute to fighting pathogens and dealing with damaged cells and tissue debris, and many can leave the bloodstream to perform their functions in the tissues.[3]

Lymphocytes include B cells, T cells, and natural killer cells, and we will discuss their functions in the section on immunity. For now, it is important to note that the number of white blood cells alone does not tell us everything they do. Increase and decrease are indicators for examination within the clinical picture, not definitive names for a specific disease.

Platelets and Hemostasis

Platelets originate from large cells in the bone marrow called megakaryocytes; membrane-bound fragments are released into circulation. When a vessel is damaged, platelets participate in adhesion and aggregation at the site of injury, and they also carry signals that contribute to repair.[3]

Hemostasis involves the vessel's response, platelet plug formation, and activation of coagulation. Ultimately, soluble fibrinogen is converted into fibrin strands that support the clot. These processes are intertwined rather than completely isolated steps, and the body then regulates them and removes the clot as repair progresses.[4]

The value of the system lies in its balance: We need to stop bleeding, and we need to keep vessels open. Disruption of this balance can lead to bleeding or unwanted clot formation. Therefore, increased clotting is not always better, nor is weakening it desirable for everyone; these are therapeutic matters determined by a specialist according to the individual case.[4]

Where are blood cells formed?

Most blood formation after birth occurs in the red bone marrow. Its distribution varies with growth; in adults, activity is concentrated in bones such as the pelvis, vertebrae, and sternum, and in parts of some long bones. We have previously discussed the sites of blood formation in embryonic life before the marrow became its primary site.[5]

Hematopoietic stem cells can give rise to the lineages from which blood cells and platelets develop. They are not synonymous with every stem cell in the body; specialization and differentiation capacity are important in understanding them.[6]

They should not be confused with mesenchymal stem cells simply because the word "stem" is used in both names.

Bone marrow is not the same as spinal cord. The former is tissue within bones associated here with blood formation, while the latter is nerve tissue within the spinal canal. The similarity of some common terms does not imply that the two organs are the same, and it is useful to establish this difference before discussing bone marrow examinations or treatment.

Blood Types: A Difference with Practical Implications

In the ABO system, blood types A, B, AB, and O are determined by the presence or absence of the A and B antigens on red blood cells. The absence of these antigens in O does not mean that the red blood cell surface is completely free of all antigens. Plasma contains antibodies that are important for compatibility; therefore, transfusing an incompatible component can be dangerous. [7]

The usual positive or negative sign is associated with the D antigen in the Rh system. This does not describe the entire Rh system, and blood types are not limited to these two systems. Blood type is inherited from parents, but its medical purpose is to understand compatibility and care needs, not to rank people in degrees of purity or superiority.[7]

The term “universal donor” does not authorize anyone to give their blood to another person without testing. It varies depending on the required component and the recipient’s condition, and blood bank procedures remain the foundation of safety. The letters on the blood type card are helpful information, not a complete transfusion protocol.

What does a blood count (CBC) read?

A complete blood count (CBC) includes measurements of red and white blood cells, platelets, hemoglobin, and hematocrit, and may include indicators of red blood cell size. A differential count adds details about the types of white blood cells. Hematocrit describes the volumetric percentage of red blood cells in the blood, not another name for the amount of iron.[8]

Results can be affected by many factors, including fluids, medications, and body conditions. A value falling outside the reference range alone does not definitively confirm a serious illness, nor is a single value sufficient to determine the cause. Results are interpreted in conjunction with symptoms, medical history, and other tests, and further investigation may be necessary.[8]

Body-to-body transfusion

Depending on the problem, a patient may require red blood cells, platelets, or plasma, but not always all components. Transfusion is preceded by an assessment and compatibility test, and the patient's condition is monitored during the procedure. There are potential benefits and risks that must be explained; transfusion should not be portrayed as a procedure without any possibility of complications or as a risk to be rejected in all cases.[9]

Through a suitable blood donation, a person can contribute to the care of someone they do not know. Here, knowledge transforms from describing tissues to a responsibility towards life. This noble meaning does not exempt one from the conditions of donor and recipient safety, but rather makes respecting them part of the act of giving itself.

But blood does not move through the body's network on its own as required for life. Behind the circulation is a working heart and responsive vessels, and this is the next link in our story.

Chapter Sources

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[3] Ibid., Section 18.4, White blood cells and platelets; white blood cell types and the origin of platelets, without transferring inaccurate standard numbers from the text.

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[7] NHS Blood and Transplant, Blood groups; the ABO and Rh systems and the D antigen. The absence of antigens in O here refers specifically to the absence of A and B.

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Chapter 40: The Heart and Blood Vessels

Gently place your hand on your chest after a brisk walk; you will feel your body adjust its rhythm to meet a new demand. The heart doesn't wait for us to explain our needs, yet its function is inextricably linked to our nerves, hormones, and tissues. In understanding it, we learn that sustaining life requires not only a driving force but also timing, pathways, and responses.

Four Chambers in One Organ

The heart is located in the chest between the lungs. It has a right atrium and a left atrium, and a right ventricle and a left ventricle. Its two sides are separated by septa, and each atrium connects to its ventricle via a valve. The chambers are lined with an inner layer, and the myocardium generates the pumping force. The heart is surrounded by the pericardium, whose small amount of fluid helps reduce friction.[1]

The chambers are not adjacent, unconnected reservoirs; they function in a sequence that allows blood to return and then be pumped onward in the appropriate direction. What appears as right and left in the diagram should be interpreted according to the

right and left sides of the person whose heart is shown, as discussed in the body map.

The Journey of Blood Through the Heart

Blood returns from the body via the superior and inferior venae cavae to the right atrium, then passes through the tricuspid valve into the right ventricle. From there, it passes through the pulmonary valve to the pulmonary arteries and lungs. After gas exchange, it returns via the pulmonary veins to the left atrium, then passes through the mitral valve into the left ventricle, and exits through the aortic valve into the aorta and the rest of the body.[2]

This is the link between the pulmonary and systemic circulations. The valves help prevent the unwanted backflow of blood, and their leaflets move in response to changes in pressure differences during the cardiac cycle. A valve is not a door opened by a tiny nerve, but rather a structure whose movement is influenced by surrounding forces.

The heart needs what it pumps.

The heart muscle has its own blood supply via the coronary arteries branching off the aorta. The heart veins return blood from the muscle to the venous circulation. Therefore, the mere presence of blood within the chambers is insufficient to compensate for the lack of healthy vessels that deliver oxygen and nutrients to the muscle. [2]

This fact has a precise functional implication: the organ that serves the whole body needs, in turn, the support of other organs and networks. The heart does not function outside the body's conditions, and its vital role does not protect it from disease if those conditions are disrupted.

Rhythm originating within the tissue

The typical signal originates in the sinoatrial node of the right atrium, then spreads through the atria and reaches the atrioventricular node where it slows down slightly before passing into the ventricular conduction pathways. This regulation allows for a suitable alternation between filling and pumping, and the speed and force are influenced by neurological and hormonal regulation.[3]

The two main heart sounds are associated specifically with the closure of the atrioventricular valves and then the aortic and pulmonary valves. Therefore, the sound is not the sound of the heart striking the chest wall, and not all of its states can be inferred simply by hearing its beats.[3]

Stroke and beat count

Cardiac output is the volume of blood pumped by the ventricle per minute, and it is equal to the stroke volume multiplied by the beat count per minute. This relationship explains why pulse rate alone is not sufficient to judge the adequacy of pumping; the volume ejected with each beat may also change.[4]

The heart's response varies with rest, exertion, age, and overall health. Efficiency does not necessarily mean a pulse that is always faster or slower. It is a common mistake to assume a single number indicates health without considering the individual's background, activities, and how they feel.

Arteries and Veins: Direction First

Blood travels away from the heart in arteries and back to it in veins. Therefore, an artery is not defined by always carrying oxygen-rich blood; pulmonary arteries carry less oxygenated blood to the lungs, and pulmonary veins return oxygenated blood. [5]

Arteries branch into smaller vessels, then arterioles and capillaries, and blood returns via venules and veins. The structure of the vessel walls varies according to their function: they contain lining, fibers, and smooth muscle in varying proportions. Arteries generally withstand higher pressure than their counterparts in the veins. Valves in many peripheral veins help maintain the direction of return.[5]

Vessels are therefore living tissues, not rigid tubes. One of the functions of their lining is to participate in regulating the interaction between the blood and the vessel wall, while smooth muscle influences the vessel diameter. This change in diameter is part of how blood is distributed, not just a change in the shape of the diagram.[5]

At the capillaries, the journey nears its destination.

Substances pass between the blood and the fluid surrounding the cells through the capillary walls, by diffusion and other transport methods depending on the substance and the vessel structure. Pressures and the properties of the vascular barrier influence fluid movement. The lymphatic system then contributes to the return of fluid and proteins from the tissues to circulation.[6]

We need not imagine each cell as having its own separate artery; between the blood and many cells, there is tissue fluid through which exchanges take place. The purpose of the long journey is not the circulation of blood for its own sake, but the continuation of exchange that allows the tissues to function.

What is blood pressure?

Blood pressure describes the force exerted by the blood against the walls of the arteries. It is usually expressed as two values: systolic pressure (during ventricular ejection) and diastolic pressure (the pressure between beats). It is related to the function of the heart and blood vessels and is not equal to the number of heartbeats. Therefore, a blood pressure monitor measures something different than a pulse count, even though both readings are displayed on the same screen. [3]

This is also why a high or low reading requires proper measurement conditions and interpretation in the context of the person’s health. We will return to prevention and chronic diseases later, without turning this anatomical introduction into instructions for modifying or discontinuing medication.

The Jugular Vein in the Qur'anic Discourse

God Almighty says: “And We have already created man and know what his soul whispers to him, and We are nearer to him than his jugular vein.” [Qaf: 16]

Al-Tabarsi, in Majma' al-Bayan, mentions several interpretations of the jugular vein, explaining the nearness here as knowledge, and presenting interpretations related to encompassing knowledge and power. Therefore, the verse does not indicate the existence of the Creator within a blood vessel, nor is it an anatomical description of a distance between God and man. [7]

We read it after the diagram of circulation to recall the meaning of encompassing what we conceal, not to claim that knowing the name of the jugular vein explains the reality of divine nearness. We will also dedicate a later study to the uses of the heart in texts, so that we do not reduce the moral heart to the amount of pumping, nor do we extract from spiritual language a neural mechanism without evidence.

A Pulse Worthy of Attention

What we have seen in this chapter is a cooperative network: chambers and valves, perfusion of the muscle, a regulated rhythm, and vessels that branch and change. Each of these points illustrates why it is insufficient to reduce heart disease to a “weak pulse” or an “obstruction” without specification.

Our journey has ended with the fluid that leaves the capillaries and connects with the tissues. What returns it? And where do the cells that defend the body meet? This question leads us to the lymphatic system and immunity.

Chapter Sources

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[2] NHLBI, Blood flow in the heart; valves, the two circulations, and coronary perfusion.

[3] NHLBI, How the heart beats; electrical conduction, sounds, and blood pressure. No general numerical limits were used to issue an individual diagnosis.

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[5] Ibid., Section 20.1, Vascular structure and function, definition of arteries and veins by the direction of blood flow.

[6] Ibid., Section 20.3; principle of capillary exchange and the role of lymph. The simplified numerical model of reabsorption was not generalized to all tissues and conditions.

[7] Al-Tabarsi, Majma' al-Bayan, commentary on Surah Qaf 12–20, verse 16; the meaning of proximity and the various aspects of the jugular vein.

Chapter 41: The Lymphatic System and Immunity

You can see the blood when it flows from a wound, but another network works silently alongside it, often only attracting your attention when a lymph node in your neck swells or a limb swells. This is the lymphatic network; a pathway for fluids to

return, a passageway for cells, and part of a defense system that doesn't reside in a single organ. Within this network, we discover that human well-being requires both recognition and strength: confronting danger without attacking the very body being protected.

Fluid Returning from Between Cells

Many of the body's cells live amidst interstitial fluid with which they exchange substances. Part of this fluid, along with proteins and other materials, enters tiny lymphatic capillaries, where it is then called lymph. These capillaries connect to larger vessels, which terminate via ducts in the venous circulation near the base of the neck. Lymph is not another form of blood, and it does not contain red blood cells in the usual composition found in blood. [1]

Muscle movement and respiration facilitate its movement, while valves in the vessels prevent its backflow. The network has a function beyond fluid recirculation: in the intestinal villi, there are lacteals that carry a significant amount of absorbed fats and fat-soluble vitamins. Thus, the pathways of nutrition and immunity converge in a single system. [1]

If drainage is impaired, protein-rich fluid may accumulate in the tissues, leading to lymphedema. However, not all swelling is caused by lymphatic obstruction; a single appearance can have various underlying causes. Therefore, the reader should not derive a diagnosis from the similarity of the image or the name of the system. [1]

Lymph nodes: Meeting points, not mere filters

Nodes are distributed along the pathways of the vessels, with clusters found in the neck, armpits, and groin, as well as deep nodes in the chest and abdomen. Afferent vessels enter them, lymph passes through their internal structure, and then exits via an efferent vessel. The nodes contain lymphocytes and phagocytes within an organized tissue. [2]

The function of lymph nodes is not simply to trap substances like a sieve traps pebbles; rather, it is where cells carrying information about foreign substances meet cells capable of responding to them. Dendritic cells, for example, transport antigens from tissues to the nodes, contributing to the initiation of specialized immune responses. An antigen is a substance or part that is recognized by immune receptors; it is not necessarily synonymous with a complete germ. [5]

The spleen and thymus gland

The spleen is located in the upper left abdomen, below the diaphragm and behind the stomach. Here is a distinction worth remembering: the lymph nodes screen lymph, while the spleen filters blood. Its white pulp contains immune tissue, and its red pulp contains blood vessels and cells that contribute to the removal of aged or damaged red blood cells. The spleen is not an inactive blood vessel, nor is it the primary natural factory for blood cells in a healthy adult. [3]

The thymus gland, located behind the sternum in the upper chest, is associated with the maturation of T lymphocytes. It is relatively prominent in childhood, and its

functional tissue diminishes with age. This decline does not mean that immunity disappears in adults; its cells and functions are distributed throughout the body and have a history of maturation and response. [4, 5]

T cell maturation involves selection and regulation processes that help limit the attack on the body's own components. These are not conscious lessons received by the cell, but rather biological reactions that we approximate as learning. Furthermore, immune tolerance mechanisms are not infallible. [5]

Innate Immunity: The Immediate Response

Defense begins before the microbe reaches the bloodstream: with the skin barrier, mucous membranes, secretions, and elimination mechanisms. If a harmful agent crosses these boundaries, phagocytic cells, including neutrophils and macrophages, are involved in recognizing and engulfing it. Natural killer cells are involved in combating some infected cells, and complement proteins and chemical signals coordinate the response. [6]

This system is called innate immunity. It is not a blind response; it has receptors that recognize patterns associated with microbes or cell damage. However, it differs from the highly specific diversity of recognition through which B and T cells identify particular antigens. [6]

Inflammation is not another name for infection. It may begin after tissue damage from a non-microbial agent and contributes to bringing in cells, removing debris, and initiating repair. However, its persistence or disruption of its regulation can harm the tissue itself. Not every more intense response is necessarily a better one. [6]

Acquired Immunity: Specialization and Memory

T cells contribute to the targeted immune response. Some help regulate the activity of other cells, while others can kill infected cells. After the response, memory T cells are generated that can participate in a subsequent, faster response. This is cellular memory, not a conscious recall of the disease image. [5]

B cells mature in the bone marrow and, after activation, can differentiate into antibody-secreting plasma cells and memory cells. Antibodies bind to specific targets, helping to neutralize them or recognize and eliminate them through other mechanisms. Antibodies do not constitute the entirety of immunity. [7]

Among its types are immunoglobulin G, which can cross the placenta, and immunoglobulin A, which is important in mucous secretions and breast milk. The presence of an antibody in a single test does not make a person immune to every disease; the type, quantity, function, and context are all different. [7]

Innate and adaptive immunity do not operate as two separate armies waiting for the other to emerge. They exchange signals and roles and overlap in response. This distinction helps us understand, but it does not sever the connections upon which the body is based. [5, 6]

Vaccination and the Limits of the Phrase “Boosting Immunity”

Vaccines take advantage of the immune system’s ability to prepare for specific antigens without deliberately exposing the individual to the risks of the full disease as a route to immunity. They may contain components of the pathogen, weakened or inactivated forms of it, or instructions for producing an antigen. This varies depending on the vaccine technology. [8]

Protection is not necessarily immediate upon receiving the dose, and not all vaccines completely prevent every infection. Protection, its duration, and the need for booster doses vary depending on the vaccine, the disease, and the individual's condition; appropriate updated health recommendations should be followed, not a schedule derived from this general chapter. [8]

The phrase "strengthening immunity" may mask a misleading oversimplification. The body needs efficiency and regulation, not unlimited activation; allergies may be directed at substances that are harmless to most people, and autoimmunity may be directed at the body's own tissues. Therefore, a prescription or unknown substance should not be justified simply because it carries this phrase. [9]

Well-being in the Language of Supplication

The supplication narrated from Imam Zayn al-Abidin (peace be upon him) states: “O God, bless Muhammad and his family, clothe me in Your well-being, envelop me in Your well-being, and protect me with Your well-being.” We have verified the wording from the text explained by Sayyid Ali Khan in Riyad as-Salikin; this is not an independent investigation of the chains of transmission of al-Sahifa al-Sajjadiyya. [10]

Protection here is a request for well-being in the language of supplication, not a technical definition of vaccination or a description of antibodies. We do not infer from the shared wording any prior knowledge of immunology. Supplication remains present in the relationship between man and his Lord, while examination, treatment, and prevention remain within the realm of their known causes.

A patient who experiences recurrent infections or whose immune system is disordered is not diminished in dignity, nor should their illness be used as evidence of weak faith. We seek well-being because we are in need, and we care for those deprived of some of its benefits because their need is our duty, not an occasion to accuse them.

Chapter Conclusion

Life is not a constant victory over every harmful force, but rather a renewed balance between the body's boundaries and its connection to the world. The lymphatic system returns what has been expelled to the tissues and allows the components of the body's defense system to meet and cooperate. The lungs are among the most constant sites of this connection; with every breath, something from the world enters us.

Chapter Sources

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[2] National Cancer Institute, SEER Training, Lymph nodes: location, structure, and lymphatic pathway.

[3] Ibid., Spleen: location, white and red pulp, blood filtration, and removal of damaged cells.

[4] Ibid., Thymus: location, T-cell maturation, and age-related size changes.

[5] OpenStax, Section 21.3; Immunological recognition, T cells, antigen presentation, memory, and immune tolerance, without generalizing that all primary infections are severe.

[6] Ibid., Section 21.2; Barriers, innate immunity, inflammation, and complement.

[7] Ibid., Section 21.4; B cells, antibodies, and memory.

[8] CDC, Explanation of how vaccines work; principles of immune preparedness and the limits of protection were used, not tables or numerical generalizations of doses.

[9] OpenStax, Section 21.6; Principle of immune regulation disorder and hypersensitivity. Its therapeutic details or outdated estimates for some diseases were not used.

[10] Sayyid Ali Khan Madani Shirazi, Riyad as-Salikin fi Sharh Sahifat Sayyid as-Sajidin, Vol. 4, p. 10; the text of the supplication before the explanation. The quotation is for documentation purposes, not for independent judgment of the chain of transmission.

Chapter 42: The Respiratory System

A person goes about their day unaware of the thousands of tiny movements by which the sides of their chest rise and fall. They don't schedule each inhale, nor do they remember with each exhale that they are returning to the air a gas carried by the blood from their tissues. Yet, a single shortness of breath can encapsulate the entire world in a simple request: to get air in. Here we approach the lungs, not as empty sacs, but as a highly intricate living tissue, a link between the outside world and the circulatory system.

From the air inlet to the bronchial tree

Air enters through the nose or mouth, passes through the pharynx and larynx to the trachea, also called the windpipe. The trachea divides into two main bronchi that branch into the lungs, and these branches then decrease until they reach the bronchioles. At the end of the respiratory tract is the region containing the alveoli, where air can come into close contact with the blood. [1, 3]

The upper airways help warm and humidify the air, and the walls of the larger airways are supported by cartilage. The bronchioles do not have this same cartilage support; their walls contain smooth muscle whose contraction or relaxation affects the diameter of the passage and the amount of resistance to airflow. Therefore, access to the alveoli may become difficult, even if the lungs are present and the person has not lost the ability to move their chest. [1, 3]

Two lungs between the ribs and the diaphragm

The right lung usually consists of three lobes, the left of two, and the left also has space for the heart on one side of its surface. The lobes contain smaller segments into which branches of the airways and blood vessels are distributed. This division does not imply the existence of separate sacs, but rather interconnected areas within the organ. [2]

The surface of the lung is covered by the visceral pleura, which is opposite the parietal pleura that lines the chest wall and adjacent areas. Between them is a thin space containing a small amount of fluid, which allows the surfaces to glide during movement and contributes to the coordination of lung movement with the chest wall. This space is not normally an air-filled chamber. [2]

Below the lungs lies the diaphragm, a muscle that separates the chest cavity from the abdomen. The lung is not a muscle that contracts to draw in air; its volume changes according to the forces, pressures, and movements of the surrounding muscles. [4]

Alveoli: When the distance between air and blood is close

The lungs contain large numbers of tiny alveoli, surrounded by a network of capillaries. Thin type I cells cover most of the exchange surface, and type II cells secrete surfactant, which reduces surface tension and helps stabilize the alveoli, reducing the effort required to expand them. Macrophages are present to remove some particles and microbes that have reached this area. [3]

Air and blood do not mix like two liquids in a container. They are separated by thin layers through which the gases diffuse according to their partial pressure differences. Under normal conditions, oxygen moves from the alveolar air into the blood, and carbon dioxide from the blood into the alveolar air. The thinness of this barrier helps us understand why its thickening or the filling of the alveoli with fluid can affect the efficiency of exchange. [5]

Because the space is distributed across many small units, ample exchange surfaces are available within the limited space of the chest. This is a description of the structure, and therefore there is no need to assign a single number of alveoli or a single surface area to every person; size, age, and methods of measurement vary.

How do inhalation and exhalation occur?

During quiet inhalation, the diaphragm contracts and descends, and the movement of the rib cage contributes to increasing the volume of the chest. The lung expands, and the air pressure inside the alveoli decreases below the external pressure during air inhalation. The air moves due to the pressure difference, not because it knows the way or because the lungs summon it by some special will. [4, 6]

During quiet exhalation, the inhalation muscles relax, and elastic rebound helps decrease the volume and expel the air. In forced exhalation, as during some forms of exertion, additional muscles are involved, including the abdominal muscles. The phrase "passive exhalation" is not a general rule for every exhalation in every

situation. [4]

Lung elasticity, airway resistance, and surface tension all affect the amount of work required for respiration. The airway may be narrow, or the tissue may become more difficult to expand; thus, the cost increases even if the name of the movement remains the same: inhalation and exhalation. [6]

The arrival of air alone is not enough.

The movement of air is called ventilation, and the arrival of blood in the pulmonary capillaries is called perfusion. For gas exchange to occur efficiently, they must be proportionate; what is the use of air reaching an alveolus that does not receive enough blood, or blood passing near an alveolus that is not being re-ventilated? It is a new collaboration between what we have studied in the heart and what we are studying in the lung. [5]

Hemoglobin picks up most of the oxygen entering the blood, and the oxygenated blood returns to the left side of the heart to be pumped to the tissues. From the tissues, carbon dioxide returns to the lungs via the circulatory system. Thus, inhalation does not carry pure oxygen, nor does exhalation carry carbon dioxide alone; both are mixtures of gases in different proportions. [4, 5]

Who continues breathing while we sleep?

Centers in the brain regulate breathing patterns, receiving information from receptors affected by gases and body state. Humans can consciously alter their breathing by talking, singing, or holding their breath for a limited time, but the continuation of the process during sleep indicates that it is not dependent on conscious awareness. [7]

The airways also respond to irritants, and reflexes such as coughing and sneezing may occur. Thus, the incoming air is received, examined, and regulated, not merely passed through a tube. Disturbances in sleep and breathing, and the meanings of heedlessness and awareness, are discussed later and should not be conflated here. [7]

Constriction of the Breast: Between Sensory Experience and Qur'anic Expression

God Almighty says: “So whoever God wills to guide, He expands his breast to [receive] Islam; and whoever He wills to misguide, He makes his breast tight and constricted as though he were climbing into the sky. Thus does God place defilement upon those who do not believe.” [Al-An'am: 125]

This verse is in the context of guidance and humanity's stance towards it. Al-Tabarsi presented several aspects of the metaphor of climbing, including the effort involved and the difficulty one faces in attaining it. It is incorrect to interpret it as a pulmonary diagnosis, nor to judge an asthmatic or other patient as misguided simply because they experience chest tightness. [8]

The reader can appreciate the power of the imagery when they understand the experience of hardship, but this is not the same as claiming that the verse is a definitive explanation of the laws of atmospheric pressure. The Quranic meaning does not depend on forcing the wording into a medical theory, and interpretation does not negate the necessity of reading the context and the language.

When Breath Becomes a Cry for Help

Severe shortness of breath, or the inability to speak due to it, or cyanosis of the lips, or sudden confusion, requires an immediate call to the local emergency medical service. Seeking help should not be delayed while waiting for the symptoms to subside through prayer or breathing exercises. New or worsening shortness of breath also requires medical evaluation and should not be automatically attributed to anxiety. [9]

This reminder is not a departure from reflection, but rather a fruit of it: if we know that gas exchange is a condition for life, we know that preserving it is a responsibility. We have followed the path of air from the mouth, and now we return to the mouth to take another path: the path of the bolus.

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Chapter 43: The Mouth, Teeth, Tongue and Salivary Glands

Before a morsel becomes part of the body, it is received by a small space where the senses, movement, and secretion converge. The morsel touches the lips, moves between the tongue and teeth, mixes with saliva, and then passes along an unseen path. The mouth from which this process begins is the same mouth that smiles and speaks; thus, at its entrance, our need for nourishment and our need for expression converge.

A blessing close at hand, requiring no journey.

God Almighty said: “Did We not give him two eyes?” [Al-Balad: 8]. He also said: “And a tongue and two lips.” [Al-Balad: 9]. And He said: “And We guided him to the two paths.” [Al-Balad: 10].

The context reminds humankind of blessings while discussing their arrogance, their capabilities, and their responsibility. Al-Tabarsi clarified the connection between the tongue and lips and expression, and mentioned the two paths as the way of good and evil among the interpretations. The question of our constitution here is inseparable from the question of what we do with what we have been given. [1]

We do not limit the gift of expression to speech; those who cannot speak have their own language, means of communication, and full dignity. Reflecting on function does not diminish the person who has lost it or whose method of performing it has changed.

The Boundaries and Roof of the Mouth

The lips and cheeks border the oral cavity from the front and sides, and its roof is formed by the palate. The palate has a hard anterior part supported by bones and a soft posterior part involving muscles and connective tissues, from whose posterior edge hangs the uvula. The elevation of the soft palate during swallowing helps separate the path of food from the nasal cavity. [2]

The lips and cheeks hold food within the appropriate space for chewing, while the tongue moves and redistributes it. The morsel is not left to collide haphazardly with the teeth; rather, it is controlled by a coordinated movement, and we discover the importance of this coordination when we unintentionally bite our cheek or tongue.

The tooth is an organ, not a stone.

Humans develop two sets of teeth: a complete set of twenty primary teeth and a complete set of thirty-two permanent teeth. These numbers refer to the complete sets; there is no rule mandating that every person has the same number at every age. The shapes of teeth vary according to their function in cutting and breaking down food. [2]

A tooth is composed of multiple tissues. Enamel covers its crown, dentin lies beneath it, and cementum covers the root surface. Inside, there is a pulp containing blood vessels, nerves, and connective tissue. The pulp space extends to the roots through their canals. The hard outer surface of the tooth does not negate the life and sensation within. [3]

Periodontal ligaments anchor the root to its socket in the jawbone, and the gums surround the area where it connects to the mouth. Sensitivity may appear when the dentin is exposed and stimuli are felt through its microscopic tubules. Therefore, the whiteness of the crown is not sufficient to judge the health of the organ and its supporting structures. [3]

Enamel does not heal in the same way as a skin wound, as it does not contain living cells that can rebuild it in that way. However, some of the lost mineral can be restored in the early stages of demineralization before the cavity forms. This is the difference between early remineralization and waiting for an existing carious cavity to fill on its own. [3, 7]

The Tongue: Muscles Working Together

The tongue is not a single muscle, but a group of intrinsic and extrinsic muscles that allow it to change shape and position. These muscles manipulate food, gathering it into a swallowable bolus, and contribute to speech movements. Its surface has different papillae; some types bear taste buds, while others perform a mechanical function. Not every papilla is a taste bud. [4]

We do not need to describe it as “the strongest muscle in the body” to understand its importance; the comparison changes depending on what is meant by strength and how it is measured. We will return to taste in the chapter on the senses, and to speech at the end of this section. Here, we will focus on the role of the tongue in preparing food for swallowing.

Salivary Glands: Secretion Preceding Swallowing

There are three pairs of major salivary glands: the parotid glands near the ears, the submandibular glands, and the sublingual glands. Alongside these are numerous smaller glands in the oral tissues. Their secretions flow through ducts, bringing moisture to a surface that receives food and needs protection. [5]

Saliva helps moisten food, facilitating chewing and swallowing, and contributes to protecting the mouth. A deficiency can affect the sense of taste, making it difficult to handle food, and increasing the risk of tooth decay and oral infections. Saliva flow may be disrupted by gland disease, duct obstruction, medication, or other factors; therefore, dry mouth is not always simply due to insufficient water intake. [5]

A stage of chemical digestion begins in the mouth: the salivary enzyme amylase acts on starch. This does not mean that food is fully digested before swallowing; chewing prepares it, saliva initiates some transformations, and the journey continues in other organs. [4]

Swallowing: A Coordinated Transition

The propulsion of the bolus begins with a voluntary, controllable phase, followed by reflexly coordinated action of the pharynx and esophagus. The soft palate rises, the larynx moves, and mechanisms that close its entrance, including the movement of the epiglottis, protect the airway. Successful swallowing is not the result of a single "cover," but rather of coordinated motor and neurological processes. [4]

Coughing or choking while eating, a feeling of food being stuck, or a change in voice to a wet-sounding tone after drinking are signs that require urgent medical evaluation. Specialists in swallowing, speech, and nutrition may be involved in selecting appropriate interventions. No single food or liquid consistency is suitable for all cases of dysphagia. [6]

Miswak and Oral Hygiene

Al-Kulayni narrated on the authority of Ishaq ibn Ammar, on the authority of Abu Abdullah al-Sadiq (peace be upon him): “The miswak is one of the characteristics of the prophets (peace be upon them).” Al-Majlisi’s grading was checked against Mir’at

al-‘Uqul, vol. 22, p. 394, where it is given as “hasan or muwaththaq.” We distinguish this narration from other narrations on the same topic whose rulings differ, and we do not place them all on the same level. [8]

Oral hygiene can be interpreted in this context as a characteristic related to cleanliness and respect for the body and those around it. However, establishing the general encouragement to use the miswak does not automatically prove every therapeutic benefit attributed to it, nor does it make the narrations about improving eyesight or memory a substitute for the specific study of those claims.

Modern dental knowledge links tooth decay to acids produced by oral bacteria from sugars and starches. It recommends brushing teeth twice daily with fluoride toothpaste, cleaning between teeth, reducing the frequency of sugary foods and drinks, and regular dental checkups. The child's age and ability to spit are taken into account in the toothpaste-use instructions specified by a specialist. [7]

We should not turn a diseased tooth into an accusation of moral negligence; factors and needs vary, and access to care is not equal for everyone. It is a sign of respect for this blessing to facilitate treatment for those who cannot afford it and to assist those who need help cleaning their mouths.

Chapter Conclusion

When we swallow, the food disappears from sight, but the care we take of it remains. The mouth has participated in its preparation and then delivered it to the esophagus. In the next chapter, we follow it to the stomach and intestines, where large substances are broken down into particles the body can absorb.

Chapter Sources

[1] Al-Tabarsi, Majma' al-Bayan, Commentary on Surah Al-Balad, verses 8–10 within the Surah; the text of the verses and the context of blessings, expression, and guidance.

[2] National Cancer Institute, SEER Training, The Mouth; Borders, Palate, Lips, and the Primary and Permanent Dentitions.

[3] American Dental Association, MouthHealthy, Tooth Anatomy: Enamel, Dentin, Cementum, Pulp, and Periodontal Ligament.

[4] OpenStax, Anatomy and Physiology 2e, Section 23.3; The muscles of the tongue, papillae, amylase, and the principle of swallowing coordination, without relying on its therapeutic generalizations.

[5] NIDCR, Saliva and Salivary Gland Disorders; Location of Glands, Secretory Functions, and Effects of Deficiency.

[6] NHS, Dysphagia; Signs, the Necessity of Evaluation, and Tailoring Management According to the Cause.

[7] NIDCR, Dental Caries; Distinguishing Between Precavity Remineralization and Treatment of Advanced Caries, and Principles of Prevention.

[8] Al-Kulayni, Al-Kafi, Vol. 6, Book of Dress, Adornment, and Noble Conduct, Chapter on the Miswak, Hadith 1. Al-Majlisi’s grading of “hasan or muwaththaq” was checked against Mir’at al-‘Uqul, Vol. 22, p. 394. The volume number in this comparison is 22, not the abbreviated number 2 displayed in the Thaqalayn reference.

Chapter 44: The Esophagus, Stomach and Intestines

When you finish eating, you might think the meal is over. But a long process has already begun, unnoticed: pushing and mixing, secretion and absorption, and the selection of what enters the bloodstream and what continues its journey outwards. A piece of bread doesn't enter the cell in its original form, and food doesn't become energy simply by being swallowed. Between a morsel and energy lies a journey, and between the arrival of food and its utilization, there are conditions.

Considering Food Before Considering Digestion

God Almighty said: {Then let man consider his food} [Abasa: 24].

“We pour down water abundantly” [Abasa 80:25]. “Then We split the earth open” [Abasa 80:26].

“And cause grain to grow therein” [Abasa 80:27]. “And grapes and green fodder” [Abasa 80:28].

“And olive trees and date palms” [Abasa 80:29]. “And gardens of dense foliage” [Abasa 80:30].

“And fruit and pasture” [Abasa 80:31]. “As provision for you and your livestock” [Abasa 80:32].

The context calls for reflection on sustenance and its sources, from water and land to plants and their benefits. Before explaining the function of the intestines, the verses remind us that a meal is the fruit of a realm we are connected to, not something the body creates for itself from nothing. The listing of plant species in the verses is not an exhaustive list of what humans need nutritionally. [1]

In al-Kafi, there is a narration from Zayd al-Shahham, on the authority of Abu Ja'far al-Baqir (peace be upon him), concerning food: "The knowledge he acquires, and from whom he acquires it." In al-Kulayni's chain of narration, the phrase "from whomever he mentioned" is used, and al-Majlisi deemed it mursal (a narration with a missing link in the chain of transmission). We mention it here as a reported guidance to consider the source of knowledge, not as a hadith with a sound chain of transmission through this route, nor as a denial of the apparent context regarding food. [2]

A living wall that changes along the way

The digestive tract is not a tube made of a single substance. Its wall exhibits a general organization: a mucous membrane that meets the contents, a submucosa that carries vessels and nerves, muscular layers, and then an outer layer whose properties vary according to location. The lining adapts for protection, secretion, or absorption depending on the function of the area. [3]

The muscles, vessels, and secretory cells are connected by neural networks and hormonal signals. Therefore, the movement of food is not explained by gravity alone, nor do all secretions depend on a conscious command issued by the individual with each bite. [3, 8]

The Esophagus: Passage to the Stomach

The esophagus extends behind the trachea and in front of the spine, crossing the diaphragm into the stomach. It is a muscular tube capable of folding, not an open passage with a constant diameter. Mucus helps facilitate the passage of food, and the upper and lower sphincters contribute to regulating entry and exit. [4]

Peristaltic waves propel food forward; contraction and relaxation occur in a coordinated manner along the esophagus. At the junction with the stomach, the lower esophageal sphincter helps to limit the reflux of gastric contents. If this protective mechanism malfunctions, reflux may occur; however, its diagnosis and the causes of its symptoms are not simply a matter of heartburn. [8]

The Stomach: Reception, Mixing, and Secretion

The stomach connects to the esophagus at the cardia, and its fundus lies above it. Its body then extends to the pyloric region, which terminates in the duodenum. Its wall contains muscular layers that help to mix food, not just to carry it. The partially digested contents, called chyme, are expelled in regulated portions. [5]

Parietal cells secrete hydrochloric acid and intrinsic factor, the latter being necessary for the absorption of vitamin B12 in the intestine. Chief cells secrete pepsinogen, which, in the acidic environment, is converted to pepsin, a protein-breaking agent. Acid is not an enzyme and does not convert all nutrients into their final components. [5]

An alkaline mucus layer protects the lining from the digestive environment. The stomach is not immune to damage, but it does not face its acid without barriers. Furthermore, it is not the primary site for the absorption of most nutrients; the preparation of the contents does not equate to their complete utilization. [5]

The small intestine: a wide surface within a narrow coil

The small intestine is divided into three sections: the duodenum, the jejunum, and the ileum. At its beginning, it receives secretions that aid digestion, and its contents, mixed with the digestive fluid, are transferred to successive sections. Its name, "small," refers to its diameter, not to its being shorter than the large intestine. [6]

Folds and villi increase the surface area of the lining. On the apical surface of the absorptive cells are smaller microvilli that form the brush border. A villus is a tissue projection containing cells and vessels, while a microvillus is an extension of a cell surface; these are two different levels of organization. [6]

The villi contain blood capillaries and lymphatic vessels called lacteals, so the structures that receive substances lie alongside those that transport them. Mixing movements bring the contents into contact with the surface, alongside movements that propel them along the digestive tract. [6]

From Macromolecule to Absorption Pathway

Specialized enzymes act on specific bonds; digestible starches and sugars are broken down into simple sugars, proteins into smaller units that eventually become amino

acids, and lipids into products that can be processed and absorbed. The pancreas and the brush border contribute to completing many of these processes. [7]

Simple sugars and amino acids pass into the bloodstream and are transported by the portal circulation to the liver. A large proportion of long-chain lipids are reassembled within the intestinal cells and packaged into lipoprotein particles called chylomicrons. These enter the lacteal vessels and then reach the bloodstream via the lymphatic system. Not all lipids follow this route; some shorter fatty acids can reach the portal bloodstream directly. [7]

Herein lies the difference between digestion and absorption: a substance may be broken down in the intestinal lumen and then need to pass through the intestinal lining; one process may be disrupted while the other is not. The arrival of a substance in the bloodstream marks the beginning of a phase of utilization, storage, and regulation, not the end of all transformations.

The large intestine: What remains is not without function

The remaining contents enter the cecum, to which the appendix connects, and then pass through the ascending, transverse, descending, and sigmoid colon before reaching the rectum. The appendix is a structure containing lymphatic tissue, and is not merely the name of an organ mentioned when it is inflamed. [6]

The large intestine absorbs water and electrolytes and secretes mucus to facilitate the passage of contents. Its lining lacks the villi found in the small intestine. However, water absorption does not begin there; the small intestine absorbs a significant amount before the residue reaches the colon. [8, 9]

Gut microbes participate in processing some of the remaining material. Therefore, feces consist not only of undigested food but also of water, residues, shed cells, microbes, and other substances. We will dedicate a later chapter to the microbial world, without portraying it as entirely harmful or entirely beneficial in every situation. [8]

Defecation: The End of a Road That Needs Respect

The rectum collects feces before they are expelled through the anal canal. Control involves an internal sphincter of smooth muscle that operates involuntarily and an external sphincter of skeletal muscle that is under voluntary control. This is a preliminary picture of a more coordinated structure, connected to the nerves and muscles of the region and the human condition. [9]

The need for defecation does not diminish the body's dignity; it is part of maintaining its balance. Similarly, impaired control or the need for assistance with hygiene is not a reason for ridicule or the violation of privacy. Respect for the patient in these moments may prove more genuine than grand pronouncements about their dignity.

Chapter Conclusion

You eat once, and many organs work to utilize what you have eaten. Within this cooperation, the intestines cannot complete their function without secretions and

regulation originating from outside their walls. Therefore, we turn to the liver, gallbladder, and pancreas; organs through which food does not pass, yet they participate in its fate.

Chapter Sources

[1] Al-Tabarsi, Majma' al-Bayan, Commentary on Surah 'Abasa 24–32; the text of the verses and the meaning of considering sustenance.

[2] Al-Kulayni, Al-Kafi, vol. 1, Book of the Excellence of Knowledge, Chapter on Rare Narrations, Hadith 8; Al-Majlisi's ruling: mursal (a type of hadith with a missing link in the chain of narrators), Mir'at al-'Uqul 1/167, as quoted by the source.

[3] SEER Training, General Structure of the Digestive System; Layers of the Wall and Their Adaptation, without generalizing the description of the outer lining to all areas.

[4] The same reference, Pharynx and Esophagus; Location, Pathway, Mucus, and Sphincters.

[5] OpenStax, Anatomy and Physiology 2e, Section 23.4; Gastric components, cells, secretion, and mucosal protection.

[6] Ibid., Section 23.5; Intestinal organization, villi, motility, and colonic components. Outdated statistics or screening recommendations were not used, nor were some of its inaccurate descriptions of jejunal and ileal differences.

[7] Ibid., Section 23.7; Chemical digestion and pathways of sugar, protein, and lipid absorption.

[8] NIDDK, The Digestive System and How It Works; Peristalsis, Neural and Hormonal Coordination, Water Absorption, and Fecal Formation.

[9] SEER Training, Small and Large Intestines; Colonic Wall, Water and Electrolyte Absorption, and Anal Sphincters.

Chapter 45: The Liver, Gallbladder and Pancreas

Food does not pass through the liver, the gallbladder, or the pancreas. Yet, these organs participate in its digestion and utilization. In the previous chapter, we examined the pathway taken by food contents; now we will examine the secretions that reach this pathway and what happens to nutrients after they leave it. An organ can be involved in the fate of something that does not pass through its interior.

The Liver: A Site of Reception, Transformation, and Production

The greater part of the liver is located in the upper right abdomen, below the diaphragm. It receives blood from two sources: the hepatic artery and the portal vein, which carries substances absorbed from the digestive system. The term "vein" does not imply that its contents are worthless; this blood carries substances the body needs. [1]

At the microscopic level, liver cells are arranged near blood sinusoids that facilitate the exchange of substances. Blood collects in pathways that lead to the hepatic veins, while bile begins in canaliculi between cells and then flows into larger ducts. The blood and bile pathways lie alongside one another within the tissue, but they are not a single duct. [2]

The liver stores glucose as glycogen, contributes to glucose availability when

needed, synthesizes plasma proteins and clotting factors, and participates in the metabolism of fats and amino acids. It is a synthetic and regulatory organ, not merely a filter that traps waste. [1]

It also converts ammonia to urea, which is excreted by the kidneys, processes bilirubin resulting from heme breakdown, and contributes to the metabolism of drugs and other substances. However, this capacity does not mean that every harmful substance becomes safe upon passing through it, nor does it mean that the liver has an unlimited capacity to tolerate damage. [1]

Bile: Not an enzyme and not produced in the gallbladder.

Bile is a fluid produced by the liver, composed of bile salts, pigments, cholesterol, water, and other substances. Bile salts help emulsify fats and facilitate their digestion in the aqueous environment of the intestines. They do not perform the same function as lipase in breaking the chemical bonds of fats. [2, 3]

The gallbladder is a small sac attached to the underside of the liver. It stores and concentrates bile, then releases it through ducts when needed. Its duct connects to ducts coming from the liver, and the bile flows into the duodenum. Therefore, it is important to distinguish between the organ that produces the secretion and the organ that stores it, and between the secretion itself and the duct that transports it. [2, 3]

Gallstones may form from components of bile, including cholesterol and pigments. Some remain asymptomatic, while others may obstruct a duct, causing pain or complications. One possible complication is pancreatitis due to stone obstruction. Seeing a stone on a medical imaging test does not provide a one-size-fits-all approach; management depends on the symptoms, location, and risks. [4]

The Pancreas: A Gland with Two Roles

The pancreas lies behind the stomach, extending from a head near the duodenum to a body and tail pointing to the left. Most of its tissue is associated with exocrine secretion, while islands of endocrine cells are scattered throughout. Exocrine secretion here refers to secretions reaching the intestinal lumen via ducts, not those exiting the skin. [5]

Acini produce enzymes that aid in the digestion of proteins, starches, and fats. A network of ducts delivers these enzymes to the pancreatic duct and then to the intestine. The pancreatic duct usually meets the bile duct near their entry into the duodenum, although there are anatomical differences. This proximity explains how a single obstruction can affect more than one organ. [5]

Pancreatic juice contains bicarbonate, which helps neutralize stomach acid. Proteolytic enzymes are secreted in their inactive precursor forms and then activated in the intestine. This is not true for all pancreatic enzymes; some, such as amylase and lipase, are secreted in their active form. [2]

Small islets that release hormones into the bloodstream

Beta cells in the pancreatic islets secrete insulin, alpha cells secrete glucagon, and other cells participate in the production of hormones, including somatostatin. These hormones do not travel to the food through the pancreatic duct; they reach the bloodstream to act on tissues that have the appropriate receptors. [6]

Insulin helps lower blood glucose levels. Its actions include promoting glucose uptake by muscles and adipose tissue and supporting its storage. Glucagon contributes to raising blood glucose levels, primarily by stimulating the liver to release and synthesize glucose. This does not mean that every cell requires insulin in the same way to absorb glucose, or that a single hormone manages all metabolism. [6]

Here, the pancreas and liver interact again, but in a different way: not through bile and enzymes this time, but through signals that regulate food utilization and storage. We will expand on this concept in the chapter on endocrinology, and then in the section on life-sustaining functions.

The presence of food does not guarantee adequate utilization.

If sufficient pancreatic enzymes do not reach the intestines, or if they do not function and mix with food properly, pancreatic exocrine insufficiency may occur. Digestion and absorption can then be impaired, leading to nutritional consequences, including deficiencies in some fat-soluble vitamins. [7]

This deficiency is not synonymous with diabetes; one describes a digestive function, and the other relates to blood glucose regulation, although they may coexist in some diseases. This distinction prevents us from thinking of the pancreas as simply a “sugar gland,” and also prevents us from reducing all weight loss to a lack of food. [7]

Does the liver need a “cleanse” prescription?

Some advertisements use the word “toxins” without specifying the substance, its quantity, or how to measure it, and then offer a drink or program that supposedly eliminates it. Evidence for commercial cleansing programs is limited and of poor quality, and some of these practices may cause dehydration, electrolyte imbalance, or other harm. They should not be confused with specific medical treatments for poisoning. [8]

Some supplements may also harm the liver itself. Therefore, the word “natural” is not a certificate of safety, and a short program does not replace the diagnosis and treatment of an existing disease. Knowing what the liver does does not encourage us to overburden it and then expect a prescription to erase the effects. [9]

Linguistic Note on Reading the Qur’an

God Almighty says: {We have certainly created man in hardship} [Al-Balad: 4]. The Arabic word kabad in this context has been interpreted as toil, difficulty, and the struggle of life, along with other interpretations mentioned by the commentators. It

does not mean that man is created inside the liver, called kabid in Arabic. Attention to vowel sounds and context is part of the integrity of reading; the similarity of letters is insufficient for an anatomical interpretation. [10]

Reflecting on the hidden organs does not require forcing verses to use their names. It is enough to learn their function, then realize the extent of our dependence on what we do not see, and translate this understanding into care, mercy, and responsibility.

Chapter Conclusion

In these organs, secretion is combined with storage, digestion with metabolism, and hormonal messaging with cellular activity. Our discussion of ammonia-to-urea conversion led us to another question: how do excess and waste products leave the blood, and how is what the body needs retained? This is where our journey with the kidneys begins.

Chapter Sources

[1] Johns Hopkins Medicine, Liver Anatomy and Function; Location, Perfusion, Metabolism, Storage, Protein Synthesis, and Urea.

[2] OpenStax, Anatomy and Physiology 2e, Section 23.6; Microscopic Organization, Bile Pathway, Emulsification, Bicarbonate, and Enzyme Precursors. Some of its inaccurate descriptions of liver perfusion or bile pigments have not been adopted.

[3] SEER Training, Accessory Organs of the Digestive System; Gallbladder, Bile Components, and Function.

[4] NIDDK, Gallstone Definition and Facts; Silent Stones, Obstruction, and Complications, without generalizing treatment decision.

[5] Columbia Surgery, Pancreas and its Functions; Location, Divisions, Exocrine, and Ducts.

[6] OpenStax, Section 17.9; Islet Cells, Insulin, and Glucagon. The generalization of the text regarding the absence of insulin receptors in certain organs, and the errors in the figure description concerning hormone pathways, were not adopted.

[7] NIDDK, Definition and Facts of Pancreatic Exocrine Insufficiency; Distinguishing the Gland’s Functions and Describing the Effects of Enzyme Deficiency.

[8] NCCIH, Detox and Cleansing Programs; Quality of Evidence, Risks, and Distinction from Medical Treatment for Poisoning.

[9] Johns Hopkins Medicine, Liver Cleansing: Fact and Claim; Lack of Evidence and Potential Harm from Supplements. Its numerical guidance regarding alcohol consumption was not transcribed.

[10] Al-Tabarsi, Majma' al-Bayan, Tafsir al-Balad 4, within the interpretation of the Surah; the linguistic meaning and aspects of hardship.

Chapter 46: The Kidneys and Urinary System

We drink water and then go about our business, unaware of what happens deep within our bodies. However, the proper retention of water, its timely excretion, and the maintenance of the necessary salt balance are all processes upon which the

health of our cells depends. The blessing of water is not merely its arrival in the mouth; rather, it lies in the body's ability to utilize it, retain what it needs, and eliminate excess. This is where the kidneys come into play: two relatively small organs that do not operate on the principle of constant emptying, but rather on the principle of balance.

The Water We Drink

God Almighty said: “Have you considered the water that you drink?” [Al-Waqi'ah: 68]

“Is it you who send it down from the clouds, or is it We who send it down?” [Al-Waqi'ah: 69]

“If We willed, We could make it bitter. Then why are you not grateful?” [Al-Waqi'ah: 70]

Al-Tabarsi explains al-muzn as clouds, and ujaj as water that is intensely salty or bitter. These verses remind humankind of the blessing of water and of the power that the context of the surah uses to point to creation and resurrection. These verses are not a description of the nephron or of blood filtration, nor do we need to interpret them as such. It suffices to awaken the question of gratitude, and then we can study, through scientific means, how the body utilizes the water it cannot do without. [1]

Location and Map of the Kidneys

The kidneys are located behind the peritoneum, on either side of the spine in the posterior part of the abdomen, with the right kidney usually slightly lower than the left. Each kidney is surrounded by a capsule and supported by fatty tissue and supporting layers. In cross-section, an outer cortex and an inner medulla are visible, in which the renal pyramids are arranged. Fluid leaving the pyramids collects in the calyces and then in the renal pelvis, which connects to the ureter. These are names for interconnected locations, not separate organs within the organ. [2]

Each kidney is surmounted by an adrenal gland, but their proximity does not make them a single system: the adrenal gland is an independent endocrine gland, while the kidney is a filtration and regulatory organ that also has hormonal functions. Just as the liver is not limited to producing bile, the kidney is not limited to producing urine.

The Nephron: The Microscopic Unit of Action

The kidney's work is distributed across a large number of microscopic units, each called a nephron. The nephron begins with a renal corpuscle containing the glomerulus, a bundle of capillaries, and Bowman's capsule, which receives the filtrate. A multi-component barrier separates the blood from this filtrate; water and many small molecules pass through, while blood cells and most blood proteins normally remain in the circulation. Therefore, what enters the tubule is not whole blood, and filtration is not hidden bleeding. [3]

From the capsule, the filtrate travels through the proximal tubule, then the loop of Henle, and then the distal tubule, before reaching the collecting ducts. The cells of

these parts, their permeability, and their transport mechanisms differ; therefore, the filtrate changes as it travels. The tubules are surrounded by vessels that reabsorb substances back into the blood or supply the tubules with substances that are secreted into them. The collecting duct receives fluid from more than one nephron and participates in regulating its final composition. [3]

Three actions produce the result

Filtration is the transfer of a portion of plasma water and its solutes into Bowman’s capsule. Reabsorption is the return of substances from the tubular fluid to the surrounding environment and then to the blood. Tubular secretion is the transfer of substances from the blood or cells into the tubules to be excreted in the urine. Thus, the matter becomes clear: not everything that is filtered is harmful, and not everything that is excreted in the urine was reached by filtration alone. [4]

Most of the filtered water is reabsorbed, along with beneficial substances such as glucose under normal conditions, and various salts are regulated according to the body's needs. The kidneys participate in maintaining acid-base balance and in excreting metabolic waste products. Therefore, the phrase "a filter that purifies the blood" is a useful starting point for understanding, but it is incomplete: a simple filter does not reabsorb or respond, while the kidney constantly adjusts its function. [4, 5]

Water, Salts, and the Language of Hormones

Antidiuretic hormone (ADH) helps increase water reabsorption in the collecting ducts by altering the presence of water channels in their cell membranes. Aldosterone helps the kidney retain sodium and excrete potassium. Renin, secreted by specialized cells in the kidney, initiates the angiotensin cascade, which is involved in regulating blood pressure and fluid volume. These are not three keys to the same function; each has its own location and response, and their effects overlap in the final outcome. [6]

The kidney produces erythropoietin, which stimulates red blood cell production, and is involved in converting vitamin D to its active form. Therefore, the effects of kidney disease may extend beyond urine output, manifesting in the blood, bones, and other organs. However, not every case of anemia or bone pain is attributable to the kidney; a single symptom may arise from multiple causes, and examination will determine the specific location. [7]

From the Ureters to the Outside of the Body

The ureters transport urine from the kidneys to the bladder through muscular contractions in their walls. The bladder is a muscular reservoir that expands to hold urine; it is not a factory for it. The urine then exits through the urethra. The ureter is not the same as the urethra, and neither is the fallopian tube; the similarity in terminology does not negate the difference between these pathways. Storage and urination require coordination between the nerves, the bladder muscle, and the closing mechanisms, with the involvement of the brain and spinal cord. [8]

This coordination may be disrupted, or the ability to control it may be weakened due to various medical and age-related reasons. It is a matter of good care for family members to understand this without ridicule or accusations of laziness. A person's dignity is not diminished because they need help with something they would otherwise keep private; rather, protecting that privacy becomes part of the family’s responsibility.

What Tells Us About Kidney Health?

Urine color alone does not prove that the kidneys are healthy, nor does frequent urination mean better filtration. Doctors estimate the glomerular filtration rate (GFR) from blood tests and measure albumin in the urine, often by its ratio to creatinine. Results are interpreted according to context and change over time; a single reading is not a definitive diagnosis. Certain cases may require further testing. [9]

Fluid needs also vary with age, activity level, climate, and health status. We do not prescribe a single number of cups as a mandatory rule for everyone; some kidney or heart patients may receive specific instructions to restrict fluid intake. Drinking water as needed is one thing, and believing that unlimited consumption washes away all harm is another. [8]

Chapter Summary

The kidneys have taught us that retention and excretion go hand in hand: it is not good to keep everything, nor to get rid of everything. This is a statement for reflection, not a rule from which we can derive medical judgments. The anatomical reality is that an organ operating beyond our conscious awareness participates in keeping our internal environment suitable for life. Hormonal messages connecting disparate organs were revealed in this chapter; this is the gateway through which we now enter the realm of endocrinology.

Chapter Sources and Documentation

[1] The Holy Quran, Al-Waqi'ah: 68–70; Al-Tabarsi, Majma' al-Bayan, commentary on verses 57–74. The reference is to the blessing of water and the context of creation and resurrection, not to establish anatomical details.

[2] OpenStax, Anatomy and Physiology 2e, 25.3: Gross Anatomy of the Kidney. Location of the kidney, its divisions, and the urinary drainage pathway.

[3] OpenStax, ibid., 25.4: Microscopic Anatomy of the Kidney. Glomerulus, capsule, tubule parts, and collecting ducts.

[4] OpenStax, ibid., 25.5: Physiology of Urine Formation. Distinguish between filtration, reabsorption, and secretion; without treating filtrate volumes as blood volumes.

[5] NIDDK, Your Kidneys & How They Work. Regulation and excretion functions; only general principles were drawn from this source.

[6] OpenStax, Anatomy and Physiology 2e, 25.8: Endocrine Regulation of Kidney Function. Antidiuretic hormone, aldosterone, and renin.

[7] NIDDK, Treat Complications & Comorbidities, Anemia and Mineral and Bone Disorders. Erythropoietin and vitamin D activation; drug therapy recommendations were not transferred from this page.

[8] NIDDK, The Urinary Tract & How It Works. The urinary tract, urinary control, and variation in fluid needs.

[9] NIDDK, Chronic Kidney Disease Tests & Diagnosis. Filtration estimation and albumin testing; this chapter is not a guide to self-diagnosis.

Chapter 47: Endocrine Glands and Hormones

Organs may be far apart within the body, but they do not exist in isolation. A small organ in the neck receives information from the base of the brain, a signal reaches the kidney to increase water reabsorption, and a distant tissue responds to what is secreted by a cell it cannot see. This is not conscious knowledge on the part of the organs, but rather a chemical communication network with receptors, pathways, and controls. Hormones are part of this communication language; through them, the body's story moves from describing its parts to understanding the dialogue between them.

Why are they called endocrine?

An endocrine gland does not transport its secretion to a surface or cavity via a duct, as salivary or sweat glands do; rather, its hormone reaches the bloodstream and from there to the target tissues. A single organ may contain both endocrine and exocrine tissue, as seen in the pancreas. The Arabic term for these glands, literally “deaf,” describes their mode of secretion, not an absence of communication; these glands are part of one of the most interconnected networks in the body. [1]

Just because a hormone reaches many areas does not mean that all cells will respond to it in the same way. The response requires a suitable receptor and also depends on the cell's condition and internal mechanisms. Therefore, a single hormone may have more than one effect, and it may affect one organ without producing the same effect in another. Increasing its concentration is not always sufficient to achieve a greater effect; the number and sensitivity of receptors are part of the equation. [2]

Differently structured messages

There are peptide and protein hormones, others derived from amino acids, and steroid hormones derived from cholesterol. Many water-soluble hormones bind to receptors on the cell membrane, initiating an internal signaling cascade; while steroid hormones act via intracellular receptors. This is a preliminary map that does not encompass all the details, nor does it imply that every hormone belongs to the same pathway simply because it shares an apparent function with another. [2]

Hypothalamus and Pituitary: The Brain's Connection to the Glands

The hypothalamus is a part of the brain that combines neurological and endocrine functions. The pituitary gland is connected to it by a stalk and rests in a bony cavity called the sella turcica. It is important to differentiate between its two lobes: the anterior lobe is glandular tissue that produces its hormones under the influence of signals from the hypothalamus, which reach it via the portal vascular system; the posterior lobe stores and releases hormones produced in nerve cells of the

hypothalamus, the most important of which are oxytocin and antidiuretic hormone (ADH). The site of hormone release is not always the site of its production. [3]

Among the secretions of the anterior lobe are growth hormone, prolactin (associated with milk production), thyroid-stimulating hormone (TSH), adrenocorticotropic hormone (ACTH), and the two hormones that regulate the functions of the gonads: follicle-stimulating hormone (FSH) and luteinizing hormone (LH). Some of these hormones act on multiple tissues, while others stimulate other glands. Oxytocin is involved in uterine contractions and milk ejection; milk production is distinct from milk expulsion, although the two processes are integrated during breastfeeding. [4]

Describing the pituitary gland as the “master gland” helps to remember the breadth of its influence, but it can be misleading if we think of it as a single ruler. It receives signals, influences, and is influenced, just as there are glands that respond directly to changes in the blood. Understanding the body as a network is far more nuanced than drawing a one-way chain of commands without feedback.

Feedback: When the result returns to the beginning

In the hypothalamic–pituitary–thyroid axis, the hypothalamus stimulates the pituitary gland, and the pituitary gland stimulates the thyroid; then, the rise in thyroid hormones returns to limit the stimulating signals under normal circumstances. This is negative feedback; and “negative” here does not mean harmful, but rather that it inhibits further increases. It is one form of regulation, not the sole law of every hormone or every moment of life. [3]

Thyroid and Parathyroid: Proximity does not mean identity

The thyroid gland is located in the front of the neck and has two lobes connected by an isthmus. Its follicular cells are arranged around cavities and produce the hormones thyroxine and triiodothyronine, both of which contain iodine. These hormones have a wide-ranging effect on energy utilization and tissue function. The thyroid also contains cells that produce calcitonin; therefore, it is incorrect to attribute all its secretions to a single hormone. [5]

The parathyroid glands are small glands, usually four, located behind the thyroid. They secrete parathyroid hormone, which participates in calcium regulation and works in conjunction with the kidneys, bones, and vitamin D. The two names are not synonymous because the glands are adjacent, and disease in one does not necessarily imply dysfunction in the other. [5]

The Adrenal Glands: Cortex and Medulla

Each adrenal gland consists of an outer cortex and an inner medulla, which differ in origin and function. The cortex produces steroid hormones, including aldosterone, cortisol, and adrenal androgens. The medulla secretes adrenaline and noradrenaline in response to sympathetic nerve stimulation, thus participating in mobilizing the body to meet urgent demands. Not all cortical regulation functions in the same way; the regulation of aldosterone, which we have already discussed, is not a replica of cortisol regulation. [6]

Therefore, it is inaccurate to portray cortisol as a “stress poison” that must be eliminated. The hormone has a function, and its imbalance or its use as a medication has other implications. The need for equilibrium does not mean we should choose a single substance and burden it with all of humanity’s troubles.

The Pineal Gland and Beyond the List of Glands

The pineal gland in the brain produces melatonin, and the timing of its secretion is linked to the light-dark cycle via neural pathways involving the hypothalamus. This hormone is involved in regulating the circadian rhythm, and it is insufficient to reduce all of sleep to its name alone. We will return to the topic of sleep in its proper place; knowing the function of a natural hormone is not, in itself, a recommendation to take its supplement. [7]

Endocrine function doesn't end with the well-known glands. The heart secretes peptides involved in fluid regulation, the digestive tract produces signals that regulate digestion and food responses, and adipose tissue secretes, among other things, leptin, which is linked to energy and satiety signals. We've seen the hormonal function of the kidney, and we've also discussed the pancreatic islets, the gonads, and the placenta. These functions don't negate the anatomical classification, but they reveal that the boundaries of the chapters aren't walls within the body. [8]

When Regulation Is Disrupted

Fatigue or weight changes are not enough to diagnose a specific "hormonal imbalance." In evaluating the thyroid, for example, a doctor might begin by testing thyroid-stimulating hormone (TSH) and then measure thyroid hormones or antibodies, depending on the case. The results of these tests need interpretation; the signal from the pituitary gland is not the same as the hormone produced by the thyroid, and different areas of dysfunction affect the relationship between them. [9]

The Endocrine Society cautions that “adrenal fatigue,” in the common understanding of the term, meaning exhaustion of the gland due to life's stresses, is not a diagnosis supported by evidence. This does not negate the patient's fatigue, nor does it negate true adrenal insufficiency; rather, it necessitates investigating the underlying cause instead of relying on an unproven label or supplements of unknown effect. Hormones should not be taken or discontinued arbitrarily in an attempt to increase activity or improve appearance. [10]

Chapter Summary

Hormones explain aspects of our lives, but they don't reduce a person to a specimen in a test tube. Nor should their fluctuations be used as a pretext to denigrate a woman or a man, or to equate illness with moral weakness. In contemplating creation, we don't need to claim that these glands are mentioned by name in a religious text that doesn't; it suffices to see the vastness of what should be learned and preserved. From the hypothalamus's connection to the glands, we move to the nervous system, which regulates sensation, movement, and communication.

Chapter Sources and Documentation

[1] National Cancer Institute, SEER Training, Introduction to the Endocrine System. The difference between endocrine and exocrine secretion.

[2] OpenStax, Anatomy and Physiology 2e, 17.2: Hormones. Classes of hormones, receptors, and the differences in response.

[3] OpenStax, ibid., 17.3: The Pituitary Gland and Hypothalamus. Nerve and vascular communication, lobes, and thyroid axis.

[4] SEER Training, Pituitary & Pineal Glands. Functions of pituitary hormones; only relevant paragraphs were transcribed.

[5] SEER Training, Thyroid & Parathyroid Glands. Basic structure and secretions; no generalized number of glands for all individuals.

[6] SEER Training, Adrenal Gland. Cortex, medulla, and their functions; see also the explanation of aldosterone in the previous chapter.

[7] OpenStax, Anatomy and Physiology 2e, 17.7: The Pineal Gland. Melatonin and circadian rhythm, no drug recommendation.

[8] OpenStax, ibid., 17.10: Organs with Secondary Endocrine Functions. Examples include the heart, digestive tract, and adipose tissue; the remaining organs are documented in their respective chapters.

[9] NIDDK, Thyroid Tests. Tests and their context of interpretation, not individual diagnosis based on general symptoms.

[10] Endocrine Society, Adrenal Fatigue, updated January 25, 2022. Distinguishing between an unproven label and true adrenal insufficiency and the risks of inappropriate use.

Chapter 48: The Brain, Spinal Cord and Nerves

You reach for something, then adjust your hand direction before even thinking about the details of the movement. You hear your name and turn around, recognize the face that called you, and choose a word to reply. The experience seems singular, but behind it lies information reception, transmission, processing, and response. Understanding these pathways doesn't reduce human beings to wires, nor should contemplation of the human being prevent us from studying them. The nervous system is one of the areas where the clarity of certain mechanisms intersects with the breadth of questions.

The Center and the Periphery

The central nervous system consists of the brain and spinal cord. The skull protects the former, while the latter runs within the vertebral canal. They are surrounded by the meninges: the dura mater, arachnoid mater, and pia mater. Cerebrospinal fluid is found in the ventricles and subarachnoid space. These coverings are not layers of nervous tissue itself, but rather structures that surround and protect it. [1]

The peripheral nervous system comprises the nerves and ganglia outside the center, connecting it to the rest of the body. Fibers are called afferent when they transmit information toward the central system and efferent when they carry signals from it to their targets. A nerve may contain both sensory and motor fibers; therefore, its

singular name does not necessarily indicate a single direction for all the signals it carries. [2]

A neuron is not the whole nerve.

A neuron is a cell with a cell body containing the nucleus and extensions that vary depending on its type. In the typical model, the dendrites receive many inputs, and the axon transmits the signal to its synapses with other cells. A visible nerve, however, is a bundle of fibers surrounded by supporting tissue and accompanied by vessels; therefore, cutting a nerve is not the same as cutting a single small cell. [2, 3]

Glial cells participate in maintaining and supporting the neural environment. These include astrocytes, microglia with immune functions, and oligodendrocytes that produce myelin in the central nervous system. At the periphery, Schwann cells play a role in myelinating axons. This sheath, with its regular gaps between its segments, affects the way the impulse is transmitted; not all axons are equally covered. The word "support" here does not imply a marginal or dispensable function. [3]

How does the signal travel?

Ion concentrations differ between the two sides of the cell membrane, and channels and pumps maintain the properties of this distribution. When the stimulus reaches a suitable threshold, an action potential arises that propagates along the axon with successive changes in membrane permeability, in which sodium enters and potassium exits in the typical neural model. The impulse is not a piece of substance running from one end of the nerve to the other, nor a miniature household current; it is an electrical change resulting from the movement of ions across living membranes. [4]

At a chemical synapse, a cell releases a neurotransmitter that affects the receptors of the next cell. The result may be facilitation or inhibition of its activity, depending on the neurotransmitter, receptor, and circuit. There are also electrical synapses that allow direct communication via channels between cells. A neuron receives multiple inputs, and their combination and timing affect its response; the network is not a line in which each member repeats what they have received without modification. [5]

The Big Brain Map

The cerebrum is the largest part of the brain, and it has two hemispheres connected by the corpus callosum. Each hemisphere contains frontal, parietal, temporal, and occipital lobes, and the insula lies deep within. The thalamus and hypothalamus are located within the diencephalon; the thalamus plays an important role in transmitting and processing information, and the hypothalamus is involved in regulating the internal environment and glandular functions. These names help to pinpoint locations, but they do not confine every idea to a closed box. [1]

The brainstem consists of the midbrain, pons, and medulla oblongata. It contains pathways and centers involved in essential functions, including regulating respiration and blood circulation. The cerebellum is involved in coordinating movement and comparing sensory information with incoming motor signals. Although there are specializations and differences between the two hemispheres of the brain, dividing people into creative “right-brained” individuals and logical “left-brained” individuals is an oversimplification that fails to describe the workings of the

cooperative networks. [6]

The Spinal Cord: A Pathway and a Center

The spinal cord is not simply a long conductor. Its gray matter contains cell bodies and connections involved in information processing and reflex responses, and its white matter contains ascending and descending pathways. Sensory fibers enter via the posterior roots, and motor fibers exit via the anterior roots. In adults, the spinal cord does not extend the entire length of the vertebral column; rather, long roots known as the cauda equina continue beneath it. The level of a segment of the spinal cord differs from the level of the corresponding vertebra. [6]

In the usual anatomical description, there are twelve pairs of cranial nerves and thirty-one pairs of spinal nerves. These numbers represent a map of the named nerves, not the number of their fine branches or the number of cells that compose them. Hence, we understand why describing an injury requires specifying its location and trajectory, rather than a general phrase like "nerve weakness." [2]

Voluntary and Autonomic

The somatic system is associated with skeletal muscles and many responses that we can direct voluntarily, although some of its functions are reflexive or without conscious attention. The autonomic system regulates aspects of the function of smooth muscles, the cardiac muscle, and glands. It comprises the sympathetic and parasympathetic divisions. The two phrases “mobilization for action” and “rest and digestion” are useful to remember, but they do not imply that the former is evil and the latter good, or that one ceases entirely when the other is activated. [7]

It is a mistake to imagine the heart awaiting a conscious command with each beat, or that every unintentional movement necessarily belongs to the same neurological category. The diaphragm is a skeletal muscle, yet breathing continues during sleep. Categories are tools for understanding function, not substitutes for examining its details. [7]

The Intellect in the Discourse of Guidance

We have already encountered the hadith attributed to Imam al-Sadiq (peace be upon him) defining the intellect as: “That by which the Merciful is worshipped and Paradise is attained.” Its chain of transmission in al-Kafi includes an unnamed narrator and omits intervening links in attributing the report to the Imam; therefore, we do not present it here as having a sound chain of transmission. [8] The point of mentioning this is that the use of the term “intellect” in the discourse of guidance may focus on sound discernment, action, and purpose, rather than on naming an organ or describing its fissures.

This hadith alone is insufficient to establish an anatomical location for the intellect, just as the image of the brain does not determine a person’s worth in the eyes of God. A patient may be unable to speak or move, yet retain some aspects of their awareness. Therefore, we cannot judge their inner state based on a single appearance. We will dedicate subsequent chapters to consciousness, memory, will,

and the relationship between soul and body, without conflating neurological analysis with moral judgment or claims about the unseen.

Chapter Summary

From cell to synapse, from nerve to cord and brain, a connection emerges that does not negate specialization, and specialization does not negate cooperation. If we describe this structure more precisely, we become better able to understand the disease and care for the patient, rather than reducing their person to their illness. In the following chapters, we will continue exploring the gateways to the world, beginning with the eye and vision.

Chapter Sources and Documentation

[1] SEER Training, The Central Nervous System. Protection of the central nervous system, meninges, and parts of the brain and diencephalon.

[2] SEER Training, The Peripheral Nervous System. Nerves, ganglia, sheaths, and anatomical numbers; the nerve fibers referred to here are axons, and the description of all sensory fibers as long dendrites is not supported.

[3] OpenStax, Anatomy and Physiology 2e, 12.2: Nervous Tissue. Neuron structure, types of glia, and myelin; the total cell counts given on the page were not reproduced.

[4] OpenStax, ibid., 12.4: The Action Potential. Ionic gradients, channels, and action potential; numerical values vary by cell and are not generalized.

[5] OpenStax, ibid., 12.5: Communication Between Neurons. Chemical and electrical synapses and input integration.

[6] OpenStax, ibid., 13.2: The Central Nervous System. Brainstem, cerebellum, and spinal cord, and a critique of the common generalization about the two hemispheres.

[7] OpenStax, ibid., 15.1: Divisions of the Autonomic Nervous System. Somatic, autonomic, sympathetic, and parasympathetic; the educational terms do not imply absolute opposition in each organ.

[8] Al-Kulayni, Al-Kafi, vol. 1, Book of Intellect and Ignorance, Hadith 3. The chain includes “from one of our companions, who traced it back [to the Imam without naming the intervening transmitters]”; this is a reference to the text, not an independent authentication of the chain of transmission.

Chapter 49: The Eye and Vision

You open your eyes and find faces, colors, and distances present in an experience that seems instantaneous. However, the arrival of light in the eye is not enough for vision; there must be a medium that allows its passage, a structure that focuses it, cells that respond to it, pathways that transmit its effects, and a brain that processes the information. The eye is a great gateway, but it is not the whole story. What we see clearly outside depends on precise workings that we do not see inside.

From the Transparent Window to the Retina

Light rays pass through the transparent cornea at the front of the eye, and its curvature helps to refract the light. Some of it enters through the pupil, which is an

opening in the center of the colored iris, not a separate black disc. The iris regulates the size of this opening, and then the cornea and lens work together to focus the light onto the retina. Here, the photoreceptors respond, and the information is transmitted as nerve signals to the brain. [1]

This sequence explains why “the arrival of light” does not equate to “the integrity of vision”: the problem may lie in the transparency of the media, in the focusing, in the retina, or in the neural pathway. Simply observing the eye from the outside does not reveal the integrity of all these stages.

The Eye Wall and Fluids

The sclera forms a tough outer covering, part of which is visible in the white of the eye. The vascularized choroid lies between the sclera and the retina, nourishing the outer layers of the retina. Inside, a clear, gel-like substance, the vitreous humor, fills the space behind the lens. The aqueous humor is a different fluid produced by the ciliary body in the anterior segment of the eye. The aqueous humor, tears, and vitreous humor are three things, and the difference in their names is not merely linguistic variation. [2]

The lens is attached to the ciliary body by suspension fibers. The eyelids cover the surface of the eye when closed, while muscles attached to the sclera help move the eyeball. The retina contains a central area called the macula, which is important for distinguishing fine details. Thus, the protective sheath, the transparent medium, and the light-sensitive tissue are all integrated into a single organ, while each retains its distinct function. [2]

Rods, Cones, and Initial Processing

The retina contains rods, which are highly sensitive to dim light, and cones, which contribute to seeing colors and details in appropriate lighting. The sensitivity of different types of cones varies across overlapping wavelengths; each color we see does not have a separate receptor with its own name. Color perception arises from comparing and processing patterns of response, not simply from placing three inks in the eye. [3]

The effect of light stimulation travels through retinal circuits, including bipolar cells and other cells, until it reaches the ganglion cells, whose axons converge to form the optic nerve. Therefore, the retina is not a passive screen that delivers a finished image. The point where the nerve exits lacks photoreceptors, resulting in a normal blind spot in the corresponding field. This is a description of a specific anatomical location, not evidence that the entire eye is impaired. [3]

To the Brain: Two Fields, Not Two Separate Eyes

Fibers from the nasal half of each retina cross to the opposite side at the optic chiasm, while fibers from the temporal half remain on their respective sides. Thus, the following pathways carry information about half of the visual field, not just one eye. The majority of signals along this pathway pass through the lateral geniculate body of the thalamus and then reach the visual cortex in the occipital lobe. It is

incorrect to say that the right eye sends all its information to one half and the left eye to the other. [4]

Vision is a perception that requires processing, not merely the reception of light. We may look at something without noticing its significance, or we may need time to distinguish an unfamiliar shape. Here, a distinction should be made between describing what happens in the neural pathway and reflecting on how humans use what they see; each question has its own route to an answer.

The tear we don't notice

Blinking distributes a thin tear film across the corneal surface, maintaining its moisture and consistency, aiding vision, and protecting against irritants. This film contains aqueous, fatty, and mucous components. Tears drain into the nose. Dry eye is not always a complete absence of tears; it may be related to their quantity or the quality of their action and stability on the surface. [5]

It is beautiful to see tears in sadness and joy, but they have a daily function that does not require outward emotion. They remind us that some of what we consider a fleeting detail is part of the well-being of a whole field of knowledge.

Between Focusing Errors and Retinal Disease

Refractive errors include myopia, hyperopia, and astigmatism, in addition to presbyopia, which is related to age-related changes in the lens and difficulty focusing on near objects. Glasses, contact lenses, or selected procedures can help, depending on the diagnosis. Glasses do not treat every cause of vision impairment, nor is the need for them necessarily a sign of a lack of diligence or poor eye care. [6]

Signs that warrant immediate examination include the appearance of new flashes of light, a sudden and significant increase in floaters, or a curtain-like shadow in the field of vision; these may be associated with retinal detachment. In such cases, the affected person should not wait for a distant appointment or attempt home remedies, but rather seek immediate eye evaluation or go to the emergency room. The intention is not to cause alarm about every old floater, but rather to highlight the need to recognize sudden changes that require attention. [7]

Sight and Insight in the Qur’an

God Almighty says: “Have they not traveled through the land so that they may have hearts by which to understand or ears by which to hear? For indeed, it is not the eyes that are blind, but it is the hearts in the breasts that are blind.” [Al-Hajj: 46]

Al-Tabarsi presents this verse in the context of reflecting on the conditions of nations and their rejection of the messengers. What is blameworthy is turning away from the truth, not visual impairment. A person may lose their sight and still recognize the truth and act upon it, or their eyes may remain sound but they may not heed what they see. Therefore, the verse does not accuse the blind person, nor does it deny the possibility of organic eye disease, nor does it alone provide an anatomical diagram of the seat of perception. [8]

The Right of Sight

In the Treatise on Rights attributed to Imam Zayn al-Abidin (peace be upon him), as narrated by Ibn Shu'bah al-Harrani in Tuhaf al-'Uqul: “As for the right of your sight, it is to lower it from what is unlawful for you and to refrain from using it indiscriminately except for a place of reflection from which you gain insight or knowledge, for sight is the gateway to reflection.” [9] The text appears here in its ethical context, noting that the assessment of all the chains of transmission of the treatise and the comparison of its wording across its sources have not yet been completed.

This meaning does not call for closing one's eyes to the world, but rather for protecting sight from abuse and degradation, and directing it towards knowledge and reflection. Part of fully respecting this blessing is to respect those who have lost it: to address them directly, to ask before helping them, and not to reduce their person to their need for a means of reading or transportation. Care does not deprive its recipient of the right to choose.

Chapter Summary

The world's landmarks reach us through the eye, but its proper use is a responsibility that extends beyond the health of the lens and retina. This chapter brings together science, which explains how we see; ethics, which asks what we do with what we see; and compassion, which prevents us from turning differences in sensory ability into differences in dignity. From light, we move to vibration: the ear, which hears and also contributes to maintaining balance.

Chapter Sources and Documentation

[1] National Eye Institute, How the Eyes Work. The general path of light and signal.

[2] Johns Hopkins Medicine, Anatomy of the Eye. Covers, media, lens, and macula; the abbreviated page description for the posterior chamber was not adopted.

[3] OpenStax, Anatomy and Physiology 2e, 14.1: Sensory Perception, Vision section. Receptors, retinal circuits, and blind spot; without numerical generalizations.

[4] OpenStax, ibid., 14.2: Central Processing, visual pathway. Crossing, field organization, and the occipital cortex.

[5] National Eye Institute, How Tears Work, updated August 6, 2025. The tear film: function and drainage.

[6] National Eye Institute, Refractive Errors. Types and the importance of identifying the cause of vision loss.

[7] National Eye Institute, Retinal Detachment, updated November 5, 2025. Warning signs and the need for urgent evaluation.

[8] The Holy Quran, Al-Hajj: 46; Al-Tabarsi, Majma' al-Bayan, interpretation of the verse in the context of consideration and truth.

[9] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, edited by Ali Akbar al-Ghaffari, p. 257, Treatise on Rights, Right of Sight. The reference in this version is to the wording, not to an independent judgment on its chain of transmission.

Chapter 50: The Ear, Hearing and Balance

We may hear someone approaching before we see them, distinguish a familiar tone among many sounds, and walk while the image before us remains relatively stable with head movement. These experiences are connected to diverse functions, some of which the ear shares. The ear is not merely the outer auricle, nor is it simply an organ for hearing speech; deep within it are structures that receive sound vibrations and others that sense movement and head position. From this proximity, the story of hearing and balance begins.

The Blessing of Hearing and the Responsibility of Gratitude

God Almighty says: “Say, ‘It is He who has created you and made for you hearing, vision, and hearts. Little are you grateful.’” [Al-Mulk: 23]

Al-Tabarsi mentions these faculties in the context of the tools of reflection, discernment, and attaining knowledge. The verse attributes the blessing to its Giver and awakens gratitude, but it does not provide a timeline for the development of the organs. We cannot, therefore, deduce from the arrangement of words alone the precise week of the onset of hearing in the fetus, nor should we consider disability as evidence of a person's diminished worth. We have already discussed prenatal sensory development in its proper place. [1]

Three Regions and a Connecting Pathway

The outer ear comprises the auricle and the auditory canal, which terminates at the tympanic membrane, separating it from the middle ear. The middle ear contains the ossicles, and this chamber connects to the nasopharynx via the Eustachian tube, which helps equalize pressure. The inner ear includes the cochlea and the structures of the vestibular system. The external auditory canal is not the Eustachian tube; the former receives sound from the outside, while the latter is a ventilation pathway connecting the middle ear to the area behind the nose. [2]

This distinction facilitates understanding the different locations where disease may affect the ear. Not every earache is a cochlear ailment, and not every sensation of blockage is due to wax buildup in the canal. The similarity in human complaints does not negate the need to identify the affected structure.

From Vibration to Signal

Sound waves move the eardrum, and the three ossicles—the malleus, incus, and stapes—transmit the vibration to the inner ear. A movement is generated in the cochlear fluid, which corresponds to a wave on the basilar membrane. Different areas of the basilar membrane respond to different frequencies; the area near the base of the cochlea receives higher frequencies, and the area near the apex receives lower frequencies. Sound intensity and pitch are not a single description; a sound may be sharp and faint or deep and loud. [3]

Hair cells bear microscopic projections, not hairs like those that grow on the skin. The bending of these projections leads to a change in the cell's channels and

electrical activity. This information is then transmitted to the auditory fibers and from there to the brain. Thus, the mechanical effect is transformed into a nerve impulse. Words are not stored within the cochlea; distinguishing speech and its meaning requires processing and learning. [3]

In the central pathways, information from both ears is compared, including differences in timing and intensity, which help determine the direction of a sound. Processing continues through centers to the auditory cortex in the temporal lobe. Therefore, hearing is not the work of a single ear isolated from the brain. [4]

A system that tells us about head movement

The three semicircular canals on each side respond to head rotation movements through the movement of fluids and their effect on gelatinous structures and sensory hair cells. The utricle and saccule, the two otolith organs, contribute to the perception of linear acceleration and the head's position relative to gravity. Tiny crystals of calcium carbonate are incorporated into the layer that transmits the mechanical impact to their receptors. These crystals are not pathological stones in their normal position. [5]

But maintaining balance does not depend on the ear alone; the brain integrates vestibular and visual signals with information from muscles, joints, and ground contact. This integration helps stabilize body posture and vision during movement. Dizziness or imbalance may result from disturbances in more than one area, or from medications and other conditions; therefore, not all dizziness is a "disease of the inner ear." [5]

What Strains Hearing and What Protects It

Loud noise can damage the ear with very short exposure, and prolonged or repeated exposure to noise can cause gradual damage. The intensity of the sound, the duration of exposure, and the distance from the source all contribute to the degree of risk. Preventive measures include reducing the intensity, moving away from the source when necessary, using appropriate hearing protection in noisy environments, and protecting children who cannot assess the danger themselves. [6]

Becoming accustomed to noise does not mean that the sensory cells become immune to it. Hearing loss may develop without being noticeable in its early stages. Safety is not measured solely by our ability to tolerate noise, nor is it correct to compensate for hearing loss by constantly increasing the volume to its maximum instead of investigating the underlying cause. [6]

Sudden hearing loss is not an appointment to be postponed.

When hearing suddenly decreases, especially in one ear, an urgent medical evaluation should be sought, even if there is a feeling of fullness in the ear or the affected person suspects earwax buildup. Sudden sensorineural hearing loss requires prompt assessment, and delays can impair the effectiveness of treatment. This description does not identify the cause of every case, but it guards against reassurance unsupported by an examination. [7]

Technology, Communication, and the Right to Choose

Hearing aids amplify sound to benefit from the person's remaining hearing, while cochlear implants convert sound into signals that stimulate the auditory nerve, bypassing damaged parts of the sensory pathway. Implants do not restore normal hearing in every detail; their results vary, and they require suitability assessment, training, and rehabilitation. The decision is not a one-size-fits-all approach. [8]

Human participation should not be limited to a single method: one person may use a hearing aid, another sign language, another writing or accompanying texts, or a combination of methods. The duty of the family and the institution is to facilitate communication, not to place the sole responsibility for removing all obstacles on the individual. We address the person concerned and respect their choice, rather than speaking about them as if they were not present.

The Right of Hearing in the Treatise on Rights

In Tuhaf al-Uqul, within the Treatise on Rights attributed to Imam Zayn al-Abidin (peace be upon him): “As for the right of hearing, it is to purify it by not allowing it to become a path to your heart except for a noble source that instills goodness in your heart or cultivates noble character.” It then states that hearing is the gateway through which speech and its meanings reach the heart. [9] Here, we adhere to the limits of referring to the transmitted text; this chapter has not undertaken an independent investigation of all the chains of transmission of the treatise.

This is guidance on the responsibility of listening and choosing what we receive willingly, not an accusation against those forced to hear what they do not want, nor a description of how the cochlea works. Part of its etiquette is not to spread a rumor simply because our ears have picked it up, and not to use our ability to speak to silence someone who needs more time to communicate.

Chapter Summary

The ear contains structures we cannot see, through which the vibration is transmitted to the experience of hearing, and head movement is transmitted to the balance networks. However, good listening is a broader process than simply the proper functioning of the receptors; it requires attention and fairness. Human dignity remains regardless of one's hearing ability. After this chapter, we will turn to smell, taste, touch, and body position.

Chapter Sources and Documentation

[1] The Holy Quran, Al-Mulk: 23; Al-Tabarsi, Majma' al-Bayan, Interpretation of verses 22-30. Gratitude and tools of distinction, without deducing an order of embryonic development from the wording of the verse.

[2] Johns Hopkins Medicine, Ear, Nose and Throat Facts, section on the outer, middle, and inner ear and the Eustachian tube.

[3] NIDCD, How Do We Hear? The conversion of vibration into a nerve signal; Errors in naming the components of the alternative image were not adopted.

[4] OpenStax, Anatomy and Physiology 2e, 14.2: Central Processing, sections on the auditory

pathway and signal comparison.

[5] NIDCD, Balance Disorders. Canals, the two otolith organs, sensory integration, and the multiple causes of balance disorders.

[6] NIDCD, Noise-Induced Hearing Loss. Risk related to sound intensity and exposure duration, and protective measures, without generalizing occupational exposure figures to all people.

[7] NIDCD, Sudden Sensorineural Hearing Loss. The importance of prompt evaluation and not assuming a simple obstruction without examination.

[8] NIDCD, Cochlear Implants, updated June 13, 2024. Difference from a hearing aid, limitations of results, and need for rehabilitation; the changing age eligibility criteria were not transferred.

[9] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, edited by Ali Akbar al-Ghaffari, p. 257, Treatise on Rights, The Right of Hearing. The text was not given an unverified grading of its chain of transmission.

Chapter 51: Smell, Taste, Touch and Bodily Sensation

We sometimes recognize a house by its smell, discern food before seeing it, and place our hand where it belongs without watching it with our eyes. These experiences may seem less dramatic than sight and hearing, but they contribute to our sense of security, familiarity, and movement. The body's knowledge of the world is not limited to the five common senses; the sense of limb position and certain aspects of the interior are part of a broader narrative.

How does smell reach us?

In a small area high inside the nose are olfactory sensory nerve cells whose receptors respond to molecules that arrive with the air. There need not be a separate receptor corresponding to every odor; the identity of an odor may arise from the pattern of stimulation of a group of receptors and the processing of their signals. Thus, a limited number of receptor types can distinguish a wide variety of odors. [1]

Odors reach the olfactory region through the nostrils, as well as from the back of the mouth during chewing. Therefore, someone with a blocked nose might say that food has lost its taste, even though a significant part of what is lost is the aroma involved in the flavor. Smell and taste are interconnected, but they are not the same sense. [1]

Taste is not a color map on the tongue.

Taste cells are organized into buds located on the tongue and in other parts of the mouth and throat. The basic tastes are sweet, sour, salty, bitter, and umami, the latter being associated with substances such as glutamates. The school diagram that confines sweetness to the tip of the tongue and bitterness to the back, excluding other areas, is incorrect; the cells responsible for different tastes are distributed across multiple regions. [2]

Flavor is broader than taste: it combines taste, aroma, food temperature, texture, and other chemical sensations. The heat of pepper and the coolness of menthol are not simply two additional tastes of the same kind. This explains why the perception of food differs if its aroma or texture changes, even if the amount of sugar or salt

remains the same. [2]

The Skin: A Vast Area of Reception

The skin and underlying tissues contain diverse sensory endings, which can be classified according to their response into mechanoreceptors, thermoreceptors, and receptors for noxious stimuli (nociceptors). The ending may be free or attached to a specialized structure. Its activity changes when the stimulus affects the properties of the membrane and channels; touch is not a substance that travels to the brain, but rather an effect that is transformed into neural activity. [3]

In describing touch reception, terms such as Meissner's and Pacinian corpuscles, Merkel discs, and Ruffini endings are used. These structures share the function of receiving aspects of touch, pressure, vibration, and skin stretch, although their properties differ. It is inaccurate to group all cutaneous sensation under a single receptor or to assume that all these structures are enclosed in the same sheath. [4]

From this, we understand that the word “feel” is broad: a person may feel the touch of something, its temperature, or its harmful effects, and these experiences are not identical. We will address pain in a separate chapter, as we are not equating here the mere activity of a receptor for noxious stimuli with the sum total of the experience that the patient calls pain.

How do you know where your hand is without looking at it?

Proprioception, or the sense of body position and movement, allows the brain to track the positions of body parts without relying on sight alone. It involves mechanical information from muscles, tendons, joints, and skin, and is processed by multiple neural networks. It integrates with the vestibular system and vision in the performance of movement and balance, but it is not identical to them: knowing that the elbow is bent is not the same as detecting the rotation of the head in the inner ear. [5]

This is not clairvoyance, nor the ability to know what is happening in a distant place. The term “sixth sense,” as used by some commentators here, refers to a somatic sensory function that can be studied. A common, everyday example is: reaching a familiar location on the body requires an internal knowledge of the limb's position, not a visual image of it at every moment.

From Behavior to Molecular Channel

A study of two individuals with inactivating variations in the PIEZO2 gene provided human evidence for the role of its channel in aspects of touch and proprioception. They exhibited more pronounced sensory and motor difficulties in the absence of visual cues, while retaining the capacity to learn and perform daily tasks. This is a specific observation in a rare genetic condition, not a conclusion that a single gene explains every sensation or skill. [6]

The value of this type of research lies in its connection between human experience and a cellular structure that can be studied, while preserving the limitations of the sample and the conclusion. The difference in receptors does not render the individual less human, nor does it allow for the generalization of this experience to every sensory disorder.

News from Within

The term interoception refers to receiving, interpreting, integrating, and regulating responses to signals originating from within the body. The general scope of this research includes the perception of needs such as hunger, thirst, respiration, and satiety, along with processes that may not reach conscious awareness. The internal world is not silent until pain strikes; rather, there are ongoing neural and non-neural connections between the organs and the brain that participate in regulation. [7]

Distinguishing between proprioception and interoception is useful, even if their boundaries overlap in some applications: the former focuses here on the body's position and movement, while the latter focuses on the conditions of its internal environment. We will return to hunger, thirst, and fluid balance in the next part, so that the terminology does not become a substitute for explaining the functions.

The Scent of Joseph: A Quranic Narrative, Not a Laboratory Test

God Almighty said: “And when the caravan departed, their father said, ‘Indeed, I find the scent of Joseph, if you do not think me delirious.’” [Yusuf: 94]

And He, the Exalted, says at the end of the account: “Then when the bearer of good tidings arrived, he placed it on his face, and he regained his sight. He said, ‘Did I not tell you that I know from God what you do not know?’” [Yusuf: 96]

Majma’ al-Bayan presents the account in the context of Jacob and Joseph, peace be upon them, and the sincerity of hope and the lifting of hardship, and mentions different accounts regarding distance and details. We do not need to select an unverified numerical distance from those reports to prove the Qur'anic text. Nor do we turn the specific incident into a law that determines the extent of a person's sense of smell, or into a prescription for treating blindness with a shirt; for the study of the senses is conducted according to testable principles, and the account here is part of a prophetic story with its own specific context. [8]

Maintaining the Senses and Knowing Their Limits

A change or loss of smell may be related to an infection, obstruction, injury, medication, or other causes. A persistent or life-disrupting problem requires evaluation, rather than randomly trying to compensate by increasing salt intake or assuming a single cause. The mere presence of a symptom does not diagnose a specific neurological disease, nor does it justify discontinuing prescribed medication without review. [1]

A healthy sense of smell does not make us safe from all dangers; carbon monoxide is an odorless and colorless gas. Prevention depends on the safe use of combustion equipment, proper ventilation, and appropriate alarm systems, not on a nose test. The sense is useful, but it is not a universal detector for every harmful substance. [9]

Chapter Summary

We encounter the world in more than one way, and we come to know our bodies through experience, not just from a mirror. The more we understand the diversity of

these ways, the less inclined we are to accuse those whose senses differ from our own of exaggeration or negligence. The body map still contains a section that connects the breath, larynx, tongue, lips, and brain: how is sound produced, and how does it become speech?

Chapter Sources and Documentation

[1] NIDCD, Smell Disorders. Receptors, nasal and posterior pathways, and the multi-cause nature of the disorder; no single diagnosis from a single presentation.

[2] NIDCD, Taste Disorders. Taste buds, basic tastes, flavor integration, and a critique of the separate tongue map.

[3] Purves et al., Neuroscience, 2nd ed., 2001, Cutaneous and Subcutaneous Somatic Sensory Receptors. The text excerpt available through NCBI Bookshelf search was used for the general classification.

[4] Ibid., Mechanoreceptors Specialized to Receive Tactile Information. The available excerpt was used for receptor names and their general functions; the full page could not be read.

[5] Cleveland Clinic, Proprioception, Revised July 25, 2024. Mechanical information from tissues and its integration with the nervous and vestibular systems.

[6] NCCIH, Study Provides New Information on Mechanisms Involved in Touch Sensation and Self-Perception of Body in Space, September 21, 2016. An account by an institution involved in the research of the study by Chesler et al., published in NEJM, 375:1355–1364; the original article was not read in full.

[7] NCCIH, Interoception Research, Explanation of the concept within the 2021–2025 research plan. Definition and two-way communication; no specific treatment efficacy is established.

[8] The Holy Qur'an, Yusuf: 94 and 96; Al-Tabarsi, Majma' al-Bayan, Interpretation of verses 94–98. Narrated distances or subsidiary reports were not accepted without verification.

[9] CDC, Carbon Monoxide Poisoning Basics, January 12, 2026. Odorlessness and the Importance of Prevention and Warning Measures.

Chapter 52: Voice and Speech

We utter a short word, without considering what went into it: air expelled at the right time, folds that vibrated, a cavity that altered the resonance of the sound, a tongue and lips that shaped its points of articulation, and a brain that organized the movement and meaning. Then the word reaches another person, comforting, teaching, or harming them. Here, the final chapter of the Body Map meets a question that has accompanied the book since its beginning: What do we do with the power we have been given?

The Creation of Man and the Teaching of Expression

God Almighty said: {The Most Gracious} [Ar-Rahman: 1]. {He taught the Qur’an} [Ar-Rahman: 2]. {He created man} [Ar-Rahman: 3]. {He taught him expression} [Ar-Rahman: 4].

At-Tabarsi presents several interpretations of the meaning of al-bayan (expression), but he considers its explanation as speech, writing, understanding, and making others understand to be the most apparent and comprehensive. This meaning opens

a wider door than simply producing a sound; it refers to the manifestation of meaning and the possibility of learning and making others understand. Acknowledging the blessing of expression does not necessitate denying it to those who communicate through writing or sign language, nor does it mean making unimpaired speech alone the measure of full humanity. [1]

Voice, Speech, and Language

The human voice, in its voiced form, arises from the vibration of the vocal folds by the passage of air. Speech is the organization of precise movements that produce distinctive sounds using the speech organs. Language, however, is the system of expression and communication that carries meanings and can be used in speech, writing, and sign language. One of these levels may be affected while aspects of the others remain. Loss of voice is not equivalent to loss of language skills, and difficulty in pronouncing a word is not proof that its meaning is lost to the speaker. [2]

The Larynx: A Structure for Air and Sound

The larynx is located in the neck, connected to the airway above the trachea. It contains cartilage, muscles, ligaments, and membranes that maintain its structure and allow for movement. Anatomically, it is divided into the supraglottic, glottic, and infraglottic regions. The vocal folds are located in the glottic region; they are not two dry, taut strings like the strings of an instrument, although the term "vocal cords" is commonly used. The larynx also participates in the passage of air and protects the respiratory tract during swallowing, so its function is not limited to speech. [3]

During breathing, the vocal folds separate to allow air to pass through. During vocalization, they converge, and the flow of air and the interaction of the tissues with it cause them to vibrate. The cavities of the pharynx, mouth, and nose then contribute to the formation of resonance. The properties of the folds and cavities affect the pitch and tone of the voice; therefore, there is no single vocal form that everyone must have. [4]

From Resonance to Articulation

Speech sounds require coordination between breathing, vocalization, and the movements of the palate, tongue, and lips. The tongue changes position, and the lips open or narrow the passageway, creating differences that language recognizes as sounds with a function. The motor system monitors its results through sensory information, including hearing and touch. Speech is not simply a movement of the tongue, so not every difficulty in speaking is explained by the phrase "his tongue is heavy." [5]

And meaning is not created by the larynx alone. The voice may be regular, yet word choice or sentence comprehension remains impaired. The idea may be clear, but the movements needed to express it are difficult. Therefore, a specialized assessment differentiates between problems of voice, articulation, fluency, and language, rather than combining them into a single diagnosis.

Aphasia and Stuttering: The Difference Between the Problems Alters Care

Aphasia arises from damage to brain networks responsible for language and can affect expression, comprehension, reading, and writing to varying degrees. Stroke and brain injury are among its causes, and it can accompany other conditions. Aphasia is not simply hoarseness or weakness of the tongue, and we cannot make a sweeping judgment of a person's overall abilities based solely on it. [6]

Stuttering, on the other hand, may manifest as the repetition or prolongation of sounds or syllables, or as pauses that are difficult to overcome. It is not evidence of lying or low intelligence, and not all forms of stuttering should be attributed to psychological trauma. Developmental, neurological, and genetic factors interact depending on the individual case. Good communication involves listening to the meaning and not rushing to finish the speaker's sentences or mocking their pauses. Speech-language pathologists can help in assessment and selecting appropriate support. [5]

Moses' Supplication and the Purpose of Understanding

Moses, peace be upon him, said: “He said, ‘My Lord, expand my breast.’” [Ta-Ha: 25]. “And ease my task for me.” [Ta-Ha: 26].

“And untie the knot from my tongue” [Ta-Ha: 27]. “That they may understand my speech” [Ta-Ha: 28].

These verses clarify the purpose of the request: that the audience understand the message being conveyed. The commentaries mention various accounts of the cause of the speech impediment and how it is resolved, and Majma’ al-Bayan presents several views and favors the view that the prayer was fully answered. We do not diagnose a specific modern disorder based solely on these words, nor do we affirm the story of the "ember" and its details simply because it is circulated. Turning to God in supplication does not make seeking treatment or preparing for speech incompatible with reliance on God. [7]

When Communication Requires Another Means

Augmentative and alternative communication methods include pointing to pictures or words, writing, communication boards, and speech-generating applications and devices. These may be used temporarily or continuously, or alongside existing speech. The assessment selects a method that suits the individual's abilities and environment, while training those around them. A method is ineffective if it remains solely in the hands of the user and others do not give them time to respond. [8]

We must not equate the inability to use the mouth for speech with the inability to take a stance or express a desire. We seek the most feasible means of communication, preserving the individual's presence and privacy, and we do not speak on their behalf simply because their method is slower than ours. Technology here is a tool to serve the relationship, not a substitute for patience and respect.

Voice Care

Resting the voice, avoiding shouting or trying to speak over noise, staying away from smoking and secondhand smoke, and drinking fluids appropriate for one's health can all help. A microphone can reduce the need to raise it when teaching and speaking. Hoarseness or repeated straining of the voice deserves evaluation, not assuming a single cause or taking random medication. A forced whisper is not necessarily a relief for the vocal folds. [4]

The Right of the Tongue and the Limits of Speech

In the Treatise on Rights attributed to Imam Zayn al-Abidin (peace be upon him), in Tuhaf al-Uqul, it states: “As for the right of the tongue, it is to honor it by refraining from obscenity, to accustom it to goodness, and to guide it towards good manners.” [9] Obscenity here refers to foul language. This wording was verified in its source, without implying that all the chains of transmission of the treatise have been fully assessed.

The right of the tongue is not determined by the quantity of words nor by their absence. Silence may be a safeguard against falsehood, while speech may be a defense of the oppressed or a clarification needed by the ignorant. Part of its etiquette is truthfulness in attributing information, gentleness in giving advice, and not violating people's privacy. If the body coordinates many organs to produce a single word, then we should certainly pay attention to the choice of that word.

Conclusion of the Part on the Map of the Body

We began this part with the body as a unified whole, then moved through its skin, bones, muscles, blood, and organs, until we reached the senses and sound. These chapters were not isolated islands; each one required the preceding one. Now, the perspective shifts: having inquired about the body's composition, we now ask how it maintains its balance, utilizes energy, experiences hunger, sleeps, moves, suffers pain, and repairs itself. This is the journey of Part Six.

Chapter Sources and Documentation

[1] The Holy Quran, Ar-Rahman: 1–4; At-Tabarsi, Majma' al-Bayan, explanation of al-bayan (expression) and its interpretations.

[2] NIDCD, Voice, Speech, and Language: What Are They?, Text Version, March 13, 2023. Differentiating between the three levels.

[3] Cleveland Clinic, Larynx (Voice Box), Revised August 23, 2023. Sections of the larynx, its components, and general functions.

[4] NIDCD, Taking Care of Your Voice. Vocalization, resonance, and general care; the description of muscles as smooth, and the general dietary recommendations as a one-size-fits-all approach, were not adopted.

[5] NIDCD, Stuttering. Motor coordination of speech, the multiple contributing factors, and support for communication; recovery rates were not reported as individual projections.

[6] NIDCD, Aphasia. The impact of language network damage and its diverse manifestations, without self-diagnosis or generalization of a single location to all cases.

[7] The Holy Qur'an, Ta-Ha: 25–28; Al-Tabarsi, Majma' al-Bayan, commentary on verses 17–36. The Qur'anic supplication was separated from unverified reports regarding the cause of the speech impediment.

[8] ASHA, Augmentative and Alternative Communication, general education page referenced from the association's website. Communication methods, individual adaptation, and training.

[9] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, edited by Ali Akbar al-Ghaffari, p. 256, beginning of the section on the right of the tongue; the rest of the paragraph is on p. 257. Textual reference while maintaining the limits of the assessment of the chains of transmission.

Part 6: How the Body Sustains Life

We have learned the locations of the organs and their parts, and it remains for us to see how they maintain their cohesion. For life is not merely possessing a heart, lungs, and kidneys, but rather the continuation of the relationships between them amidst a changing world: heat and cold, food and fasting, movement and stillness, health and injury. In this part, we move from the map of the body to its daily functioning; from the names of the structures to the processes that make their survival possible.

Chapter 53: Homeostasis

You enter a cold room and fold your arms; you climb stairs and your breathing changes; you go for hours without drink and thirst becomes insistent. You sense some of what is happening, and many more details escape you. Behind these conditions are systems that monitor and respond; they don't prevent every change, but rather try to keep the conditions of life within limits that allow the body to function.

The Stability Created by Movement

Physiology calls this regulation "homeostasis" or internal balance. It doesn't mean that every value remains fixed at a single number at every moment; the body changes with activity, rest, and other factors. Rather, it means maintaining an internal environment suitable for bodily functions through constantly renewed responses. This is similar to maintaining balance while walking: the foot doesn't remain still to avoid falling, but moves in a way that maintains continuity. The analogy is meant to approximate the concept, not describe the biological mechanism itself. [1]

In the negative feedback model, receptors detect a change, regulatory centers process the information, and organs or cells respond in a way that limits the direction of that change. The word "negative" doesn't mean harmful; it describes the opposing response to the deviation. These systems are not all simple, separate chains; in humans, neural, hormonal, and local signals are intertwined, and more than one pathway may act on the same variable. [1]

Positive feedback reinforces a change that has already begun. An example is one of the pathways involved in labor: stretching of the cervix contributes to the release of oxytocin, which enhances uterine contractions, thus increasing the stretch signals. This does not mean that all of childbirth is reduced to a single hormone, nor that every reinforcement is beneficial, no matter how long it lasts. The effectiveness of the response depends on its location and scope. [1]

Temperature Cannot Be Reduced to a Single Number

The body produces heat during its metabolic activity and exchanges it with its environment. The hypothalamus helps regulate thermal responses; blood flow to the

skin and sweating can increase when heat needs to be dissipated, or loss can decrease and muscle shivering can occur in the cold. The effect of these mechanisms depends on the conditions: sweat cools the body when it evaporates, not merely when it appears, and high humidity can hinder the effectiveness of evaporation. [2]

Heat is transferred by radiation, conduction, air or water movement, and evaporation, but the proportions of these methods are not fixed ratios suitable for every weather, clothing, and activity. A body moving in hot, humid conditions faces a different situation than a body at rest in a temperate room. Therefore, knowing that a regulatory mechanism exists is not enough to say that it will overcome any exposure. [2]

It is also incorrect to consider thirty-seven degrees Celsius a fixed rule that does not vary among people. Temperature readings are affected by factors including age, activity level, and time of day. The meaning of the number depends on the context, the method of measurement, and the individual's health status. A statement in a general guide does not become a diagnosis for an individual. Natural variation does not rule out illness, just as a slight difference from the average does not, on its own, prove it. [3]

Water is distributed, not concentrated in a single reservoir.

Body water exists both inside and outside cells. The extracellular space includes the surrounding fluid and blood plasma. These spaces are separated by membranes and barriers that allow some substances to pass through while restricting others; therefore, the composition of all fluids is not equal. Sodium is more concentrated outside cells, and potassium is more concentrated inside them under normal circumstances. These differences are part of the function, not a defect that needs to be eliminated. [4]

Water moves according to differences in osmotic concentration across the membranes that allow its passage. It's not like pouring water into open containers until the levels are equal; there are dissolved substances, carriers, pressures, and barriers. Therefore, the volumes of the spaces may change when equilibrium is disturbed, and the total amount of water alone does not reflect the proper distribution of water. [4]

Water enters us from drinks and food, some is produced during metabolism, and it is lost through urine and other means, including the skin and respiration. The kidneys contribute to regulating excretion according to the body's condition. We will return to thirst in its proper chapter; for now, the basic idea suffices: intake and output are not independent, and conserving water does not mean eliminating its natural loss. [5]

Salts: Amounts that Perform Functions

When we say "body salts," we might think only of table salt, but the meaning is broader: sodium, potassium, calcium, magnesium, chloride, and other ions. These ions participate in electrical signals, muscle function, fluid balance, and other processes. Their usefulness is not a reason to consider increasing them an absolute

good; their function depends on the quantity, location, and relationship to other substances. [6]

Their regulation results from the interaction of absorption, excretion, and distribution among tissues, along with hormonal signals and appropriate renal function. A person does not infer a deficiency of a particular mineral from fatigue alone, nor does one infer the body's need for a supplement simply because that mineral's name appears in the description of an important function. Understanding a physiological need is different from proving a deficiency in a specific individual. [6]

Acidity: Cooperation between the lungs, kidneys, and buffers

The chemical environment affects the function of proteins and enzymes, and one of its variables is acidity, measured by pH. Buffering systems, including bicarbonate and proteins, help limit its change. These buffers do not remove all the burden on their own; rather, they complement the elimination of carbon dioxide through the lungs and the processing of hydrogen and bicarbonate ions by the kidneys. [7]

The speed of these responses varies. Chemical buffers can respond quickly, and pulmonary ventilation changes, while some aspects of renal regulation require more time. Carbon dioxide excretion, all other factors being equal, tends to raise the pH; therefore, the relationship should not be reversed due to the misconception that "acidity" is synonymous with a higher pH. A lower pH indicates higher acidity, not the other way around. [7]

This highlights the flaw in the slogan "alkalizing the body" through food or water as a general treatment. Urine pH may change, but this does not prove a change in blood acidity in the way the slogan suggests. Increasing vegetable intake may be beneficial for nutritional reasons, but it is not a cancer treatment through altering blood acidity. The true benefit of a food does not justify a misinterpretation of its benefits. [8]

Measure, Wisdom, and the Limits of the Body

God Almighty said: {Indeed, We have created everything in precise measure.} [Al-Qamar: 49] In its interpretation of the verse, Majma' al-Bayan presents the meaning of the measure dictated by wisdom. We read in it an invitation to contemplate order, not a table of laboratory values, nor a declaration that bodies do not get sick. Establishing measure in creation does not absolve us from investigating its observable causes, nor does it make every scientific explanation we propose part of the verse's meaning. [9]

The body's systems may compensate for a disturbance for a time, then reach their limits. Compensation is not always a cure, and the existence of a protective mechanism does not mean that its owner is morally responsible if illness overcomes him. A person preserves what he can of the means of his well-being, seeks knowledge and assistance, and does not hold his body accountable as if it were a machine that promised not to malfunction.

Thus, it becomes clear that balance is a continuous process, not a state of tranquility devoid of events. But all this process requires matter and energy. So where does the

energy come from, and how does it transfer from food to the processes that sustain our lives? That is the subject of the next chapter.

Chapter Sources and Limits of Inference

[1] OpenStax, Anatomy and Physiology, 1.5: The Concept of Homeostasis and Feedback Models; general principles were used, not all examples and generalizations on the page.

[2] Ibid., 24.6: Heat regulation and modes of heat transfer; no fixed percentages of heat loss or oversimplified definitions of energy expenditure were used.

[3] MedlinePlus, Body temperature norms: Temperature varies according to person, age, activity, and time; not a reference for individual diagnosis.

[4] OpenStax, 26.1: Body fluid compartments and differences in their composition; the differing numerical percentages of water content given on the page were not used.

[5] Ibid., 26.2: Water sources, loss, and the kidney's role in water balance.

[6] Ibid., 26.3: Electrolyte functions and regulation; not a basis for prescribing supplements or fluids.

[7] Ibid., 26.4: Chemical buffers and the respiratory and renal regulation of acidity. The treatment proposals mentioned in some of its sections were not included.

[8] MD Anderson Cancer Center, Alkaline diet: What cancer patients should know: A critique of explaining the benefits of food in terms of alkalizing the blood; no treatment is prescribed in this chapter.

[9] Al-Tabarsi, Majma' al-Bayan, Commentary on Surat al-Qamar, verses 43–55, especially verse 49; the meaning of divine measure is distinguished from inferred physiological details.

Chapter 54: Food, Energy and Metabolism

A grain of wheat does not remain in the body in the same form it was in the field. It undergoes digestion and absorption, and its components then enter different pathways: some are used to build cells, some are stored, and others contribute to providing energy for the body's functions. When we eat, we are not simply adding mass to mass; we are providing a living organism with some of what it needs to continue.

Digestion is one realm, and metabolism is a world beyond it.

Digestion prepares parts of food for absorption, while metabolism is the sum of the chemical reactions that take place in the body. This includes breaking down molecules into smaller components and building molecules from simpler units. Breakdown here does not necessarily mean disease, nor does building necessarily mean health in every circumstance; life requires both, and the regulation of the relationship between them. [1]

Certain pathways contribute to providing the energy necessary for cellular function. One of the transporters of this energy is the adenosine triphosphate molecule, known as ATP. Its breakdown is associated with reactions that require energy, and it is constantly being regenerated. It is an energy carrier with rapid turnover, not a substitute for long-term food stores. It is incorrect to portray the breaking of a

chemical bond alone as releasing energy; the calculation involves the entire reaction and the bonds that are formed and broken. [1]

At this level, we do not find a mysterious "energy" that can explain every feeling. We are talking about processes that can be described and measured. A person may feel energetic or weak for many reasons, but subjective sensation does not directly measure the amount of ATP in all their cells, nor is it sufficient to diagnose a specific metabolic disorder.

Sugars: Multiple Pathways, No Flame Inside the Cell

Simple sugars, including glucose, are products of the digestion of many carbohydrates. Glucose breakdown begins in the cytoplasm through a series of reactions that yield pyruvate and a quantity of ATP. Under suitable conditions, its derivatives enter stages associated with the mitochondria, including the citric acid cycle and the electron transport chain. Oxygen acts as the final electron acceptor in this chain; hence, a key aspect of the link between pulmonary respiration and cellular energy. [2]

Food is not burned in the cell like a piece of wood. Enzymes and chemical intermediates carry out the process through organized steps. In the inner mitochondrial membrane, the differential distribution of protons contributes to the activation of an enzyme that synthesizes ATP. This is a simplified description of a pathway, not a claim that every cell uses the same fuel or that all ATP is produced within the mitochondria. [2]

Fat: Storage and Building Material

Fat is not a foreign substance that should be eliminated from the human body. Its components are incorporated into cellular structures, and triglycerides are an important form of energy storage. When broken down, they produce glycerol and fatty acids; fatty acid oxidation pathways can contribute to ATP production. They are richer in energy per unit mass than carbohydrates or proteins. [3]

The liver may produce ketone bodies that tissues use as fuel under certain conditions, including prolonged food deprivation. However, knowing this adaptation does not mean that starvation is safe, nor that one diet is suitable for everyone. The physiological description answers what might happen, but deciding what to do requires an assessment of the situation, the evidence, and the risks. [3]

Protein: Beyond Growing Muscle

We need amino acids to build a variety of proteins: enzymes, receptors, transporters, and building blocks, not just muscles. Some of these amino acids are essential, meaning the body needs to obtain them from food. The carbon structures of amino acids can be used in energy pathways, but the body does not maintain an inactive protein store like it does with triglycerides. [4]

The breakdown of amino acids requires the handling of nitrogen. The liver contributes to its conversion into excretable urea, and the kidneys participate in its elimination. Therefore, protein metabolism is not isolated from the function of other

organs. Nutritional quality is not measured by an unlimited increase in protein; needs vary, and the presence of kidney or metabolic disease may alter what is suitable for an individual. This is a reminder of the need for individualization, not a determination of therapeutic quantities. [4]

Between meals

After a meal, pathways are directed towards utilizing nutrients and storing some of them. Insulin contributes to regulating glucose utilization and storage, and to supporting anabolic processes. Glycogen is formed in the liver and muscles, but the roles of their stores are not identical: the liver participates in maintaining blood glucose between meals, while muscle glycogen primarily serves its local function. [5]

When absorption is complete, the organs do not pause to await the next meal. Hormonal signals shift, glucagon helps mobilize liver stores, and gluconeogenesis from non-carbohydrate sources contributes to sustained energy supply. These pathways don't operate like switches that flip all at once; the pattern is influenced by fasting duration, food composition, activity level, and health status. [5]

Good nutrition is not just about calories.

The World Health Organization emphasizes the principles of sufficiency, balance, moderation, and variety, along with food safety. Energy alone is not enough: we need foods that provide different components, and the composition of an appropriate pattern changes with age, circumstances, and activity level. Whole grains, vegetables, fruits, legumes, and other foods are not competing for the title of "miracle food," but rather elements that can be integrated into a suitable pattern. [6]

Vitamins have specific functions; deficiencies in some can be harmful, but increasing the dose is not synonymous with increased well-being. Some conditions may warrant supplementation, while advertising is no substitute for knowing the actual need. A varied diet is generally recommended, but determining whether a supplement is needed, and its type and dose, depends on the individual. [7]

Energy Balance Does Not Determine a Person's Worth

Changes in the body's energy reserves arise from the relationship between energy intake and expenditure over a given period. However, describing this relationship alone does not explain why a person eats or moves in a certain way. Genetics, sleep, certain medications and illnesses, and access to suitable food and a safe place to be active can all influence weight. [8]

It is unfair to let a physiological equation become a judgment of a person's worth. Recognizing the various factors does not negate the role of habits, but it makes providing help more effective than criticizing. One person may need treatment, another access to affordable food, and a third support to help them overcome a painful relationship with food. Respecting someone does not depend on the result on the scale.

From Good Things to the Responsibility of Choice

God Almighty says: “O Children of Adam, take your adornment at every mosque, and eat and drink, but do not be excessive. Indeed, He does not like the excessive.” [Al-A'raf: 31]. This verse combines permission to benefit from food with a prohibition against extravagance. Majma’ al-Bayan presents meanings of exceeding the limit related to quantity and to what is permissible and forbidden. Therefore, the verse should not be reduced to a diet aimed at weight loss, nor should one infer extravagance or piety from a person's appearance. [9]

This table that reaches us bears the fruits of the land, water, and people. Gratitude is not about belittling the pleasure of what is permissible, but rather about understanding its place and responsibility: to eat consciously and not to let our abundance obscure the needs of others. Between the mechanisms of the cell and the meaning of gratitude lies a space of cooperation, where there is no need to invent a correspondence between every chemical reaction and a Quranic word.

We have learned something about what the body does with food. The question that precedes the meal remains: How do we know we need it? And why might we crave food without immediate need, or need water before we realize it? We move on to hunger, thirst, and satiety.

Sources of the Chapter and Limits of Reasoning

[1] OpenStax, 24.1: The concept of metabolism, anabolism, catabolism, and ATP turnover; neither fixed efficiency ratios nor a portrayal of ATP as a long-term energy store were used.

[2] The same source, 24.2: The general outlines of glycolysis and cellular respiration; neither the old numerical ATP yield nor the generalization of all tissues' dependence on insulin for glucose uptake were used.

[3] Ibid., 24.3: Fat mobilization, fatty acid oxidation, and ketone bodies; the inaccurate explanation of ketoacidosis was not reported.

[4] Ibid., 24.4: Functions of protein, amino acids, and nitrogen elimination; the therapeutic section on metabolic diseases was not used.

[5] Ibid., 24.5: General difference between the absorption and post-absorption states; no rigid transition times or therapeutic fasting prescription was given.

[6] World Health Organization, Healthy Diet, updated 26 January 2026: Principles of a varied, balanced, and safe diet.

[7] MedlinePlus, Vitamins: The diversity of vitamin functions, the limits of supplementation, and the risks of high doses.

[8] NIDDK, Factors Affecting Weight & Health: Genetic, health, drug, and environmental factors that influence weight; separating explanation from stigma.

[9] Al-Tabarsi, Majma' al-Bayan, Tafsir al-A'raf: 31–32; the anecdote on the page was not used to authenticate a medical hadith or to confine medicine to a single statement.

Chapter 55: Hunger, Thirst and Satiety

You might read a whole page and then find your mind preoccupied with a glass of water. You might finish your meal and then a familiar aroma awakens a new desire to

eat. Our relationship with food and water is not a list of requests that arrive at fixed times. It is an interaction between the body's needs and signals, what we know and crave, and what is available to us.

Hunger Is a Message, Not Something to Blame

One of the signals involved in regulating eating is the hormone ghrelin, which is primarily produced by the stomach. Its levels tend to rise before meals and fall after eating, and it contributes to stimulating appetite through effects in the brain, including the hypothalamus. However, it is not the only "hunger switch"; it has other roles, and not every food craving should be explained by its supposed level. [1]

Its responses change with dietary conditions. It may rise when calories are restricted and weight is lost, which helps explain why some diets are difficult to stick to. This is not an argument against human choice, but rather a reason not to reduce the difficulty to a weakness of character. Furthermore, its common name, "hunger hormone," does not make every instance of hunger a sign of a hormonal disorder. [1]

Hunger is fundamentally a need that warrants being fed, not a flaw that deserves reprimand. A person may choose when to eat for religious or practical reasons, but choice loses its meaning if we treat the body as an adversary to be humiliated. Discipline is different from punishment, and care is different from indiscriminately responding to every craving.

Leptin: News about the Store

Adipose tissue secretes the hormone leptin, which is involved in informing the brain about energy stores and regulating homeostasis over a longer period. Therefore, portraying it as a message that only appears after the last bite is a misleading oversimplification; it is much more than a signal to stop a single meal. It acts primarily via the hypothalamus, with receptors in other locations as well. [2]

Its levels may be high in some obese individuals, with a reduced response to its effects; more of the hormone does not necessarily mean a greater expected effect. There are rare cases of congenital deficiency, but this does not explain all weight gain. These are examples of differing mechanisms and are not meant to help the reader diagnose themselves with leptin resistance or purchase a product that promises to regulate it. [2]

Between ghrelin and leptin, there is no battle between a bad and a good hormone. Both are part of a regulatory system that needs to communicate needs and respond to changes in stores. Simple names aid memorization, but they can be misleading if they replace the actual relationships.

When Need Meets Habit

In describing our experience, we must distinguish between the need for food and the desire for a specific food. We may eat because the meal is available now and will not be later, or because we are sharing with our family, or because a sight or smell reminds us of something we love. These observations do not negate the physiological aspect, but rather prevent reducing the human experience to a single molecule.

Not everyone has the same freedom at the table. Those who work long hours, those who lack sufficient food, and those who depend on others for sustenance do not start from the same conditions. Therefore, the useful question is sometimes: What does this person need to eat regularly and with dignity? Before asking: Why didn't they do what we advised them to do?

Thirst and Water Management

A high concentration of solutes in body fluids contributes to stimulating thirst pathways and the release of antidiuretic hormone. This hormone is produced in the hypothalamus and released from the posterior pituitary gland, and it helps the kidneys reabsorb water. Reduced circulatory volume and the renin-angiotensin pathway may also contribute to stimulating thirst. Thus, the need for fluids is integrated with the need to minimize water loss, and balance is not solely dependent on sensation. [3]

Although dry mouth may accompany thirst, it does not negate the need for a comprehensive assessment of the condition. It is important not to interpret the description of the regulatory system as a guarantee that it functions with the same efficiency at every age and in every disease. Sometimes, a person needs someone to notice their need or provide them with water.

Who can reach the glass?

Susceptibility to dehydration increases in conditions such as vomiting, diarrhea, sweating, and fever, and in those who are dependent on others for fluids. Possible signs include decreased urine output, darker urine color, dizziness, and dry mouth; in infants, fewer wet diapers or unusual drowsiness may also be present. No single sign alone can establish the cause, but their combination warrants attention. [4]

Severe symptoms, such as altered mental status or marked deterioration, require immediate medical attention. Replacing fluids lost through vomiting and diarrhea may necessitate an appropriate rehydration solution; it is not sufficient to assume that any beverage will replace water and electrolytes in the required proportions. A healthcare professional will determine what is appropriate for the person’s age and condition; we do not offer any home remedies with speculative concentrations. [4]

In nursing homes, homes, and hospitals, providing a cup nearby and helping someone hold it can be a form of life-saving care. These may seem like small acts, but they reveal that the body's needs sometimes become shared responsibilities.

More is not always better.

Just as dehydration can be harmful, so too can excessive water intake when it exceeds the body's ability to eliminate it. Sodium levels in the blood can drop, and water can enter cells, including brain cells, potentially leading to dangerous situations. Therefore, there is no point in competing to drink the most, nor in considering water limitless simply because it is necessary. [5]

The logic of care does not align with absolute slogans like: drink nonstop, or ignore your thirst to strengthen yourself. We need the right amount and the right

circumstances, and some illnesses may require a specific fluid plan determined by the medical team. Understanding balance teaches us to ask for limits, not to seek new excesses.

The Right of the Stomach and the Prohibition of Starving a Person

In the Treatise on Rights attributed to Imam Ali ibn al-Husayn (peace be upon him), as cited in Tuhaf al-Uqul: “As for the right of your stomach, it is that you do not make it a vessel for a little of what is forbidden, nor for much, and that you are moderate in what is permissible.” The text shifts the focus from merely satisfying the body to the responsibility of the source of food and the manner of its consumption. This is a reference to the text in the aforementioned book; we are not judging the authenticity of all the chains of transmission of the treatise, as its chain of transmission has not been fully investigated here. [6]

The encouragement of moderation does not imply that the need of the sick or child for nourishment is contrary to virtue, nor that harmful abstinence from food is a path to perfection. The ethical objective does not negate the differences in bodies and circumstances. It is cruel to use the etiquette of food to rebuke someone who cannot find food, or to hold the sick responsible for symptoms they did not choose.

God Almighty said: “So let them worship the Lord of this House” [Quraysh: 3], “Who has fed them against hunger and made them safe from fear” [Quraysh: 4]. The mention of food and security serves as a reminder of God's blessings and an invitation to worship. These verses do not explain the hormones of appetite, but they place the relieving of hunger within the context of a blessing that demands recognition and gratitude. [7]

We emerge from this chapter with hunger less of a mystery, without reducing the hungry person to a number in an equation. After food and drink comes another need that one cannot fulfill through willpower alone: sleep. So what happens when we are absent from the daytime routine?

Chapter Sources and Limitations of Inference

[1] Cleveland Clinic, Ghrelin: Origin, Role, and Changes with Meals and Energy Restriction; no suggestions for hormone reduction were used as a treatment.

[2] Ibid., Leptin: Its Longer-Term Role in Regulating Energy Stores and Variability in Response; no general laboratory limits were used for the reader's diagnosis.

[3] OpenStax, 26.2: Thirst, Antidiuretic Hormone, and Angiotensin; brief description supplementing Chapter 53, without the imprecise definition of osmolality on the page.

[4] NHS, Dehydration: Risk Factors, Signs of Dehydration, Seeking Help, and Rehydration Solutions; general guidance, not individual diagnosis.

[5] Cleveland Clinic, Water Intoxication: Risks of Excessive Water Intake and Hyponatremia; there are no therapeutic doses in this chapter.

[6] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, edited by Ali Akbar al-Ghaffari, p. 258, Treatise on Rights, The Right of the Stomach. The chain of transmission for the treatise has not been fully investigated, and no nutritional doses can be derived from it.

[7] Al-Tabarsi, Majma' al-Bayan, commentary on Surah Quraysh, especially verses 3-4; feeding and

security in the context of gratitude and worship.

Chapter 56: Sleep, Wakefulness and the Biological Clock

We lay our heads on the pillow, leaving many things pending until morning. The scene appears to be a pause, but it is not a closure of life. The heart continues its work, breathing continues its course, and the patterns of brain and body activity change. The sleeper does not relinquish their need for care; they enter a biological state with its own regulation, not an empty interval between two days.

One Night Is Not One Sleep

Experts distinguish between rapid eye movement sleep (REM) and non-REM sleep. The latter is divided into three stages based on brain activity recordings and other indicators. It begins with a transition from wakefulness, followed by more stable sleep, and then deep, slow-wave sleep. Cycles of these states recur throughout the night, though their duration varies for everyone. [1]

Deep sleep tends to occupy a larger share in the early part of the night, while REM periods are relatively longer in the later part. During REM sleep, the brain is active, the eyes move rapidly, and the tone of most skeletal muscles decreases significantly. This should not be interpreted as every muscle shutting down; essential life functions continue. Many vivid dreams are associated with this state, but not every dream experience is limited to it. [1]

This division is not a matter of moral value; there is no such thing as "virtuous" sleep because it is deep and another that is useless because it is different. Rather, these are integrated states within the structure of sleep, which we learn in order to understand what is happening and to recognize disturbances when necessary, not to chase a single stage on a personal device screen.

Sleep Pressure: What Accumulates with Wakefulness

The biological need for sleep increases with prolonged wakefulness. Adenosine is associated with one of the pathways of this pressure; caffeine affects alertness by blocking its action at its receptors. This does not mean that caffeine eliminates the accumulated need or gives the body a complete substitute for sleep. It affects a signal, not the underlying need for rest. [2]

Sleep pressure interacts with the circadian rhythm. Therefore, one may have difficulty falling asleep at a time that does not suit their rhythm despite being tired, or feel relatively alert at a time when they are accustomed to staying up late. This is one of the reasons why the question of sleep is not simply a matter of the number of hours since the last wakefulness. [2]

Clocks Distributed in the Body

The circadian rhythm is a pattern that repeats approximately every twenty-four hours and includes more functions than just sleep: hormone secretion, temperature changes, and aspects of appetite and digestion. Timing systems exist in multiple

tissues and organs, and the suprachiasmatic nucleus in the brain plays a central role in coordinating them. There is no clock hand in the head, but rather the activity of cells, genes, and proteins that interact periodically. [3]

Light and darkness are among the most important signals that regulate this rhythm in relation to the external world. The central clock contributes to regulating melatonin secretion according to light signals. Traveling between time zones, working nights, or being in light late at night can disrupt the relationship between the internal and socially required timing. A difference in pattern between two people does not necessarily mean that one of them is lazy. [3]

This fact teaches us that rest is not just for the individual; work schedules, noise levels, and caring for a child or a sick person can all determine when a person can sleep. It's only fair to understand these circumstances before offering advice and to make our living environment conducive to sleep whenever possible.

What does sleep provide?

Sleep supports brain function and learning, and contributes to maintaining physical health and growth. Insufficient sleep or poor sleep quality is linked to multiple health risks, including metabolic and cardiovascular problems. However, being linked to a risk factor doesn't mean that everyone who develops an illness had poor sleep, nor does it mean that increased sleep guarantees protection against every disease. [4]

Sleep is also involved in regulating immune and hormonal responses. But we don't need to reduce it to the slogan "brain cleansing" or present a single hypothesis as if it were the only definitive function. It's clear that sleep is an active, multifunctional state, and research is still exploring its details and mechanisms. [4]

Ages are not all the same

The structure of sleep changes with age; the proportion of REM and slow-wave sleep varies between infants, children, and adults. This natural variation does not justify ignoring an elderly person's complaint or treating insomnia as an inevitable fate that needs no evaluation. Describing age-appropriate sleep patterns is no substitute for listening to the individual's experience. [1]

General guidelines suggest that most adults need about seven to nine hours of sleep per night, while teenagers typically need eight to ten. Younger children have higher needs, including age-appropriate naps. These are guidelines; needs may vary during illness or recovery from sleep deprivation, and time in bed is not synonymous with actual sleep. [5]

When drowsiness is no longer fleeting

Sleep deprivation can impair attention, decision-making, memory, and reaction time. Brief episodes of sleep, or microsleeps, may occur without the person noticing. Therefore, a drowsy driver should not be reassured merely by feeling able to resist sleep; such a mistake could harm themselves and others. Safety is paramount, even more so than proving one's ability to stay awake. [6]

Persistent insomnia, significant daytime sleepiness, or severe snoring accompanied by noticeable pauses in breathing or choking during sleep warrant medical evaluation. A partner or family member may notice what the sleeper themselves may not. These signs are not an automatic diagnosis of sleep apnea, but they are appropriate reasons to inquire about it. [7]

This passage is not an endorsement of taking sleeping pills or melatonin without evaluation. Similarity of complaint does not imply similarity of cause, and knowing the name of a hormone does not provide a therapeutic dose suitable for every age.

Sleep, a Sign, and a Blessing

God Almighty said: {And We made your sleep a rest} [An-Naba: 9]. And He, the Exalted, said: “And among His signs is your sleep by night and by day and your seeking of His bounty. Indeed in that are signs for a people who listen.” [Ar-Rum: 23]. The text opens the door to reflection on what we are familiar with, and does not present a classification of sleep stages or the names of brain neurotransmitters. [8, 9]

Mentioning sleep at night and during the day protects us from interpreting the discussion of the regularity of the night as a ruling that negates all daytime sleep. We do not derive from the verse a single clinical schedule for the infant, the night worker, and the sick; rather, we read the blessing of sleep and the request for divine favor within the context of verses that encourage contemplation.

In the morning and evening supplications from Al-Sahifa Al-Sajjadiyya: “He created the night for them so that they might find rest therein from the movements of fatigue and the exertions of toil, and He made it a garment so that they might wear its comfort and sleep, thus providing them with respite and strength.” Here we read the meaning of rest that aids life, not a division between worship that respects the soul and a body that has no right to rest. The reference is to the text of Al-Sahifa in the aforementioned edition, without claiming to have completed the verification of all its chains of transmission. [10]

Sleep reminds us that life is not a continuous capacity for achievement. It is wise to work, and it is wise to accept our need for what renews our capacity to work. When we wake up, we return to movement; how do muscles, nerves, lungs, and heart respond to a single step and then to greater exertion?

Chapter Sources and Limitations of Reasoning

[1] NHLBI, Sleep Phases and Stages: Sleep phases and their changes throughout the night and with age; did not establish fixed cycle durations.

[2] NHLBI, Your Sleep/Wake Cycle: Sleep pressure, adenosine, caffeine, and the interaction of the need for sleep with its timing.

[3] NIGMS, Circadian Rhythms: Central clock, tissue rhythms, light, and melatonin; did not use experimental molecular details to interpret a religious text.

[4] NHLBI, Why Is Sleep Important?: Functions of sleep and health; did not adopt the page formulation of leptin and ghrelin changes as an absolute rule.

[5] NHLBI, How Much Sleep Is Enough?: Age-based sleep guidelines, no individual prescription.

[6] NHLBI, How Sleep Affects Your Health: Performance, attention, microsleeps, and safety; no older incident statistics were reported.

[7] NHLBI, Sleep Apnea Symptoms, updated January 9, 2025: Signs that warrant evaluation, not diagnosis based on snoring alone.

[8] The Holy Quran, An-Naba: 9; Arabic text reviewed, without adopting any particular foreign translation.

[9] The Holy Quran, Ar-Rum: 23; Mention of sleep by night and day and seeking bounty.

[10] Al-Sahifa As-Sajjadiyya Al-Kamilah, the consulted edition edited by Haj Abdul Rahim Afshari Zanjani, p. 47, Morning and Evening Supplication. The supplication is identified by name because its numbering differs between some collections; the chains of transmission (isnad) have not been fully investigated here.

Chapter 57: Movement, Exertion and Rest

When you rise from your seat, no single muscle works alone. Your body position changes, and parts of your body work together to propel you forward while others maintain your balance. A single step may seem insignificant because we are accustomed to it; however, anyone who recovers from an injury knows that movement is a blessing comprised of many actions.

Fibers Are Not a Single Copy

Skeletal muscle fibers differ in their contraction speed, endurance, and energy delivery methods. Some are slower-moving fibers with higher oxidative capacity and greater resistance to fatigue, while others are faster-moving and also vary in their properties. Most muscles contain a mixture of types, not a single type of function. [1]

These differences help in understanding the difference between prolonged standing and a rapid, powerful movement, but they do not allow us to judge a person's abilities by their appearance, nor do they dictate their athletic destiny in a simplistic description of their muscle fibers. Training, coordination, health, skill, and other factors contribute to performance. This teaching classification clarifies the picture but does not exhaust the diversity of muscle tissue. [1]

When Blood Demand Increases

With exertion, the working tissue's supply needs usually increase. The heart can increase its output per minute by changing the beat rate and the volume of blood pumped per beat. This is the meaning of cardiac output: not just the pulse rate, but the combined effect of rate and volume. The response varies depending on the type and intensity of exertion and the individual's condition, and a single pulse number is not a safe standard for everyone. [2]

The muscles themselves help in the return of venous blood. When they contract around the veins, they compress them, and the valves in their positions direct the blood flow towards the heart and prevent its backflow. Therefore, the muscle is not merely a consumer awaiting the service of the circulatory system; rather, its movement contributes to supporting this system. [3]

The pressure changes associated with respiration also contribute to venous return. When we put these relationships together, we understand why studying an isolated organ is insufficient to explain exertion: the heart supplies the muscle, its movement helps the blood return, and respiration participates in both the supply and movement of blood. [3]

Respiration prepares and accompanies

Pulmonary ventilation increases during exertion to accommodate the changing needs of the body and gas exchange. Increased respiration is not simply a delayed response to oxygen depletion; it is regulated by neural signals associated with the initiation of movement and by information from the muscles and joints. These signals are then integrated with chemical factors. [4]

It is important to distinguish between increased ventilation appropriate for metabolism and hyperventilation, which exceeds what is required to eliminate carbon dioxide and thus lowers its level. Not all respiratory rates are the same, and their cause cannot be understood by counting breaths alone. Therefore, physiology describes the relationship between ventilation and need, not just external appearance. [4]

What changes with training?

Endurance training can improve the oxidative capacity of a muscle through changes involving mitochondria and capillary supply. Resistance training can increase contractile components and fiber size. The difference here lies in the predominant direction of adaptation; there is no absolute separation that prevents overlapping or varying effects depending on the program and the individual. [5]

Adaptation requires appropriate repetition and recovery. Benefits are not achieved simply by making each session more painful than the last, and uncontrolled overload can injure muscles, tendons, or bones. Rest is not withdrawal from training; it is part of managing the load to which the body can respond. [5]

Next-Day Muscle Soreness Is Not Trapped Acid

It's a common misconception that delayed onset muscle soreness (DOMS) is caused by retained lactic acid. However, this explanation doesn't account for what we know about post-exercise pain. A study published in 1983 demonstrated a discrepancy between lactate spikes during running and subsequent pain; pain occurred after downhill running without the expected corresponding lactate spike. [6]

This finding reminds us of the importance of distinguishing between the simultaneity of two phenomena and the causation of one for the other. It's not meant to explain every pain with a single experiment, nor to suggest that severe pain is a sign of success. A professional evaluates unusual pain based on its nature, location, and accompanying factors, and training progress isn't measured by the degree of discomfort.

Activity is broader than just the playing field

The World Health Organization defines physical activity as movement produced by skeletal muscles that requires energy expenditure. This includes mobility, some daily activities, play, and recreational activities, not just structured exercise. Examples include walking, cycling, and using a wheelchair, depending on ability and circumstances. [7]

Regular activity is associated with physical and mental health benefits, while inactivity and prolonged sitting are associated with health risks. However, this is population knowledge that should translate into appropriate care for the individual; it is not a means of ostracizing those limited by disability, illness, or an unsuitable environment. Guidance becomes fairer when it is coupled with the removal of barriers and the provision of alternatives. [7]

Possible benefits include improved fitness, easier daily living, and improved risk factors for heart disease. Individuals with heart disease may need to determine the type and intensity of activity with their treatment team; just because movement is beneficial does not mean that every strenuous effort is appropriate for every patient. This chapter does not offer a personalized training program or endurance test. [8]

Rest is not the opposite of human worth.

Rest after work may be a natural return to renewed capacity, or fatigue may be a sign that needs to be understood. There are many situations in between. It is not one's duty to prove that one does not get tired, nor to compare one's body to others every day. What suits a healthy person may not suit someone undergoing treatment or convalescence.

When we support someone who needs a cane, a wheelchair, or assistance, we do not diminish their independence; rather, we may expand their opportunities for participation. Movement is a means to serve life, not a test by which life earns respect. A person's worth remains constant whether they are walking, being carried, or confined to their bed.

Steps on Earth, and a destination beyond it.

God Almighty says: {It is He who made the earth subservient to you, so walk upon its slopes and eat of His provision. And to Him is the resurrection.} [Al-Mulk: 15]. Striving on Earth and benefiting from sustenance are intertwined with the remembrance of the Hereafter. The verse does not specify a daily number of steps, nor does it measure a person's righteousness by the distance they walk. [9]

Reflecting on this reveals that the ability to move can serve a purpose: seeking sustenance, visiting the sick, aiding the needy, or acquiring beneficial knowledge. We do not add this reflection to the verse as a hidden scientific detail, but rather connect our daily actions to the concept of responsibility.

Movement preserves many potentials, but the body may send out warnings of pain or prepare for danger during or outside of movement. What is pain? And when does a protective response become a cause of prolonged hardship? This is what we will

explore in the next chapter.

Chapter Sources and Limits of Reasoning

[1] OpenStax, 10.5: Diversity of skeletal muscle fibers; the classification was used as an aid to understanding, not as a rigid classification of individuals.

[2] Ibid., 19.4: Cardiac output and its response to exertion; the age equation was not used to determine a personal maximum heart rate.

[3] Ibid., 20.2: Muscular and respiratory pumps in venous return; simplifications of venous resistance or arterial disease were not conveyed.

[4] Ibid., 22.6: Ventilation during exertion and the neural signals involved; the contradictory statement on the page regarding hyperventilation and exercise was not conveyed.

[5] Ibid., 10.6: Adaptation to endurance and resistance and the importance of recovery; did not rely on sweeping generalizations about the necessity of increasing the weight lifted alone or claims about performance-enhancing substances.

[6] Schwane et al., Is Lactic Acid Related to Delayed-Onset Muscle Soreness?, 1983; Phys Sportsmed, 11(3):124–131; DOI: 10.1080/00913847.1983.11708485. Abstract reviewed in PubMed, not full text.

[7] World Health Organization, Physical activity: Definition, benefits, and forms of activity; did not use prevalence statistics or time targets.

[8] NHLBI, Physical Activity and Your Heart — Benefits: General benefits and consideration of cardiac condition; did not provide an individualized training prescription.

[9] The Holy Quran, Al-Mulk: 15; Arabic text reviewed; reflection on human striving is kept distinct from medical recommendations.

Chapter 58: Pain, Stress and the Response to Danger

A hand approaches a hot surface and withdraws, yet attention remains fixed on the source of the pain. In another situation, the heart races before an encounter whose outcome we fear, even without a cut on the skin. The causes of alarm vary, and systems share in the response. But pain and stress are not two names for the same thing, nor can they be explained by a simple story applicable to everyone.

Pain is an Experience, Not Just an Electrical Signal

The International Association for the Study of Pain describes pain as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or resembling the experience associated with such damage. This is a presentation of meaning, not a literal rendering of the definition. Pain is influenced by biological, psychological, and social factors and is not solely derived from sensory nerve activity. [1]

The presence of psychological factors in an experience does not mean that the person experiencing it is fabricating it. Similarly, the inability to speak does not preclude the possibility of pain in an infant or a patient who cannot express themselves. A patient's description of their pain deserves respect, and listening to them is part of the assessment, not a substitute for investigating the cause. [1]

Hence, we must be wary of two opposing statements: "All pain is evidence of new damage," and "As long as the examination does not reveal a clear cause, there is no real pain." Both are too narrow for the human experience we seek to understand.

Rapid Withdrawal and Conscious Assessment

The withdrawal reflex can move a limb away from a harmful stimulus via circuits in the spinal cord, without waiting for a detailed voluntary decision. Interneurons participate in coordinating the activation of muscles and the inhibition of their antagonistic muscles, so that neither impedes the movement of the other. This is an example of rapid protection, not a description of every pain response. [2]

However, perceiving what has occurred, paying attention to it, and appreciating its meaning are matters broader than a local reflex arc. Therefore, we do not equate the withdrawal movement with the entirety of the sensory experience, nor do we consider the absence of a particular movement sufficient proof of the absence of pain. The interpretation must remain proportionate to the sign we observe.

When Pain Persists

Pain may persist for months, and its impact on sleep, movement, work, and relationships becomes part of the problem. It may be associated with an illness, inflammation, injury, or treatment, and its origin may be a problem in the nervous system. Its cause may not be clear even after available evaluation. Therefore, chronic pain is not a single disease with a unified cause and treatment. [3]

It may be accompanied by anxiety, depression, or sleep disturbances, without this proving that the psychological disturbance preceded the pain or is its sole cause. The relationship may be reciprocal and complex. The appropriate plan takes into account the individual's condition and goals, and does not simply ask about the intensity of the pain while neglecting the activities their pain prevents them from doing. [3]

The evidence for supportive interventions varies depending on the condition; the benefit of a method for one type of pain cannot be generalized to all types. Furthermore, labeling a supplement as "natural" does not guarantee its safety or freedom from drug interactions. Promises of quick relief should not replace proper evaluation and treatment. [3]

Preparedness for Danger

Stress is a physical and emotional response to challenges. It may be accompanied by an increased heart rate and breathing, muscle tension, and sweating. In some situations, this response is part of preparedness and adaptation. The problem is not its presence itself, but its intensity, duration, and the context in which it operates. [4]

The sympathetic nervous system and the adrenal medulla contribute to the rapid response through adrenaline, noradrenaline, and other effects. The hypothalamic-pituitary-adrenal axis is also involved: corticotropin-releasing hormone stimulates the release of adrenocorticotropic hormone (ACTH), which supports cortisol secretion. These are interacting pathways, not two completely separate, non-overlapping phases. [5]

Cortisol has normal functions in metabolic and immune regulation; therefore, it is incorrect to describe it as a poison that should be kept at zero. Furthermore, understanding its role does not allow for diagnosing elevated levels based on facial shape or a fleeting feeling of stress. The hormone functions within a system, and a medical diagnosis requires more than a common name in a video clip. [5]

If the mobilization is prolonged

Prolonged stress may contribute to increased sleep problems, headaches, and digestive issues, and may interact with anxiety, depression, and other conditions. However, this does not prove that every illness is caused by stress, nor that the individual could have prevented their illness with better thinking. The relationship between life circumstances and health should not be used to condemn the patient. [4]

Some circumstances cannot be alleviated by relaxation exercises: a burdensome debt, an unsafe job, or ongoing caregiving without support. An individual may benefit from appropriate calming techniques, but broader care also seeks to reduce the burden and identify those who can share it. It is unfair to expect a person to cope alone with everything that harms them.

When distress persists or affects the ability to live, seeking professional help is an appropriate step. Psychotherapy is not an admission of weak faith, just as treatment of physical illness is not a denial of the power of support and meaning. The approaches vary and can work together to serve the individual. [4]

Compassion is part of dealing with the warning.

The person in pain doesn't always need a long explanation of what's happening to them; they may first need someone who believes them, sits with them, and helps them express their complaint. When we don't know the cause of the pain, the honest statement is: "We haven't found out the cause yet," not: "There's nothing wrong with you."

The book doesn't ask its reader to endure severe pain that is new or worsening to prove their patience. Seeking help is not a betrayal of endurance, and informing a doctor about what one feels is not a reprehensible complaint. The assessment of urgency and treatment depends on the location of the pain, its accompanying symptoms, and the individual's health, and is not decided from a general overview.

Job: Supplication Does Not Negate Acknowledging Affliction

God Almighty said: {And [mention] Job, when he called to his Lord, “Indeed, adversity has touched me, and You are the Most Merciful of the merciful.”} [Al-Anbiya: 83]. Supplication did not omit the description of suffering; rather, it combined acknowledging affliction with appealing for mercy. We reflect on this without inventing a modern diagnosis for Job's illness or relating stories not supported by the text. [6]

And He, the Exalted, said: “So We responded to him and removed his affliction and gave him back his family and the like of them with them, as a mercy from Us and a

reminder for the worshippers.” [Al-Anbiya: 84]. This is a report of a response and mercy in the story of a prophet, not a medical promise that every supplicant will have their pain instantly removed. Therefore, we should not judge the faith of someone whose illness has been prolonged by such a comparison. [7]

The story provides us with a language to address God, not a tool to pressure the patient. Our duty remains to take the necessary steps, preserve their dignity, and stand by them when we cannot remove all their pain.

Pain may signal an injury, but the body doesn't simply send the message; it begins, where possible, to stop the bleeding, clean the affected area, and rebuild. How does wound healing occur, and why do some injuries leave a scar?

Sources of the Chapter and Limits of Reasoning

[1] IASP, Terminology, Definition of Pain and Notes: Presenting the meaning in Arabic while distinguishing between pain and the reception of harmful stimuli, and respecting those who cannot verbally describe it.

[2] OpenStax, 14.3: Spinal reflexes and muscle coordination in the withdrawal reflex; the reflex is not equivalent to conscious perception.

[3] NCCIH, Chronic Pain and Complementary Health Approaches: The causes of chronic pain are numerous, and the evidence and risks vary; no treatment recommendation has been established for any specific type.

[4] NCCIH, Stress: The Stress Response and Its Effects and Seeking Help; the “reset button” metaphor was not adopted literally.

[5] OpenStax, 17.6: The adrenal medulla and the hypothalamic–pituitary–adrenal cortex axis. The portrayal of exhaustion as an inevitable stage and simplifications of aldosterone regulation presented on the page were not adopted.

[6] The Holy Quran, Al-Anbiya: 83; the Arabic text was reviewed, without diagnosing Job’s illness or relying on unverified detailed accounts.

[7] The Holy Quran, Al-Anbiya: 84; the Quranic account was separated from the promise of an immediate therapeutic outcome for each individual.

Chapter 59: Wound Healing and Tissue Regeneration

The mark left by a small cut on the hand may remain for years, while other scratches disappear until we forget where they were. This difference raises a question: Does the body repair itself by restoring what was damaged to its original state, or does it build a replacement that performs some function? In both cases, much work is happening beneath the surface we observe.

What was injured?

Not all wounds are the same. The injury may be confined to the skin's surface, or it may extend to blood vessels, nerves, tendons, and deeper tissues. Cuts differ from abrasions, puncture wounds, burns, and pressure injuries. Therefore, the visible area of the mark is insufficient to assess what lies beneath, and a small opening does not always indicate minor damage. [1]

However familiar a wound may seem, a description of its healing in a book is no substitute for evaluating it when necessary. We learn what the body is capable of; we do not promise it that it will succeed on its own in every circumstance.

Stop the Loss and Start the Protection

Hemorrhage is stopped where bleeding occurs, with the involvement of blood vessels, platelets, and coagulation mechanisms. A plug and a network form, helping to limit blood loss. However, not every wound bleeds in the same way; significant damage may occur without noticeable bleeding. [1]

An inflammatory response then kicks in, involving immune cells, including neutrophils and phagocytes. These help deal with microbes and debris and participate in preparing the injury site for repair. The presence of inflammation does not mean that every redness is a confirmed infection, nor that every inflammation should be eradicated; it is part of the response and can become harmful if it is disrupted or prolonged. [2]

Building and then Reorganization

During the proliferative and growth phase, fibroblasts participate in the production of collagen and the supporting matrix of the new tissue. Repair tissue forms, and the surface is gradually re-covered. Subsequently, the tissue components continue to be modified and rearranged, and the scar and its properties change over time. [2]

These stages are commonly called hemostasis, inflammation, proliferation, and remodeling. They provide a useful description of overlapping processes; no doors close at the same time for every individual. The surface may appear closed while what lies beneath continues to gain strength and organize. The appearance or shedding of the scab is not a precise clock signaling the completion of the entire repair. [2]

Herein lies the delicate interplay between what preserves immediate continuity and what serves subsequent recovery. Stopping the bleeding limits immediate loss, the formation of new tissue requires suitable conditions, and that tissue then needs to be remodeled. The journey is not reduced to a surgical suture, although bringing the wound edges together when necessary may help; nor is it reduced to a material applied to the surface.

Regeneration is not scarring.

Regeneration replaces cells of the type that were lost, while fibrous repair relies on a supporting material that may not restore all the properties of the original structure. New blood vessels and extracellular matrix are involved in the granulation tissue that fills the site of injury. Therefore, wound closure can be achieved without the tissue returning to its original state completely. [3]

A scar is not necessarily a sign of failure. It may be the body's way of closing a damaged area and preserving its integrity. However, acknowledging its value in repair does not preclude addressing the pain, tightness, or psychological impact it may cause.

Scars come in different forms.

A scar may be flat, sunken, or raised. A hypertrophic scar remains within the boundaries of the wound site, while a keloid can extend beyond those boundaries. Contracture scars may tighten the skin, especially after some burns, and affect movement if they are near a joint. These are descriptive differences that aid the specialist in evaluation, not definitive names that can be determined at a glance. [4]

The appearance of a scar is influenced by the depth and location of the injury, the method of care, and individual factors. Some scars fade, while others remain. There are ways to reduce symptoms or improve appearance and function, depending on the case. The possibility of improvement does not guarantee complete removal of the scar. [4]

A person with a scar has the right to care for it or seek advice, and they also have the right not to make it the focus of their relationship with their body. We are not obligated to praise pain in order to respect its effects, nor to hide every mark in order to be accepted.

Why is healing delayed?

Infection, poor circulation, diabetes, smoking, and some medications can hinder healing. Therefore, slow healing does not necessarily mean the patient has neglected themselves. A difficult wound requires investigation of both local and systemic factors, and the treatment plan may change depending on the cause. A patient should not stop taking a prescribed medication simply because they read that it might affect healing; the balance is individual. [1]

To an outsider, care may seem simple: clean, bandage, and wait. However, the patient may have difficulty accessing the site, observing its change, or obtaining dressing and follow-up care. Therefore, providing assistance is part of the possible treatment, not an added detail.

When Shouldn't We Wait?

Unstoppable bleeding, a large or deep wound, and loss of sensation or difficulty moving near the injury require immediate assistance. Similarly, an object lodged in a wound requires professional handling; it should not be removed impromptu. Increased redness and pain, the appearance of pus, or fever warrant an assessment for possible infection. [5]

For a small, superficial wound, cleanliness and appropriate covering may be part of the care, but contaminated wounds, bites, and other injuries may require additional measures. This chapter is not a comprehensive first aid guide and should not delay seeking care when an injury is concerning. [5]

Scientific Regeneration and the Promises That Surpass It

Medicine studies ways to support regeneration, but the words “cells” or “tissue” in an advertisement do not prove that a product is safe or effective. The U.S. Food and Drug Administration has warned against unapproved products derived from human

cells or tissues marketed to treat a wide range of conditions, with reports of harm. This is a specific regulatory example, not a judgment on all regenerative medicine research. [6]

The useful questions about any intervention are: What substance is it? For which condition was it tested? What are the benefits and risks? And has the relevant regulatory body approved it for that use? It is not enough for the substance to come from the body itself, nor to be called "natural," to guarantee a result.

Healing and Understanding its Causes

God Almighty said, through the words of Abraham, peace be upon him: {And when I am ill, it is He who heals me} [Ash-Shu'ara: 80]. This acknowledgment directs the heart to God and does not mention any alternative to caring for the wound or seeking medical help. In a faith-based reading of causes, studying cells and aiding tissue healing is not in conflict with this meaning; rather, it is an understanding of the means available to us. [7]

We do not derive from the verse a promise that every wound will heal without a trace, or that healing depends on a degree of the patient’s righteousness as judged by others. We make use of the available means, we pray, we hope, and we remain responsible for care even when tissues are no longer the same.

Many cells cooperate to maintain the integrity of this surface. But our skin, intestines, and other tissues do not live in complete isolation from microbes. Is their presence always a disease, or do some have a place in the story of shared life?

Sources of the Chapter and Limits of Reasoning

[1] MedlinePlus, How wounds heal: Different types of wounds, hemostasis, and factors that delay healing. The inaccurate statement that red blood cells produce collagen was not adopted, nor were fixed timelines.

[2] City of Hope, Scar Healing Stages, July 9, 2025: Stages, fibroblasts, and remodeling. The statement describing cytokines as cells and the conflicting timelines in the article were not cited.

[3] OpenStax, 4.6: Distinguishing between regeneration, repair, and granulation tissue, continuing the brief discussion in Chapter 15; no standardized depth rule was adopted for deciding whether to suture a wound.

[4] Cleveland Clinic, Scars: Scar Forms, Effects, and Limits of Improvement; no descriptions were used that detract from a person's appearance.

[5] NHS, Cuts and Grazes: Signs Requiring Attention and General Care for Minor Wounds; this chapter does not replace first aid or examination.

[6] FDA, Patient and Consumer Warning about Potential Serious Risks of Harm following Use of Unapproved Products from Human Cells or Tissues, May 11, 2026. The warning was presented without asserting the cause of every reported harm.

[7] The Holy Quran, Ash-Shu'ara: 80; review of the Arabic text, separating the declaration of faith from the claim of a specific treatment.

Chapter 60: The Human Microbiota

The story of the body doesn't end with its cells. On its skin, in its mouth, and in its intestines are microscopic communities invisible to the naked eye. We are accustomed to associating microbes with disease, but this association doesn't describe all relationships. The presence of a microorganism is not a guarantee of its harm, just as labeling it beneficial doesn't make it safe in every situation.

Changing Communities

The term microbiome is used to describe microbial communities in a particular environment, and in research applications, it also includes their genetic material. We are talking here about bacteria, fungi, viruses, and other organisms associated with the body's environments, not a homogeneous mass. These communities are dynamic; they are affected by food, medications, exposures, and environmental conditions. [1, 2]

The skin environment is not identical to the intestinal or oral environment. Each location has conditions that help some species thrive and limit others. Therefore, it is incorrect to take a stool sample as a complete map of a person's entire microbiome, nor to infer the state of the entire body from the name of a single bacterium.

What did the first maps reveal?

One of the foundational studies of the Human Microbiome Project examined samples from 242 adults selected according to specific health criteria. Samples were collected from multiple locations, revealing the differences in microbiomes between bodily environments and individuals. This research sample, from two locations in the United States, does not provide a definitive picture of a healthy microbiome for all humans. [3]

One of its findings is that similarities in some functional pathways can exist despite differences in species composition. The question is not always: What is present? But also: What can this community do? Furthermore, species diversity does not carry the same meaning in every location; "higher diversity" is not a universal certificate of health for every sample. [3]

These results teach us that a long list alone is not enough for understanding. We need the sample location, the method of collection and analysis, and the question we want to answer. Moving from measuring a difference to classifying it as a disease requires further evidence.

Are we ten times more bacteria than humans?

It has been widely said that there are ten times more bacterial cells than human cells. A 2016 quantitative study revisited this estimate, proposing, in a reference model of a 70-kilogram adult male, approximately 38 trillion bacteria versus approximately 30 trillion human cells—that is, on the same numerical order, not a ten-to-one ratio. [4]

These are estimates based on assumptions, body size, and counting locations, not

fixed statistics for each individual. Furthermore, comparing numbers does not equate to comparing mass, function, or value. Humans do not become "less human" simply because they live with many tiny cells, and the wonder of science does not require an exaggerated number. [4]

Cooperation, Not Permanent War

Microbial communities contribute to the utilization of nutrients, interact with the development and function of the immune system, and limit the establishment of certain pathogens. They may also influence how the body processes environmental substances. However, the effects are organism-specific, location-specific, host-specific, and context-specific; we do not lump all microbes together. [2]

The composition of these communities changes throughout life, influenced by diet, medications, and the environment. Because many studies find a correlation between microbial changes and health conditions, the question arises: Is the change a cause, an effect, or are they both influenced by a third factor? Observing the relationship is the beginning of the investigation, not its end. [2]

Recognizing the microbial partnership does not absolve us of hygiene, food safety, or infection control. The point is to understand the relationships, not to replace fear of every microbe with blind trust in every exposure.

Antibiotics: A Benefit Requiring Appropriate Use

Antibiotics can alter the gut microbiome, and their use may be associated with an increased susceptibility to Clostridioides difficile infection, which can cause diarrhea and colitis. Not every case of diarrhea following medication is this infection, and the risk does not mean the patient should stop prescribed treatment on their own. [5]

The practical idea is to use antibiotics only when appropriate and as prescribed by a healthcare professional, and to have concerning symptoms medically reviewed. We do not benefit from the discovery of the microbiome if we turn it into a reason to fear necessary treatment; nor do we benefit from antibiotics if we treat them as a general remedy for every illness or suspected infection.

Probiotics and Prebiotics

Probiotics are preparations or foods containing live microorganisms intended to provide a health benefit. However, the effect of a studied strain does not automatically transfer to all strains or products bearing the same generic name. The question of benefit requires specifying the product, the condition, and the outcome tested. [6]

Prebiotics, on the other hand, refer to ingredients that benefit specific microbes in a way that may enhance their benefit to the host, and are not the live microorganisms themselves. Combining the two in a product does not, by itself, prove that it treats a specific disease or is suitable for everyone. [6]

Probiotics may carry risks in certain circumstances; severe infections have been reported, including in premature infants who received these products. Therefore,

they should not be prescribed indiscriminately to vulnerable populations, and the word "beneficial" should not be used as a substitute for safety assessment and evidence. [6]

From Discovery to Targeted Treatment

Understanding the microbiome can translate into controlled medical interventions. For example, the FDA approved the oral medication Vowst in 2023 for the prevention of recurrent Clostridioides difficile infection in adults after antibiotic treatment for recurrent infections. This example is specific to its indication; it is not a declaration that microbiome transfer cures every gastrointestinal or psychological disorder. [7]

The FDA has also warned of the transmission of pathogens and the occurrence of serious infections in the context of fecal microbiome transfer. Therefore, these practices should not be carried out at home, and the donor's apparent health is not enough. Research, testing, manufacturing, and follow-up are not formal restrictions but rather elements of the recipient's safety. [8]

What the Test Box Doesn't Say

A colorful list of microbe names might suggest that we have the key to our personality, immunity, and everything we feel. But the data do not provide their own complete clinical interpretation. We should ask what the test has been proven to measure, whether it beneficially alters a medical decision, and what the limits of its conclusions are. This is a methodological precaution, not a rejection of developing useful tests.

In writing about faith, we don't need to extract a verse or narrative from its context to insert the term "microbiome." We can contemplate the vastness of creation and the interconnectedness of its causes, while keeping laboratory discoveries within their realm of testing and correction. The connection to meaning does not require attributing details not explicitly stated in the text.

Conclusion of Part Six

We began with internal balance, then food, hunger, and thirst, followed by sleep, movement, pain, and repair, and concluded with the communities that accompany us, though we do not see them. In this part, the body appears as a network of relationships that sustains life, not as a collection of self-contained systems or an unbounded capacity.

Now we move from daily bodily function to the journey through the stages of life: how does a child leave the womb, breathe, nurse, and grow, and then how do their needs and strengths change until old age? We will examine these stages without reducing their averages to a standard that erases individual differences.

Sources of the chapter and the limits of reasoning

[1] NHGRI, Microbiome, Glossary entry: The meaning of the term and changes in microbial communities; its usage varies among references.

[2] NIEHS, Microbiome: General Locations, Roles, and Interactions with the Environment. The

results from mice were not generalized to humans, and disease associations alone were not considered proof of causation.

[3] Human Microbiome Project Consortium, Structure, function, and diversity of the healthy human microbiome, Nature 486, 207–214, 2012; DOI: 10.1038/nature11234. The sections on the sample, diversity, and functions were reviewed, taking into account the limitations of the studied population.

[4] Sender, Fuchs, and Milo, Revised Estimates for the Number of Human and Bacteria Cells in the Body, PLoS Biology 14(8):e1002533, 2016; DOI: 10.1371/journal.pbio.1002533. Reference estimates, not a fixed count for each body.

[5] CDC, About C. diff: Disease, Antibiotics, and Risk Factors; No risk ratios were reported for application to a specific individual.

[6] NCCIH, Probiotics: Usefulness and Safety: Strain variation, prebiotics, and the limits of benefit and safety, particularly in preterm infants.

[7] FDA, Vowst Approval Announcement, April 26, 2023: Historical example of a specific indication following treatment of recurrent infection; No individual dosage or recommendation was provided.

[8] FDA, March 12, 2020 safety alert concerning fecal microbiota transplantation and pathogen transmission; a statement of risks, not a guide to a do-it-yourself procedure.

Part 7: The Stages of Life from Birth to Old Age

A human being does not live a lifetime all at once. Their needs, abilities, and relationships change; they acquire what they did not previously possess and may lose some of what they were accustomed to. We begin this part with birth, then proceed to growth, maturation, and old age, while maintaining the distinction between describing these stages and judging the value of those who experience them. Differences in the path do not make a life less deserving of care.

Chapter 61: Labour and Birth

The house prepares for a guest, and the mother prepares for an event occurring within her body, whose every detail is not encompassed by the expectations of those around her. The hours may hold joy, fear, pain, and hope all at once. Delivery is a transition for the child, an experience for the mother, and a responsibility for those who accompany them; it is not enough to focus on the moment of delivery and neglect the journey to it and what follows.

A Beginning Does Not Come in a Single Form

The signs of labor may begin with contractions that increase in regularity and strength, with the expulsion of the mucus plug, or with the rupture of membranes and the release of amniotic fluid. These signs do not necessarily have to appear in a specific order. Furthermore, prenatal contractions may occur during pregnancy, but these do not, on their own, signify the onset of active labor. The assessment is based on the overall situation, not on a single sign. [1]

If water breaks, vaginal bleeding occurs, fetal movement decreases, or labor is suspected before 37 weeks, the delivery team should be contacted immediately. A woman should not wait until the next day if she is concerned about a worrying sign. These are important examples, not an exhaustive list, and this book does not replace the individual instructions she received during follow-up. [1]

From Cervical Dilation to Delivery

Vaginal delivery is usually divided into three stages. The first begins with labor and continues until cervical dilation is complete; the cervix softens, thins, and gradually widens. This early stage differs from more regular labor. Complete dilation is defined as approximately 10 centimeters, but the assessment is not limited to a single measurement in isolation from the condition of the mother and fetus. [2]

The second stage extends from complete dilation to delivery. The fetus moves through the birth canal, and uterine contractions and the mother's efforts are coordinated according to the case and the team's plan. The third stage involves the delivery of the placenta after the baby. Therefore, monitoring the mother does not end with hearing the baby's first cry; attention continues to be paid to bleeding, uterine contractions, and her overall condition. [2]

During labor, the midwife or doctor monitors the mother and fetus, and may use intermittent or electronic monitoring as needed. Devices are not a substitute for communication, and appropriate movement, positions, and pain relief are discussed within the specific context of the situation. [2]

Labor Does Not Follow a Single Timetable

The duration varies between women and from one birth to another for the same woman. The World Health Organization, in explaining its recommendations for obstetric care, has pointed out that adopting a dilation of one centimeter per hour as a general standard does not accurately identify risk for everyone; slowness alone does not automatically necessitate speeding up labor. [3]

This does not mean ignoring obstructed labor or danger signs. Rather, it means that the decision is based on a broader assessment, not an automatic comparison to a standardized schedule. Respecting physiology does not mean refusing necessary intervention, and effective intervention does not mean using every available tool unnecessarily.

Induction and Augmentation

Labor induction is the process of initiating labor when delivery is needed before it begins spontaneously. The need may arise due to a prolonged pregnancy, rupture of membranes, or problems with the mother or fetus. The method varies depending on the situation; medications or mechanical means may be used to prepare the cervix, and other methods may be included in the plan. [4]

Augmentation involves supporting labor that has already begun when the assessment warrants it. These are not procedures a woman can perform on her own; altering the strength and frequency of contractions requires supervision and monitoring. The circulation of certain foods or herbs among people does not constitute a proven and safe method for initiating labor. [2, 4]

Pain Relief Does Not Diminish Motherhood

There are many methods of pain relief, from support, changing positions, and comfortable breathing to medication options and regional anesthesia, including epidurals. Effectiveness, side effects, suitability, and availability vary, and options should be discussed with the midwife, physician, and anesthesiologist as needed. A woman may change her choice during labor, and this is not a flaw. [5]

Pain tolerance is not a test by which a woman earns the title of mother, nor is choosing pain relief proof that she did not give birth properly. It is respectful to explain to her what can be done and its limitations, and to take her wishes seriously without promising that every method will eliminate all sensation.

Methods of Delivery and Shared Decision-Making

Some vaginal deliveries may require the assistance of forceps or a vacuum extractor. This is performed by a specialist after assessing the position and condition of the baby and the mother, explaining the reason, risks, and alternatives, and obtaining

consent. The tools used are not a sign of personal failure, nor does their suitability guarantee that they are appropriate for every situation. [6]

A cesarean section is the delivery of the baby through a surgical incision in the abdomen and uterus. It may be planned or necessitated by an emergency. It is a major operation with benefits when needed and risks that require discussion; it should not be disparaged as an “incomplete birth,” nor presented as a burden-free option. [7]

A woman’s motherhood is not measured by the way her baby is delivered. A good outcome is not just physical well-being, but also understanding what happened and not being treated with humiliation, coercion, or neglect. Respectful care emphasizes privacy, communication, the woman’s participation in decision-making, and the possibility of having a companion of her choice present within appropriate care arrangements. [3]

Mary in the Moment of Labor

God Almighty said: “So she conceived him and withdrew with him to a remote place.” [Maryam: 22]. Then He said: “And the pains of childbirth drove her to the trunk of a palm tree. She said, ‘Oh, I wish I had died before this and was a thing forgotten.’” [Maryam: 23]. The verses preserve the gravity of the moment in her story and do not ask us to deny the intensity of what the woman feels under the pretext of glorifying motherhood. [8]

And He, the Exalted, said: “Then he called to her from below her, ‘Do not grieve; your Lord has provided beneath you a stream.’” [Maryam: 24], “And shake toward yourself the trunk of the palm tree; it will drop upon you ripe, fresh dates.” [Maryam: 25]. Then He said: “So eat and drink and be content. And if you see any human being, say, ‘Indeed, I have vowed to the Most Merciful a fast [of silence], so I will not speak today to any human being.’” [Maryam: 26] [8, 9]

In this context, there is reassurance, sustenance, and a message that addresses her situation. However, we do not interpret the details of the story as general instructions for childbirth: not every woman in labor is required to shake a tree trunk, nor does the verse alone establish a dose of dates to induce labor or treat bleeding. Likewise, we do not make what is specific to Mary’s story a model for excluding women from care and companionship.

Postpartum Care

After giving birth, a mother may need wound care, monitoring of bleeding, pain relief, or support in coping with a difficult experience. It is unfair to simply tell her, "The baby is fine, there's no reason for you to be tired." Our joy at the birth does not negate her body or her voice, and caring for the baby also begins with remembering the mother.

The newborn baby undergoes a rapid transition in breathing, circulation, and temperature. What happens in those first minutes, and why are observation and early care so important?

Sources and Limitations of Reasoning

[1] NHS, Signs that labor has begun: Signs and urgent communication; did not make contraction frequency a mandatory schedule for every woman.

[2] NHS, The stages of labor and birth: Stages, monitoring, and augmentation of labor; did not establish a single measurement for the onset of the active phase or standardized maximum durations.

[3] WHO, Individualized, supportive care key to positive childbirth experience, 15 February 2018: Formal explanation of individualized care, respect, and limits of the centimeter-per-hour standard; the statement was reviewed, but not the full guideline in this reference.

[4] NHS, Inducing labour: Reasons for induction, methods, and discussion of options; no doses or personalized induction plan.

[5] NHS, Pain relief in labour: Pain relief options and their varying suitability; no side effect rates or generalizations regarding the relationship to assisted delivery were reproduced.

[6] NHS, Forceps or vacuum delivery: Definition of assisted delivery, consent, and risks; epidurals alone were not considered a necessary reason for the use of instruments.

[7] NHS, Caesarean section: Planned and emergency operations and discussion of benefits and risks; statistics from one country were not generalized to all countries.

[8] The Holy Quran, Maryam: 22–25; Arabic text reviewed. No medical interpretations outside the context of the verses were adopted.

[9] The Holy Quran, Maryam: 26; Verse collated separately to complete the textual review.

Chapter 62: The First Breaths

Oxygen reached the fetus through the placenta, the warmth of the womb surrounded it, and nourishment arrived continuously without a feed being sought. Then came birth, and the baby had to breathe, maintain its body temperature, and begin receiving nourishment in a new way. This transition is not accomplished by a single organ; it involves simultaneous changes, which succeed in most newborns without resuscitation, while some require immediate assistance.

From Fluid-Filled Lungs to Air Exchange

Before birth, the lungs do not exchange gases with external air. Then air begins to enter, and pulmonary fluid is absorbed or removed via normal pathways. Blood flow in the lungs increases as vascular resistance decreases. We don't expect every baby to have the same moment based on a clock; what's important is assessing respiration, pulse, and the baby's actual condition. [1]

Surfactant helps reduce surface tension in the small respiratory units and keep them more stable. Fluid removal is not simply a matter of chest compression during passage through the birth canal; absorption processes in the lungs are essential. Therefore, a variation in the birthing route alone does not mean that a baby's lungs will not function. [2]

Circulation changes course

In fetal life, there were shunts that allowed a large amount of blood to bypass the

unventilated lungs. After respiration begins, the return of blood from the lungs increases to the left atrium, pressure relations change, and the functional closure of the foramen ovale between the atria occurs. The ductus arteriosus, which connects the pulmonary artery to the aorta, begins to narrow as oxygenation and regulatory factors change. [2]

Functional closure is not the final anatomical fusion, and not all pathways close at the same second. Transition is a gradual process that may be disrupted in some cases, requiring diagnosis and care. Therefore, it is inaccurate to portray the first cry as instantly transforming the entire fetal structure into a complete, final form. [2]

The umbilical cord is not a single countdown clock.

The 2025 American Heart Association and American Academy of Pediatrics guidelines state the benefits of delaying cord clamping in most newborns who do not require immediate resuscitation, typically by at least 60 seconds. The team makes the decision based on the condition of the baby and mother; this information should not be used as a standalone instruction for someone facing an emergency. [3]

The termination of placental attachment does not mean that the baby has lost everything it received in the womb. The baby has reached this point with organs that have developed, reserves, and characteristics prepared for the transition. What changes is the method of sustaining and regulating this supply, not the beginning of life from nothing.

Warmth is an urgent need.

Newborns lose heat relatively easily due to their body characteristics and large surface area relative to their size. Brown adipose tissue contributes to heat generation without obvious muscle shivering. However, this mechanism does not absolve those around the baby from the responsibility of keeping them warm, especially if they are born prematurely or require additional care. [4]

Drying, appropriate covering, and skin-to-skin contact, when the situation allows, are all part of early care, with monitoring. We do not overheat the baby, nor do we leave them uncovered to complete a photoshoot or celebration; their need for stability takes precedence over what we wish to record. [3]

Skin-to-skin contact with safety in mind.

When both are well, placing the baby skin-to-skin with their mother can support warmth retention, the initiation of breastfeeding, and bonding. If immediate contact is not possible due to treatment, it can be arranged when circumstances allow; the first few minutes should not become an ordeal, leaving those who miss it feeling they have lost an irreplaceable connection. [5]

Continued monitoring of respiration, color, muscle tone, and temperature during contact is essential. The airway must remain clear, the head position secure, and attention must be paid to the mother's fatigue, level of consciousness, and the effects of medication. A baby should never be left on the chest of a sleeping adult without a secure arrangement and proper monitoring. Tenderness is inseparable from

caution. [5]

Apgar: A Snapshot, Not a Verdict on a Lifetime

The Apgar score combines five aspects: pulse, respiration, muscle tone, reflex response, and color. It is usually recorded after one minute and then five minutes, and may be repeated as needed. Each aspect has a score that contributes to the total, but it is not the only method used by the team, and the color score has limitations, including variations in skin tone. [6]

This number alone does not predict a child's intelligence or individual neurological development, nor does it alone prove birth asphyxia. It must also be interpreted in light of the resuscitation and interventions performed; a score during assistance does not have the same meaning as a score for a child breathing spontaneously without assistance. [7]

Parents may carry a delivery room number for years, believing it dictates their child's future. It's better to ask what it means within the context of the child's medical history, and to base ongoing understanding on monitoring growth and health, not on a number taken out of context.

Help begins with the need, not waiting for the cry.

A trained and equipped person should be present at birth to support the baby's transition. If breathing is inadequate or absent, proper ventilation is a crucial means of resuscitation. Routine suctioning is not recommended for every newborn; it may be considered if airway obstruction is suspected. These are principles for the work of a specialized team, not instructions for performing resuscitation on one’s own. [3]

Lifting the baby by the feet or slapping them is not a way to check their lungs. Hearing a cry is not a substitute for assessment if signs of distress are present. The important thing is to allow the team to do their work and to receive a clear explanation of what the newborn needs.

Changes continue after the first few minutes.

The kidneys continue to develop functionally after birth; their ability to regulate urine concentration and salts is not yet that of an adult. Meconium, usually the first stool, appears with components that developed during fetal life. These changes necessitate monitoring of feeding and excretion, not the use of adult fluid plans for a newborn. [1]

The immune system is also present but still maturing, and the baby carries some antibodies received from the mother. The baby is not without protection, nor is it immune to infection simply because it was born healthy. Its care begins with understanding this intermediate state. [1]

Coming into the World

God Almighty says: “And God brought you forth from the wombs of your mothers while you knew nothing, and He gave you hearing, sight, and hearts that you might

give thanks.” [An-Nahl: 78]. This verse reminds us of the beginning of our dependence and the means of knowledge through which our lives unfold. We should not interpret it as a negation of reflexes or all fetal learning previously described, nor should we derive from its word order an exclusive timeline for the maturation of the senses. [8]

This being, so small that a hand can support its head, carries within it a long history of formation and potential yet to be revealed. What the newborn needs from us now is not an explanation of its entire future, but rather a reassuring breath, warmth, care, and nourishment. This leads us to breastfeeding and early feeding.

Sources and Limitations of Inference

[1] MedlinePlus, Changes in the newborn at birth: respiratory transition, renal maturation, meconium, and immunity; the fixed time of first breath was not adopted, nor was the assertion that brown fat is exclusive to fetuses and newborns.

[2] Merck Manual Professional, Perinatal Physiology: pulmonary fluid, surfactant, and circulatory changes. Principles were used without generalizing closure time to all newborns.

[3] AHA and AAP, Part 5: Neonatal Resuscitation, 2025 Guidelines: Preparation, assessment, ventilation, umbilical cord, and non-routine suction. This chapter does not include resuscitation steps or dosages.

[4] OpenStax, 28.5: Neonatal temperature regulation and brown fat. Errors in defining the neonatal period, portraying the lungs as filled with amniotic fluid alone, or describing shunts as permanently closed immediately after birth were not adopted.

[5] UNICEF UK Baby Friendly Initiative, Skin-to-skin contact: Benefits, monitoring conditions, infant position, and maternal awareness.

[6] Cleveland Clinic, Apgar Score: Components, timing, and limitations of the score; the passage suggesting suction to test the response was not adopted, nor was the total score alone used to make a resuscitation decision.

[7] ACOG and AAP, Committee Opinion No. 644: The Apgar Score, 2015; PMID: 26393460. The original abstract in PubMed was consulted to determine the limits of prediction and significance, not the full text.

[8] The Holy Quran, An-Nahl: 78; Arabic text reviewed, distinguishing the expression of gratitude from the experimental description of reflexes and senses.

Chapter 63: Breastfeeding and Early Nutrition

Before birth, his nourishment came through the placenta. He didn't need to open his mouth or coordinate sucking, swallowing, and breathing to receive it. Now, however, feeding became a matter of timing, signaling, and effort, and his crying became a question requiring understanding. In this daily encounter between hunger and care, one of the clearest examples of human dependence begins.

Milk: Production and Release

Within the breast are tiny glandular units whose cells produce milk, surrounded by contractile cells that help propel it into the ducts. Prolactin stimulates milk production, while oxytocin contributes to its release. Sucking triggers neurological

and hormonal reflexes that connect the breast to the brain. After the placenta is expelled, the decrease in its hormones allows for increased secretion; this does not mean that the breast did not produce colostrum before birth.

The secretion progresses from colostrum to transitional milk and then mature milk, and includes water, sugars, fats, proteins, and immune components. The antibodies it carries, including secretory immunoglobulin, protect the mucous membranes; however, this does not mean that everything in it passes into the infant's bloodstream or provides absolute immunity. Regular removal of milk helps sustain its production, although certain health conditions may hinder this process. [1]

Early Initiation Requires Support

The World Health Organization recommends initiating breastfeeding within the first hour, provided the mother and child are well enough, and exclusive breastfeeding for the first six months, followed by the introduction of appropriate complementary foods while continuing breastfeeding for two years or more. This is a public health recommendation, not a justification for leaving a child who needs therapeutic feeding without it, nor a substitute for managing special cases. [2]

Breastfeeding may seem simple to an outsider, but it may require instruction, patience, and practical assistance. It is not enough to tell the mother, "Breastfeed," and then leave her alone with the pain, exhaustion, and questions. Protecting this relationship includes rest time, a suitable environment, a helping hand with some household chores, and a professional who listens to the problem without turning it into a trial.

How do we know if the baby is being fed?

Adequate breastfeeding is assessed by a range of indicators: good latch, audible swallowing, weight change over the days, and urine and stool output appropriate for the baby's age. The duration of each feeding is not enough, nor does every cry indicate insufficient milk supply. If pain persists, urine output decreases, or weight gain is not as expected, then an evaluation of breastfeeding and the baby's health is necessary, not just guesswork. Latching technique and certain illnesses or previous breast surgeries can affect milk supply. [3]

The weighing scale is there to serve the child, not to humiliate the mother. Searching for the cause of the difficulty is not the same as searching for someone to blame. The infant may need additional support, and the mother may require treatment, rest, or a different feeding plan. Compassion does not preclude close monitoring; rather, it prevents anxiety from turning into blame, which delays finding a solution.

If a substitute is needed

When using a commercial substitute, choose a formula specifically designed for infants and appropriate for their condition, not a drink intended for older children. Guidelines recommend choosing an iron-fortified formula and checking the packaging for safety and expiration dates. Homemade mixtures offered as substitutes are not equivalent; they may be nutritionally unbalanced or contaminated. The

choice should be discussed with the healthcare team if there is a medical condition or special needs. [4]

The specified water-to-powder ratio must be strictly adhered to. Milk should not be diluted to save money or concentrated to increase satiety. Milk powder is not sterile, and preparation precautions are especially important for young infants, premature babies, and immunocompromised infants. Safety includes hand hygiene, clean utensils, appropriate water, and proper disposal of leftover feed according to instructions. Follow the instructions of local health authorities appropriate to the child's age and the type of formula. Do not use a microwave to heat the formula. [5]

When solids are introduced

Around six months, the need for complementary foods begins. The quantity, variety, and texture of these foods are gradually increased, while maintaining hygiene and responding to hunger and satiety cues. Responsive feeding means offering food, assisting the child, and paying attention to their needs, not turning the mealtime into a constant coercion. Introducing solids does not mean that breastfeeding is no longer valued, nor does it mean that the child is now capable of eating adult food indiscriminately. [2]

Breastfeeding in the Qur’an: The Child is Not an Arena for Conflict

God Almighty says: “Mothers shall breastfeed their children for two full years for those who wish to complete the nursing period. Upon the father is the provision for their food and clothing according to what is acceptable. No soul is charged with more than its capacity. No mother shall be harmed through her child, nor any father through his child. And upon the heir is a similar obligation. But if they both desire weaning by mutual consent and consultation, there is no blame upon them. And if you wish to have your children nursed by a wet nurse, there is no blame upon you if you pay what you have given in a reasonable manner. And fear Allah and know that Allah is Seeing of what you do.” [Al-Baqarah: 233] [6]

The verse does not mention the duration of breastfeeding alone; it also includes financial support, kindness, capacity, preventing harm, mutual consent, and consultation. It is as if considering the child's nutrition opens the door to considering the justice of the entire household. The mother is not merely a milk-producing machine, the father is not a spectator of a responsibility that does not concern him, and the child is not a means of pressure to be used by one against the other.

Deriving the specific legal rulings related to breastfeeding, compensation, and weaning requires a comprehensive collection of evidence and a fatwa from the religious authority (marjaʿ) one follows. This chapter does not transform its ethical consideration into a general ruling. Furthermore, the rulings concerning kinship through breastfeeding are distinct from the medical study of milk composition and will be addressed within the appropriate legal issues. The clear point here is that the care of the child is inseparable from the protection of the one who cares for him.

The Hadith on Mother's Milk and the Limits of its Use

Al-Kulayni narrated in Al-Kafi, on the authority of Imam al-Sadiq (peace be upon him), on the authority of the Commander of the Faithful (peace be upon him): “There is no milk that a child is breastfed with that is more blessed for him than his mother's milk.” This hadith appears in the Book of Aqiqah, Chapter on Breastfeeding, Hadith 1. Al-Majlisi described its chain of transmission in Mir'at al-'Uqul as “weak, akin to a muwaththaq report” (a technical grading). Therefore, we reproduce his grading as given, without replacing it with a claim of universally accepted authenticity. [7, 8]

The Thaqalayn platform transmits al-Bahbudi's grading of the hadith as authentic, a difference that should be made clear, not concealed, even though the page containing his ruling in the original book was not compared here. As for the next report in that chapter, which describes one breast as food and the other as drink, al-Majlisi deemed it weak; it should not be taken as a proven anatomical description or feeding instruction. The task of investigation is not to force every hadith into scientific knowledge, but rather to preserve the boundaries of the text and the limits of knowledge. [8, 9]

Praising mother's milk does not justify belittling a mother who was unable to breastfeed, nor does it justify judging a child's future based on the type of milk they consumed. The blessing of care is broader than competing mothers in ability; it is the sincere effort to protect the infant, to seek help from those who can assist, and to prioritize their needs over shame and hostility.

From Satiety to Discovering the World

When hunger subsides, the infant's needs do not end. They need someone to see them, hear them, and respond to them, and a safe space where they can learn to use their body. In the next chapter, we follow him as he raises his head, reaches out, and turns toward the sound, then discovers that the signal may reach the other person before the word does.

Chapter Sources and Limitations

[1] OpenStax, Anatomy and Physiology 2, Section 28.6: Lactation; for milk production, ejection, and basic components, avoiding inaccurate page generalizations.

[2] WHO, Infant and Young Child Feeding; for general recommendations and complementary feeding, not for an individualized treatment plan.

[3] NHS, How to Know if Baby is Getting Enough Milk; for signs of sufficiency and seeking help.

[4] CDC, Choosing Infant Formula; for appropriate preparations and the risk of homemade substitutes.

[5] CDC, Preparing and Storing Formula; for safe preparation and the different needs of infants most susceptible to infection.

[6] The Holy Quran, Surah Al-Baqarah, verse 233; reproduced in full.

[7] Al-Kulayni, Al-Kafi, vol. 6, p. 40, Book of Aqiqah, Chapter on Breastfeeding, Hadith 1; for the text and chain of narration.

[8] Al-Majlisi, Mir'at al-'Uqul, vol. 21, p. 71; for his ruling on the first and second hadiths from the

chapter on breastfeeding.

[9] Thaqalayn, Al-Kafi 6/1/28/1; to convey the difference of opinion between Al-Majlisi and Al-Bahbudi, not as an independent check against Al-Bahbudi’s original work.

Chapter 64: Early Childhood

The adult sees familiar objects in the room, while the child sees a world waiting to be discovered. The hand that once clenched around a finger now reaches for a toy, and the eye that followed a face now searches for it when it is absent. A child doesn't just grow in weight and height; they develop new ways of moving, paying attention, and communicating, and their growth transforms the very meaning of the home.

The Brain Built by Interaction

Brain networks develop through the interaction of heredity, experience, and the timing of exposure. Neural connections form, some strengthen with use, and others are reorganized. The early years are crucial in building these networks, but learning doesn't end with them, and a person's life doesn't end if they miss out on a particular experience. Neural plasticity continues in varying degrees and forms, so the importance of beginnings shouldn't be used as a definitive judgment on the future. [1]

This doesn't mean we should fill every moment with training or buy devices that promise to create genius. A child needs a life they can participate in, not an endless exam. Constantly comparing them to the neighbor's child makes the family monitor their child's ranking in an imaginary race, instead of seeing what they truly need.

Movement Opens New Doors

Milestone examples illustrate how abilities complement each other: at around six months, many babies can reach for a toy, roll from tummy to back, and support themselves on their hands when sitting. These are examples of what most babies do at a given age, not a description of a single moment that should occur in everyone. Opportunities for safe play on the floor, with supervision and responsiveness to the baby's fatigue, facilitate exploration and practice. [2]

Around the age of one, many children develop the ability to stand while holding on, move around furniture, pick up objects between their thumb and forefinger, and search for a toy hidden in front of them. Here, we observe the convergence of movement, memory, and attention. The need for a safe and organized home increases: medicines, cleaning supplies, and sharp objects are not tools to test a child's obedience, but rather dangers that must be kept away. [3]

We should not expect a young child to understand a warning as an adult would, and then punish them for not acting like an adult. It is the responsibility of caregivers to prepare the space before demanding that the child use it properly. A hand that is learning to reach does not, on its own, know what it is allowed to reach for.

Before speaking

Communication begins before clear speech; with sounds, looks, gestures, and responses to familiar sounds, then with babbling and understanding and using words. Understanding, expression, and articulation are distinct abilities; a child may know what they want but not be able to express it as an adult might expect. The pace of development varies, but concerns about language are worth discussing with a specialist, and a hearing test may be included in the assessment. [4]

Harvard’s Center on the Developing Child describes responsive exchange as an interaction in which the child initiates a sound, gesture, or interest, and the adult responds, then allows the child to take the initiative again. For example, if the child points to a bird, the adult names it and follows the child’s interest, rather than interrupting with a series of questions. These exchanges contribute to building communication and relationship skills; their benefit is not limited to formal lessons. [5]

When we talk to a child, we don't have to fill the silence completely. The pause while we wait for their signal may be part of the conversation itself. The child doesn't learn to have a voice if our voice always dominates the conversation. From this perspective, caregiving is also about listening, not just giving commands.

Proximity and Absence

A child may cry when their caregiver leaves or when an unfamiliar person approaches. Separation anxiety is common in early childhood and does not necessarily mean parenting has failed. Gradual transitions, familiar care, and clear goodbyes can help with adjustment. If the distress is severe or persistent and disrupts the life of the child and family, it is appropriate to seek counseling rather than simply dismissing it as spoiling. [6]

The child's caregiver should also be supported; financial pressures, illness, and isolation can make a consistent response more difficult. Advocating for a nurturing interaction does not mean demanding perfection from parents at every moment, but rather creating conditions that allow for more stable caregiving. When a family is struggling, practical help may be more helpful than repeated lectures. [5]

Security is not a promise that the child will never be sad, but rather an effort to ensure they are not alone in their sadness. Caregiving will not prevent every fear or distress, but it can make it possible to turn to others. This responsibility does not rest solely with the mother; everyone entrusted with the child's care is responsible for how they speak to, hold, and protect their boundaries.

Observation, Not Diagnosis

Milestone checklists track a child's play, learning, communication, and movement. While structured developmental screening uses standardized tools, diagnosis requires a broader evaluation. If a child fails to acquire expected skills, loses a previously acquired skill, or their responses raise concerns, simply stating "they'll grow up" is insufficient. The healthcare team should be consulted to assess the need for early evaluation and support. [7]

Conversely, a child should not be diagnosed based on a short video clip or a single skill. We need to understand their developmental trajectory, circumstances, and needs, not simply label them and interpret everything they do through that label. The purpose of assessment is to broaden the opportunities for help, not to restrict the family's view of the child.

Compassion for Children in Tradition

It is narrated in al-Kafi, in the chapter on Kindness to Children, on the authority of Imam al-Sadiq (peace be upon him), on the authority of the Messenger of God (peace and blessings be upon him and his family): "Love children and have mercy on them, and if you promise them something, fulfill it, for they know nothing except that you provide for them." Al-Majlisi judged this third hadith to be "majhul" (unknown); therefore, it is mentioned as a reported narration with an explanation of its status, not as an authentic and unanimously agreed upon hadith. [8]

Its content draws attention to the difference between the magnitude of a promise in the eyes of an adult and its magnitude in the heart of a child. An adult may make a promise and then forget, but a child bases their expectations on the word they have heard. Fulfilling a promise is not about promising everything the child wants, but rather about being wary of false promises, explaining the impossibility when it arises, and taking their trust seriously.

If the child lacks some form of support, the responsibility of those around them becomes even greater. God Almighty says: "Therefore, do not oppress the orphan" [Ad-Duha: 9]. The prohibition against oppressing orphans is not a psychological description of brain development, but rather a moral directive that preserves their dignity. We do not need to translate the verse into laboratory terminology to understand the power that prevents the humiliation of the vulnerable. [9]

Childhood has value in itself.

A child is not an adult-in-the-making whose right to respect we postpone until they succeed, nor a miniature replica required to fulfill their family's unfulfilled dreams. They have a present that deserves protection, a joy that should not be despised, and a weariness that should not be silenced by ridicule. Every new skill should enhance our understanding of them, not increase the conditions of our love for them.

From these beginnings, they emerge into a wider world: peers, school, rules, stories, and problems that cannot be solved by hand alone. In the next chapter, we will accompany their transition to structured learning and explore why differences in how children learn do not imply differences in their worth.

Chapter Sources and Limitations

[1] Harvard Center on the Developing Child, Brain Architecture; for the interaction of experience and heredity and the continuing formation and reorganization of connections.

[2] CDC, Developmental Milestones at Six Months: Examples, Not a Home Diagnostic Test.

[3] CDC, Milestones of Development at One Year; for movement, exploration, and securing the environment.

[4] NIDCD, Milestones of Speech and Language Development; for early communication, assessment of delays, and hearing.

[5] Harvard Center on the Developing Child, Serve and Return; for interaction and support of caregivers, not for deterministic prediction of a child's future.

[6] NHS, Separation Anxiety; for understanding it and seeking help when it is severe and persistent.

[7] CDC, Developmental Milestones and Acting Early When Concerns Arise; for differentiating between follow-up and the need for specialist evaluation.

[8] Al-Majlisi, Mir'at al-'Uqul, Vol. 21, p. 86, Chapter on Kindness to Children; includes the text of the hadiths of al-Kafi and al-Majlisi's commentary, and the ruling on the third hadith is "majhul" (unknown).

[9] The Holy Quran, Surah Ad-Duha, Verse 9; reproduced in full.

Chapter 65: Childhood and Learning

A child enters school and learns that lines have names, numbers have relationships, and stories have a beginning and an end. But along with this, they also enter another, equally impactful, realm of knowledge: how to ask for help? How to deal with mistakes? And will they remain loved if they don't understand the lesson? Childhood is not a gradebook, although the gradebook is one indicator of what happens during it.

The Expansion of the World

As childhood progresses, independence in some daily tasks increases, the ability to describe experiences and feelings expands, and friendship and teamwork gain greater importance. School provides opportunities to meet new people, learn new rules, and encounter new tasks. Supportive approaches include involving the child in appropriate responsibilities, communicating with their teachers, reading with them, and praising their efforts or learning instead of reducing them to a fixed label like genius or failure. [1]

Peer relationships then become more complex, group pressure may intensify, and attention to body image increases as puberty approaches. At this point, the child needs clear communication about friendship, respect, and choices, as well as rules with clear rationales. Gradual independence does not mean leaving the child unprotected, nor does protection mean silencing their voice. [2]

Tools for Learning How to Learn

Working memory helps retain information and use it during a task. Mental flexibility helps in switching between solutions, and self-control helps delay inappropriate responses. These abilities fall under the umbrella of executive functions. They develop throughout childhood, adolescence, and beyond, benefiting from practice, gradual progression, and supportive relationships. A child should not be assumed to possess adult organizational skills and then punished for their absence. [3]

A child may understand a single rule but struggle when faced with numerous

instructions. Clear, progressive tasks, opportunities for planning and review, and rule-based play, along with support tailored to their abilities, can help. The goal is not training that promises to turn every child into a genius, but rather to build habits and skills they can use throughout their lives. [3]

Understanding is not copying from a page.

Humans learn by connecting new information to what they already know. Prior knowledge can be helpful, or it can lead to errors that need correction. Evidence-supported strategies include recalling, explaining, and summarizing what has been learned, and spreading practice over time. The effectiveness of a method varies depending on the learner, the subject matter, and the objective; there is no single teaching formula that works for every situation. [4]

It is beneficial for learners to know what they have mastered and what needs reviewing. Specific feedback, tasks appropriate to their abilities, and a sense of security and belonging encourage participation and progress. A single grade does not explain the reason for an error, nor does it tell the teacher what needs to be changed in the teaching. [4]

We can ask the child: How did you arrive at this answer? This will reveal that they understood part and got another part wrong, instead of dismissing all their effort with a single word. We can say, "Let's look for the source of the problem," instead of saying, "You don't understand." The difference between the two phrases reflects two contrasting views of the human being; one leaves the door open, the other turns it into a wall.

When a stumbling block is a need for support

Learning difficulties may affect reading, writing, arithmetic, or language use, and do not in themselves indicate low intelligence. They can be long-lasting, but success is possible with appropriate educational support. They are not a general term for every drop in grades; they should be distinguished from other problems that may affect learning. [5]

Examples include difficulty connecting letters and sounds and recognizing words in dyslexia, or difficulties with numerical concepts in dyscalculia. A single observation is not enough to diagnose either. Assessment needs to consider the language in which the child learns and their experience with it; a weak grasp of the language of instruction should not automatically be taken as evidence of a disorder. [6]

Support is not cheating by giving a child something they don't deserve, but rather an attempt to remove an obstacle that hinders their ability. We must distinguish between modifying the learning method and devaluing learning, and between easing the barrier and diminishing our respect for the person facing it. How much some children need just one person who believes that behind their struggles lies a question worth understanding.

Play is not excluded from upbringing

Al-Kulayni, in the chapter on disciplining children, narrated on the authority of Imam

al-Sadiq (peace be upon him): “A boy plays for seven years, learns to read and write for seven years, and learns what is lawful and unlawful for seven years.” Al-Majlisi judged this third hadith to be “muwaththaq” (reliable, a technical grading). This chain of transmission differs from the hadith, “Let your son play for seven years,” which al-Majlisi described as mursal (a hadith with a missing link in the chain of transmission). Therefore, the wording and rulings should not be considered as a single hadith. [7]

This educational portrayal highlights the varying stages of development, but it should not be reduced to a neurological timetable asserting that every brain changes on the same day every seven years. Nor does it necessitate prohibiting education before the age of seven, prohibiting play afterward, or postponing all introductions to good and evil until a single stage. This is a methodological distinction between reading the transmitted texts and deriving a detailed educational system from them.

Narrations on upbringing should not be transformed into expressions of despair regarding a child or the denial of their right to care. Evaluating methods of reasoning, understanding context, and combining texts precedes translating them into actions that affect children's lives. The ethical value we emphasize here is the importance of developmental readiness and gradual progression, not using age as an excuse for violence or neglect.

Luqman: Knowledge that Refines its Possessor

God Almighty said: {And when Luqman said to his son, while he was instructing him, "O my son, do not associate anything with God. Indeed, associating others with God is a great injustice."} [Luqman: 13] [8]

And Allah Almighty said: “O my son, establish prayer, enjoin what is right, forbid what is wrong, and be patient over what befalls you. Indeed, that is of the matters [requiring] determination.” [Luqman: 17]

And Allah Almighty said: “And do not turn your cheek [in contempt] toward people and do not walk through the earth exultantly. Indeed, Allah does not love anyone who is arrogant and boastful.” [Luqman: 18]

And God Almighty said: “And be moderate in your pace and lower your voice; indeed, the most disagreeable of sounds is the voice of donkeys.” [Luqman: 19]

These commandments move from monotheism to worship, responsibility, and patience, and then to the manner of meeting people, walking, and speaking. Education is not about piling information into a child's mind while leaving their relationships with others to chance. This does not mean that Luqman's son was of a specific school age; the verses do not give us his age here, and we are considering their educational context, not a developmental history that is not mentioned.

The address “O my son” combines closeness and guidance. An educator can be clear in rejecting wrongdoing without despising the person who commits it, and can teach respect for people without humiliating those before them. Humility is not a convincing lesson when taught with arrogance, nor is honesty a living value when it is demanded of a child and then rewarded for a lie that benefits the family.

Towards the Threshold of Adolescence

As the years progress, the question grows from: How should I do this? to: Why should I do it? And from: What do my parents want from me? to: Who do I want to be? Between these two questions, new changes begin in the body, mind, and relationships. In the next chapter, we will approach puberty and adolescence without exaggeration, and without reducing the human being to their hormones.

Chapter Sources and Limitations of Documentation

[1] CDC, Middle Childhood 6–8 years, 2015 archived edition; used for Developmental Profiles and Educational Support, not as the most up-to-date health chart.

[2] CDC, Middle Childhood 9–11 years, 2015 archived edition; for Relationships, Independence, and Family Communication.

[3] Harvard Center on the Developing Child, Executive Functions Brief: Skills for Life and Learning; for working memory, flexibility, self-control, and progression.

[4] U.S. National Academies, How People Learn 2, 2018, Summary; for learning methods, feedback, and the limits of generalization.

[5] NICHD, Defining Learning Disabilities; to distinguish them from judgments of intelligence and the possibility of educational support.

[6] NICHD, Signs of Learning Disabilities; for examples, the limits of a single sign, and the need to consider the learner's language.

[7] Al-Majlisi, Mir'at al-'Uqul, vol. 21, p. 82, chapter on disciplining children; the text of the narrations in al-Kafi and the ruling on the third hadith is "muwaththaq" (reliable) and on the first is "mursal" (a report with an omitted link in its chain).

[8] The Holy Quran, Surah Luqman, verses 13 and 17-19; the cited verses have been fully included.

Chapter 66: Puberty and Adolescence

A boy may wake up to an unfamiliar change in his own voice, and a girl may be surprised by a change that makes her body the subject of questions she never used to ask. Between the mirror and the gazes of others, a new dialogue begins: Is what is happening normal? Why did I change before or after my peers? Should I be ashamed to ask? Here, quiet understanding becomes part of nurturing.

Bodily Maturity Is Not All of Adolescence

The World Health Organization uses adolescence to refer to the period between ten and nineteen years of age, a time of physical, cognitive, psychological, and social change. Puberty, on the other hand, refers to the process of physical sexual maturation and does not, by itself, encompass all of these transformations. Adolescents need age-appropriate information, health services, a safe environment, and genuine opportunities to participate in decisions that affect their health. [1]

This age division of public health is not a definition of religious accountability in Islamic jurisprudence, nor a general legal judgment on legal capacity. Its multiple uses necessitate asking in each instance: What meaning are we talking about? A

bodily function may mature while the experience of decision-making requires time and support.

Messages That Initiate Change

The axis connecting the hypothalamus to the pituitary gland and the gonads is activated. Gonadotropin-releasing hormone (GnRH) stimulates the release of luteinizing hormone (LH) and follicle-stimulating hormone (FSH), leading to increased ovarian or testicular response and the production of sex hormones. These signals contribute to the development of pubertal characteristics. Early or delayed development may be due to natural or genetic variation, or it may be associated with disease, nutritional deficiencies, or disorders affecting this axis. [2]

However, the growth of pubic and axillary hair and body odor do not represent all stages of puberty; they may be linked to increased adrenal androgens, a process that can precede some reproductive changes. Therefore, we cannot conclude from hair growth alone that reproductive maturity is complete. A specialist assesses the signs collectively, their sequence, and the rate of development. [3]

Breast development usually begins before menstruation, with the first menstruation typically occurring two to three years later. In males, an increase in testicular size is an early sign, followed by subsequent organ changes and growth. Not all signs appear simultaneously, and comparing one child to another is not a substitute for understanding each child's individual developmental trajectory. [4, 5]

When Does Timing Deserve Evaluation?

Signs of puberty before age eight in girls or nine in boys warrant medical evaluation, as do rapid progression or signs accompanied by concerning symptoms. These are the boundaries for requesting evaluation, not an automatic diagnosis of disease. The causes may vary, ranging from early activation of the hormonal axis and other sources of hormones to isolated changes. [6]

Indicators of delayed puberty include the absence of breast development by age thirteen or testicular enlargement by age fourteen. This does not necessarily indicate a permanent illness; the delay may be constitutional and run in the family. However, differentiation requires an evaluation that respects the child's privacy, not an embarrassing family examination or hurtful comments. Hormones should not be used to accelerate or delay puberty without medical supervision. [4, 5]

A Brain That Learns to Choose

Throughout adolescence, changes continue in the networks involved in planning, regulating behavior, and understanding relationships. Peer acceptance may carry more weight in decision-making, along with a greater capacity for learning and adaptation. Continued maturation does not mean that adolescents are incapable of thinking, or that all adolescents are impulsive; context, experience, and support all influence choices. Furthermore, these paths do not guarantee a single day when everyone's mind is fully developed. [7]

Many adolescents experience changes in their sleep patterns, and they may find it

difficult to fall asleep and wake up early. This should not be reduced to laziness, as proper sleep habits and structured schedules are still necessary. Lack of sleep can impair attention, emotional regulation, and academic performance. [7]

Emotional distress is not a diagnosis, and suffering is not an act.

Mental health is influenced by numerous factors: violence, bullying, poverty, peer pressure, family relationships, and the adolescent's self-image. Safe environments, stress-coping skills, and supportive relationships are crucial. Not every distress is explained by hormones, and not every disorder can be treated by simply telling the individual to be stronger-willed. [8]

If mood or behavioral changes persist and affect schoolwork, home life, or relationships, or if loss of interest, significant withdrawal, and clear disturbances in sleep or eating occur, professional evaluation is preferable to waiting and blaming. If there is an immediate threat to safety or talk of self-harm, urgent help should be sought. A teenager should not be left alone in the face of danger under the pretext of protecting reputation. [9]

Knowledge protects, it does not shame.

Children have the right to learn about their bodies' changes in clear and respectful language, and to know that asking for help does not make them a target of ridicule. Families need age-appropriate conversations about privacy, bodily boundaries, consent, and non-coercion, as well as a safe way to report any abuse. Protection is not about hiding everything, but about providing the knowledge a child needs to understand what is happening and seek help.

The biological ability to conceive does not mean that pregnancy at this age is safe or that the psychological and social readiness for parenthood is complete. The World Health Organization indicates that some pregnancy and childbirth risks are higher for adolescent girls compared to women in their early twenties, and that their newborns face greater risks. Therefore, the appearance of a physical sign should not be used as a justification for subjecting a minor to coercion or exploitation. [10]

Seeking Permission and Maturity in the Qur’an

God Almighty says: “And when the children among you reach puberty, let them ask permission [before entering] as those before them asked permission. Thus does God make clear to you His verses, and God is Knowing and Wise.” [An-Nur: 59] [11]

Puberty in this verse is linked to the etiquette of seeking permission and maintaining privacy. Growth does not merely add a physical capacity; it necessitates learning how to interact with others and respecting the boundaries of their lives. Teaching privacy is ineffective if an adult demands it for themselves and then makes it a habit to embarrass a child in the home.

And Allah Almighty said: “And test the orphans until they reach marriageable age. Then if you perceive in them sound judgment, release their property to them. And do not consume it extravagantly or hastily, fearing that they will grow up. And whoever is rich should abstain [from taking], and whoever is poor should take according to

what is acceptable. And when you release their property to them, have witnesses over them. And Allah is sufficient as a Reckoner.” [An-Nisa: 6] [12]

In the context of orphans' funds, the verse distinguishes between reaching the age of marriage and demonstrating maturity before the disbursement of funds. Physical development is not a substitute for all practical legal capacity. The details of the signs of puberty, the rulings on legal responsibility, and the legal actions are referred to their respective jurisprudential evidence and applicable law; this reflection does not yield a detailed legal opinion or a unified legal age.

Companionship that aids independence

Adolescence does not need to become a perpetual war between two generations. The young person needs fair boundaries, a space to ask questions, make mistakes, and learn, and an adult who does not ridicule their search for meaning. In the next chapter, we continue this journey as responsibilities expand: choosing a career, building relationships, and bearing the consequences of decisions.

Chapter Sources and Documentation Limits

[1] World Health Organization, Adolescent Health; for age definitions, care needs, and participation.

[2] NICHD, Causes of Normal, Early, and Delayed Puberty; Hormonal Axis and General Causes.

[3] Pediatric Endocrine Society, Premature Adrenarche; To Distinguish Its Signs from Reproductive Maturation.

[4] Pediatric Endocrine Society, Delayed Puberty – Girls; Sequence of Signs and Assessment Limits.

[5] Pediatric Endocrine Society, Delayed Puberty – Boys; Signs, Variability, and Need for Evaluation.

[6] Pediatric Endocrine Society, Guidelines for Suspected Precocious Puberty; Referral Indicators, Not Self-Diagnosis.

[7] NIMH, The Teen Brain: 7 Things to Know; For Maturing, Learning, and Sleep, Without Assigning a Definitive Age of Completion to Every Individual's Mind.

[8] World Health Organization, Mental Health of Adolescents; Social Factors, Prevention, and Support.

[9] NIMH, Mental Health of Children and Adolescents; for signs that warrant help.

[10] World Health Organization, Teenage Pregnancy; for health risks and protection from child marriage and exploitation.

[11] The Holy Quran, Surah An-Nur, Verse 59; reproduced in full.

[12] The Holy Quran, Surah An-Nisa, Verse 6; reproduced in full.

Chapter 67: Youth and Maturity

When he was young, he was asked: What do you want to be? Then, as he grew older, the question became more weighty: What can you choose, and what can you bear? The distance between the two questions is not merely age; it is a transition from

imagining life to entering into its consequences. In youth, opportunity expands as does responsibility, without people having equal opportunities or circumstances.

There is no single peak for all abilities.

It is a mistake to imagine maturation as a single curve in which all abilities rise and then fall together. A study by Hartshorne and Germine, based on electronic tests and normative data, showed that the timing of peak performance varies among multiple cognitive abilities; some reached high levels early, and some continued to improve into later ages. These results do not give us a clock that predicts an individual's fate, nor do they make testing synonymous with wisdom. [1]

The methodological benefit of this is to ask about the intended ability and how it is measured, rather than applying the phrase "best age" to the entire person. A person may be quick to respond but inexperienced, or slower at one task and more adept at another. What is measured in a particular test is not everything needed for choosing a partner, keeping a trust, or assuming responsibility.

Independence does not mean being self-sufficient.

For a young person to be independent does not mean rejecting all help, but rather learning how to ask for it without abandoning their responsibilities. Living alone is not a measure of maturity, nor is income alone a measure of worth. One person may bear significant responsibilities within their family home, while another may live alone and their decisions remain subject to the pressures of others.

Some of what we call delays is not due to personal laziness; job or educational opportunities may be limited, a young person may be responsible for the care of a relative, or they may face illness or displacement. Moral arguments about diligence do not justify ignoring circumstances. We call upon individuals to do what they are capable of, and we urge society not to turn what lies beyond an individual’s control into an accusation against them.

Work: Ability, Trustworthiness, and a Fair Environment

Decent work can provide sustenance, routine, meaning, and supportive relationships. Conversely, excessive workloads, job insecurity, discrimination and harassment, and a lack of control over one's work can harm mental health. Therefore, it is not enough to simply ask workers to manage their stress; some stress requires reforms to working conditions and management. [2]

The story of Moses (peace be upon him) illustrates a standard that combines ability and trustworthiness. God Almighty says: “One of the two women said, ‘O my father, hire him. Indeed, the best one you could hire is the strong and trustworthy one.’” [Al-Qasas: 26] [3]

From the combination of these two descriptions, we conclude that skill is no substitute for integrity, and good intentions are no substitute for learning what the task requires. Doctors, teachers, workers, and researchers all need honesty to regulate the use of their abilities. Strength here is not an invitation to exclude a person with a disability; the ability to perform a task is assessed according to its nature and what can be prepared for it, not according to a single physical appearance.

A young person may face a seemingly insignificant temptation: falsifying results, claiming credit for someone else's work, or remaining silent about preventable harm. Integrity begins with these details, not just with major issues. Success that secures a position but sacrifices one's humanity is not true success.

Relationships are broader than the number of acquaintances.

The World Health Organization distinguishes between social isolation, meaning a lack of available connections and interactions, and loneliness, which is a painful feeling of a gap between existing and desired relationships. A person may be surrounded by many people but find no secure connection among them. The quality of relationships and mutual support influence our connections with others, and these can change due to job loss, relocation, illness, or separation. [4]

Maturity doesn't mean we can endure everything alone. A friendship that allows us to say "I'm tired" is just as valuable as one that shares joy. Similarly, frequent digital interaction doesn't necessarily mean we're heard when we need someone to listen; the quality of that presence is more profound than simply counting messages.

Choosing a Family Without a Race

A person may choose marriage and starting a family, or this step may be delayed or never happen. Social pressures shouldn't be the measure of one's dignity or completeness. When choosing a relationship, building it requires honest expectations, respect for boundaries, and a willingness to shoulder responsibilities—not merely attaining an image that others celebrate.

Parenthood isn't the end of learning, but the beginning of a new chapter. A partner isn't a one-size-fits-all solution for every loneliness, nor is a child a project to rectify every past loss. What we emphasize here, ethically, is that the other is a human being with their own needs and freedom, not a means to complete our self-image.

Youth in the Quran is not synonymous with heedlessness.

God Almighty said regarding the Companions of the Cave: “We relate to you their story in truth. Indeed, they were youths who believed in their Lord, and We increased them in guidance.” [Al-Kahf: 13] [5]

The verse does not give numerical ages for these youths, but it prevents us from portraying youth as a stage that produces nothing but impulsiveness and frivolity. Youthfulness may involve a sincere search for truth and the ability to reject familiar practices that do not sit well with one's conscience. This is not praise for every transgression; sincerity in this search requires knowledge and humility, as well as courage.

In everyday life, a courageous stance might be less public than we imagine: admitting ignorance, apologizing for mistakes, or refusing to participate in injustice, even at the risk of losing social acceptance. Independence of opinion is not measured by the volume of one's voice, but by one's ability to withstand evidence and engage in self-reflection.

Freedom that protects its possessor and does not wrong others.

In Letter 31 of Nahj al-Balaghah, in the testament attributed to the Commander of the Faithful, peace be upon him, to his son al-Hasan, peace be upon him, it states: “Honor yourself by refraining from all that is base, even if it brings you what you desire, for you will never find a substitute for what you give of yourself. Do not be a slave to others when God has made you free.” We quote the text of the letter as it appears in Nahj al-Balaghah, without claiming to have independently verified all its chains of transmission. [6]

In the same letter: “My son, make yourself a scale between yourself and others. Love for others what you love for yourself, and hate for them what you hate for yourself. Do not wrong others as you would not like to be wronged, and be kind as you would like to be treated kindly.” Thus, freedom does not stop at protecting oneself; it is also connected to justice in one’s view of others. [7]

This scale helps in understanding maturity as the ability to transcend the narrow question, “What do I gain?” to a broader question, “What do I do with myself and with others on the path of gain?” He who preserves his dignity by humiliating others has not yet attained the meaning he seeks for himself.

The Power That Learns to Care

In youth, the days seem vast, but their vastness is no guarantee that what we postpone will always be available. This should not lead us to fear life, but rather to embrace it fully: beneficial learning, honest work, a relationship that is not neglected, and mistakes that are corrected. Then, a person may stand before a child who expects from him what he himself once expected from others. There begins the story of motherhood and fatherhood, which is the subject of the next chapter.

Chapter Sources and Limitations of Documentation

[1] Hartshorne and Germine, “When Do Cognitive Functions Peak?”, Psychological Science, 2015; the abstract published in PubMed was used, not as a claim of a full review or generalization of its results to every individual.

[2] World Health Organization, Mental Health at Work; The Role of the Work Environment and Risk and Protective Factors.

[3] The Holy Quran, Surah Al-Qasas, verse 26; reproduced in full.

[4] World Health Organization, Questions and Answers on Social Connection; to distinguish loneliness from isolation and the quality of relationships.

[5] The Holy Quran, Surah Al-Kahf, verse 13; reproduced in full.

[6] Nahj al-Balaghah, Letter 31, the text of the annotated version by Muhammad Abduh, vol. 3, p. 51; the text was used, not the marginal commentary, and no independent verification of the chain of transmission was conducted.

[7] Nahj al-Balaghah, Letter 31, the Arabic text on Thaqalayn; for the section on justice between oneself and others, while maintaining the limit of verification shown above.

Chapter 68: Motherhood and Fatherhood

The birth of a child changes the order of many things in the home: time, sleep, work, fear, and hope. Visitors may become so preoccupied with the newborn that they forget they have a mother recovering, a father learning, and a family reorganizing their lives. The arrival of a new person does not make adults independent of care; rather, it shows that they need it in order to provide it.

The Body After Childbirth

Postpartum bleeding may continue for weeks and gradually decrease. Uterine contractions may become more noticeable during breastfeeding. Perineal or cesarean wounds require appropriate monitoring, and difficulty urinating, urinary incontinence, and pelvic floor problems may occur. The prevalence of some symptoms does not mean they should be endured in silence; persistent pain or difficulty with daily activities warrants evaluation and assistance. [1]

Sudden heavy bleeding or fainting, chest pain or difficulty breathing, fever with abdominal pain, and headache accompanied by changes in vision are examples of signs that require immediate attention. The phrase "This is normal after childbirth" is not sufficient to explain every complaint. Fertility may return before the first menstrual period, so breastfeeding alone is not a universal guarantee of contraception; the appropriate plan should be discussed with the healthcare team. [1]

The body's recovery is not a race to regain a previous figure as quickly as possible. Pressuring the mother to look as she did before may mask her need for sleep, treatment, nutrition, and support. The body does not become less dignified because it bears the marks of pregnancy and childbirth, and the quality of motherhood is not measured by how well these marks are concealed.

Care does not end when you leave the hospital.

The World Health Organization emphasizes the importance of monitoring both mother and newborn after birth, including addressing physical problems, nutrition, mental health, and warning signs. It advocates for partner support and participation in care, and for referrals for those who need treatment. Some families' needs extend beyond the initial weeks; a single follow-up appointment is not enough to declare everything resolved. [2]

A helpful visit is not one that prolongs the guest's stay and increases the mother's responsibilities. It might be a prepared meal, assisting with some household chores, providing time for rest, or accompanying the family to a medical appointment. We should ask the family what they need, not impose upon them the image we wish to project of ourselves as helpers.

Joy does not preclude the presence of depression

In the first few days, transient mood swings known as postpartum blues may occur, usually subsiding within two weeks. However, severe or persistent symptoms, such

as sadness, loss of pleasure, hopelessness, guilt, and sleep disturbances even when rest is available, may indicate depression requiring evaluation. Depression may begin during pregnancy or after childbirth; it is not a sign of a lack of love for the child. [3]

Biological, psychological, and environmental factors contribute to its development, and the mother should not be blamed for experiencing it. Treatment includes psychological and pharmacological approaches depending on the individual case, taking into account pregnancy and breastfeeding. Medications should not be discontinued or selected without consulting a specialist. Family support is important, but it does not replace treatment when it is necessary. [3]

Fathers or partners may also experience depression after the arrival of the child. Therefore, inquiries about well-being should include the caregiver, and the idea of strength or masculinity should not make seeking help shameful. [4]

A Different Condition Requiring an Urgent Response

Postpartum psychosis is a rare and serious condition that can begin suddenly and involves severe confusion, hallucinations, delusions, or mania. It is a medical emergency requiring immediate evaluation and emergency care when there is an immediate risk to the mother or child. The affected person may not realize they are ill, so the observation and response of those around them are crucial. Recovery is possible with appropriate treatment. [5]

These signs should not be lost amidst interpretations that blame the woman or question her faith, nor should seeking treatment be delayed by waiting for an unreliable prescription. The family can pray and seek God's help while simultaneously seeking medical care; there is no conflict between hope and protecting life.

Fatherhood Is Learned

In a brain imaging study involving 89 parents, responses to their children's cues were examined in different caregiving roles. Fathers’ direct caregiving time was linked to patterns of connectivity between brain regions involved in processing emotion and understanding others. These are correlational findings in a specific sample, not a test to measure the amount of love, nor proof that a single hormone makes a good parent. [6]

Fatherhood expands practically when the father becomes aware of his child's needs, not a guest waiting for instructions every time. Carrying, comforting, monitoring the child's health, and managing household affairs are responsibilities, not favors bestowed upon the mother. The distribution of burdens may vary according to circumstances, but fairness dictates that the cost of care should not disappear simply because the one who bears it performs it silently.

The child has rights, not an extension of control.

In the Treatise on Rights attributed to Imam Zayn al-Abidin (peace be upon him), as narrated in Tuhaf al-Uqul, it states: "As for the rights of your child, know that he is

from you and connected to you in this world, for better or for worse, and that you are responsible for what has been entrusted to you concerning him in terms of good manners, guiding him to his Lord, and helping him to obey Him, both in your regard and in his own." This is a reference to the text in Tuhaf al-'Uqul, without any judgment on the authenticity of all the chains of transmission or a comprehensive comparison of its narrations. [7]

We read responsibility here as a duty of care and upbringing, not ownership of the child. It is not right to burden him with all our hopes, or to make his success our pride and his failure a personal insult. It is beneficial for him to find in his parents a measure of justice by which he can understand justice, and a measure of mercy in which he can find solace when he errs.

Gratitude to parents and the limits of obedience

God Almighty said: “And We have enjoined upon man [care] for his parents. His mother carried him, [increasing her] weakness upon weakness, and his weaning is in two years. Be grateful to Me and to your parents; to Me is the [final] destination.” [Luqman: 14] [8]

And Allah Almighty said: “But if they strive to make you associate with Me that of which you have no knowledge, do not obey them but accompany them in [this] world with appropriate kindness and follow the way of those who turn back to Me. Then to Me will be your return, and I will inform you of what you used to do.” [Luqman: 15]

These two verses acknowledge the virtue of parents while clarifying that obedience is not absolute, and that disagreement on this matter does not justify neglecting kindness. Kindness to parents does not mean setting conscience aside, nor is independence a denial of all that has been mentioned previously. Addressing cases of harm and abuse requires appropriate protection and counseling, and appeals to filial duty should not be used to prevent the victim from seeking safety.

Life is not reduced to procreation

Not everyone is a parent, and this does not diminish their humanity or capacity to give. Care may extend to a child who has lost their support, a relative in need, or work that alleviates some of the burden on others. Those who bear the responsibility of a child must also remain human beings with needs and limitations, not idealized figures destined for exhaustion.

These roles change with time; children grow up, the body changes, experience expands, and new questions arise. Therefore, in the next chapter, we move to middle age, where we must not reduce the transformations in fertility and hormones to the end of value or the end of the ability to live.

Chapter Sources and Limits of Documentation

[1] NHS, The Body After Childbirth; Recovery, Symptoms, Warning Signs, and Return of Fertility.

[2] World Health Organization, March 30, 2022 statement on postpartum care; the official statement was used, not a claim to have read the entire guide to recommendations.

[3] NIMH, Perinatal Depression; to differentiate from postpartum blues, causes, and treatment.

[4] NHS, Postpartum Depression; for the possibility of fathers and partners being affected and the need for support.

[5] NHS, Postpartum Psychosis; for symptoms, the need for an urgent response, and the possibility of recovery.

[6] Abraham et al., Father’s brain is sensitive to childcare experiences, PNAS, 2014, DOI: 10.1073/pnas.1402569111; correlational findings, not diagnostic criteria or judgment of individuals.

[7] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, p. 263, Treatise on Rights, The Rights of the Child; while maintaining the limits of the investigation outlined in the text.

[8] The Holy Quran, Surah Luqman, verses 14–15; both are cited in their entirety.

Chapter 69: Midlife and Hormonal and Reproductive Changes

Midlife doesn't arrive on a specific day when time knocks on the door. It may manifest as a change in sleep, a shift in the menstrual cycle, or questions about energy and fertility, or it may pass quietly until a person realizes that their needs are no longer the same. It is unfair to reduce this stage to a single word that suggests life has closed its doors.

What Does Menopause Mean?

Natural menopause is retrospectively defined as twelve consecutive months without menstruation, with no other clear cause. It is associated with the loss of ovarian follicular function and a decline in estrogen, and occurs in most women between the ages of 45 and 55. It is usually preceded by a transitional phase during which the menstrual cycle changes, which can last for years. [1]

The loss of ovarian function may result from surgery to remove the ovaries or from certain treatments. The absence of bleeding after a hysterectomy with remaining ovaries does not, in itself, confirm their cessation. Hormonal treatments can also alter the bleeding pattern; therefore, the doctor does not rely solely on the calendar but also considers the patient's medical history. [1]

Different Experiences, Not a Single Picture

Hot flashes, night sweats, sleep disturbances, mood swings, difficulty concentrating, vaginal dryness, pain, and urinary symptoms may occur. Their severity varies considerably; some women experience few symptoms, while others are significantly affected in their daily lives. The suffering is not imaginary, and the symptoms listed are not a predetermined fate for every woman. [2]

It is wrong to automatically attribute every palpitation, fatigue, or discomfort to this stage. Bleeding after menopause needs to be evaluated, even if it occurs only once or is light; the evaluation seeks the cause and does not necessarily mean the cause is serious. A change in bleeding to heavier than usual also warrants a visit to the doctor. [2]

If a woman complains of difficulty sleeping, pain, or a disturbing change, saying "that's just age" does not answer her question. Age may be part of the explanation, but it is not a treatment plan, nor a reason to close the door to help.

Care, not sensationalism or denial

There are hormonal and non-hormonal options for symptom relief. The type of treatment varies depending on the complaint, medical history, presence of the uterus, and other factors. Topical treatment may be appropriate for some symptoms, while other systemic, psychological, or pharmacological treatments may be discussed. No single prescription works for everyone, and the desire to avoid hormones does not mean there are no alternatives. [3]

Herbal remedies and supplements marketed for this stage are not safe or effective simply because they are labeled as natural, and they may interfere with medications. Their use should be discussed, not secretly added to the treatment plan. Treatment aims to improve health and quality of life, not to promise to turn back the clock. [3]

Hormonal shifts are also linked to bone health, but risk assessment and an appropriate plan need to consider the whole person. Healthcare at this stage remains an opportunity to review needs and preventative measures, not to replace all questions with a single hormone test. [1]

Early ovarian insufficiency is not just another name

Ovarian insufficiency can occur before age 40 and is called primary ovarian insufficiency. It does not always correspond to permanent menopause; irregular periods may continue, and some women with this condition may become pregnant. Therefore, a young woman whose menstrual cycle has stopped or become noticeably irregular needs an evaluation. Her fertility and future should not be judged based on hearsay or isolated analysis. [4]

Pregnancy remains possible during the premenopausal transition. The choice of contraceptive method, its duration, and the interpretation of amenorrhea in conjunction with hormone therapy should be discussed with a specialist on a case-by-case basis. Menstrual irregularities should not be assumed to preclude pregnancy, nor should symptomatic treatment be considered equivalent to a contraceptive plan. [1, 3]

Is there a male equivalent?

The term “male menopause” can give the impression of a sudden and universal hormonal cessation, which is misleading. Testosterone levels can change gradually with age, but decreased libido, fatigue, or mood swings do not necessarily indicate a hormonal cause. Sleep deprivation, stress, depression, physical illnesses, and other factors may contribute, and treatment requires identifying the underlying cause. [5]

Hypogonadism in men is diagnosed by combining appropriate symptoms and signs with low hormone levels confirmed by repeat measurements, not by relying on a single, isolated finding. The reading may vary depending on the time of measurement, the underlying condition, and medications. Once a deficiency is

confirmed, the cause is investigated in the testes or their regulatory axis. [6, 7]

Testosterone is a medication for specific conditions, not a guarantee of restored youth. Treatment with it may reduce sperm production; therefore, the desire to father children should be discussed before starting it, and guidelines advise against starting it for those planning to conceive soon. Those using it require monitoring and should not purchase it for aesthetic purposes or to satisfy advertising promises of lasting potency. [6, 7]

Dignity is not tied to continued fertility.

Bodily changes may evoke mixed feelings: relief from some burdens, sadness over a missed opportunity, or anxiety about how a partner and society will perceive them. We don't expect everyone to feel the same way, nor do we make their ability to reproduce the measure of their worth. Human beings possess many facets of giving, knowledge, and connection that are not reduced to the function of a single organ.

Partners need conversations that respect pain, desire, and boundaries, not accusations where one interprets every change in the other. A relationship isn't about ignoring fatigue, nor is silence a sign of loyalty. Support can begin with a simple question: What has changed, and what helps you?

Good Tidings in an Unusual Context

God Almighty said, regarding the story of Abraham’s wife, peace be upon him: “She said, ‘Woe to me! Shall I give birth while I am an old woman and this, my husband, is an old man? Indeed, this is a strange thing!’” [Hud: 72]. [8]

And God Almighty said: “They said, ‘Are you amazed at the decree of God? The mercy of God and His blessings be upon you, O people of the house. Indeed, He is Praiseworthy and Glorious.’” [Hud: 73].

The text recounts her astonishment and the good news, but it does not offer a protocol for restoring fertility or a promise that the same event will be repeated for everyone. Faith in God's power does not justify marketing a treatment without evidence, nor justify blaming those who have not been blessed with children for weak faith. The story's meaning lies in hope and divine power, and medical practice has its duty to be honest about probabilities and the limitations of treatment.

A Stage for Reassessing Perspectives

Midlife can prompt a useful question: What habits do I want to retain, and what needs to be corrected? The intention is not to impose a psychological crisis called a midlife crisis on people, but rather to acknowledge that changing circumstances may necessitate a re-evaluation of priorities. As the years progress, we reach old age, where it becomes clear that people do not age in the same way.

Sources and Limits of Documentation

[1] World Health Organization, Menopause: Definition, Transition, Ovarian Function, and Care. A single contraceptive recommendation cannot be generalized to every case.

[2] NHS, Menopausal symptoms and transition; for variability, symptoms, and the need to assess bleeding.

[3] NHS, Treatment of menopause and transition; for options and limitations of supplementation, not for individual prescription.

[4] NICHD, Definition of primary ovarian insufficiency; to differentiate it from permanent menopause and the possibility of continued intermittent function.

[5] NHS, So-called male menopause; for limitations of the term and the multiple causes of symptoms.

[6] Endocrine Society, Hypogonadism in men; for diagnosis, follow-up, and the effect of treatment on fertility.

[7] Endocrine Society, Resources for the treatment of low testosterone, 2018; for symptoms with repeat measurement and assessment, and avoiding treatment when planning a pregnancy soon.

[8] The Holy Quran, Surah Hud, verses 72–73; these are cited in their entirety, with a distinction made between the miraculous good news and the medical recommendation.

Chapter 70: Ageing and Its Diverse Courses

Wrinkles do not tell the whole story of a person. We may see the marks of years on a face but not the path a person has traveled: the hard work, the illness they recovered from, the joy they cherished, and the opportunities they were given or denied. Therefore, understanding aging does not begin with the question: How old is he/she? It also requires another equally important question: How is he/she living now, and what does he/she need to live with dignity?

The Same Age, Different Paths

Aging is associated with the accumulation of molecular and cellular changes and damage, but its impact on abilities is not uniform or identical among people. A person may experience more than one chronic disease, or complex conditions such as frailty and falls may develop. However, it is incorrect to assume that every elderly person is incapacitated or dependent; health is also affected by life history, environment, and available resources, not just by the number of years. [1]

Here we must be wary of a subtle injustice: comparing two people over seventy and then taking their difference as proof of one's willpower and the other's weakness. The comparison may overlook illness, poverty, a pre-existing injury, or years of unseen care and work. Aging is not a moral test in which those who maintain a youthful appearance pass and those who need assistance fail.

Functional Reserve: What Appears When Need Increases

Many organs possess a capacity beyond what they need at rest; this surplus is called functional reserve. It may decrease with age to varying degrees, so a person may seem stable in their usual day but find it difficult to tolerate an infection, stress, or sudden change. Not all organs age at the same rate, and this concept is not a fixed percentage deducted annually from each person's health. [2]

Conversely, it is a mistake to attribute every new complaint to "age." An explanation

that closes the door to further inquiry may obscure a problem that can be treated or alleviated. The goal is not to deny the effects of age, but to prevent age from becoming an excuse for neglecting the person who has passed it.

Memory: Between Normal Change and Illness

Dementia is not another name for old age, but a condition in which memory, thinking, and the ability to perform daily activities are affected by brain diseases. It is not an inevitable consequence of aging. When a person gets lost in a familiar place, or tasks they are accustomed to performing are disrupted, or difficulties with thinking and communication increase, it warrants evaluation, not ridicule or hasty judgment from the family. [3]

Confusion that appears suddenly has a different meaning and requires immediate medical attention; it may be related to an infection, stroke, low blood sugar, medication, or other causes. The affected person may have difficulty concentrating, knowing their surroundings, or speaking clearly. Until help arrives, they should be reassured and spoken to in simple terms, with a list of their medications available if possible, without engaging in self-diagnosis that will delay care. [4]

A person's worth is not measured by the number of names they remember. If he is unaware of our details, we must not neglect his rights. Kindness dictates that we not turn the visit into a repetitive interrogation: Who am I? What did I tell you? Instead of embarrassing him, we should ensure his safety and respect.

Medications: The Need for Review, Not Arbitrary Discontinuation

Aging or liver and kidney disease may alter how the body processes certain medications. Prescriptions may interact with other medications or supplements, leading to side effects such as dizziness, drowsiness, or memory problems. Therefore, an up-to-date list of all medications, their dosages, and timings is beneficial and should be presented to the doctor or pharmacist during the next appointment. Prescribed medications should not be discontinued or their dosage changed without consultation. [5]

The number of boxes is not the sole indicator of the quality or inadequacy of treatment; a patient may require more than one treatment, or may need a burdensome treatment regimen simplified. The responsible question is not: How do we get rid of the medication? Rather: Does each medication have a clear purpose, and are its benefits, risks, and method of use still appropriate for this individual?

Falls are not minor details.

Factors such as lower limb weakness, balance disorders, vision impairment, certain medications, ill-fitting footwear, and home obstacles all contribute to falls. Fear of falling can lead to reduced mobility and increased weakness. Assessing these factors and implementing appropriate interventions is beneficial. Head injuries following a fall require prompt evaluation, especially in individuals on blood thinners. [6]

Healthy aging is supported by accessible environments: safe transportation, walkable spaces, and services that allow participation despite some decline in abilities. A balanced diet, appropriate activity, and abstaining from tobacco also help reduce some health risks. These are not promises to stop time, but rather ways to improve living standards and capabilities. [1]

Care That Preserves the Person’s Voice

A person may be able to choose their food but not be able to prepare it, or understand a medical decision but need more time to hear it. Need in one area should not lead to the loss of their voice in all areas. Practical kindness begins with asking questions, explaining options, and offering the help needed without automatically assuming guardianship.

The family itself may become tired. Acknowledging fatigue is not an admission of lack of love, and sharing care and seeking help from those who are skilled in it is not necessarily abandonment. However, fatigue does not justify humiliation, neglect, or misappropriation of funds. We do not treat our elders well when we praise their status verbally and then transform them into someone whose opinion is not heard at home.

Kind words when need is overwhelming

God Almighty says: “And your Lord has decreed that you worship none but Him, and that you be kind to your parents. If one or both of them reach old age with you, do not say to them a word of disrespect, nor repel them, but speak to them with gracious words.” [Al-Isra: 23]

And God Almighty said: “And lower to them the wing of humility out of mercy and say, ‘My Lord, have mercy upon them as they brought me up [when I was] small.’” [Al-Isra: 24]. [7]

Kind words are not an embellishment added to food and medicine; they are an integral part of kindness itself. It is noteworthy that the verse addresses the moment of old age, when requests may increase, responses may be delayed, and roles may be reversed. In an educational reading of these two verses, the vulnerability of childhood is recalled to refine the behavior of the capable in the face of their parents' vulnerability, not to treat the elderly like children lacking identity.

Al-Kulayni narrated with his chain of transmission from Abu Abdullah al-Sadiq, peace be upon him: “Part of glorifying God Almighty is glorifying the elderly Muslim.” [8] We quote the text from its source without asserting the authenticity of its chain of transmission. The electronic version does not present a grading of authenticity, and the investigation of its narrators and transmission routes is incomplete in this instance. The ethical meaning we are invoking is respect for humanity, not granting the elderly immunity from criticism or permitting injustice against others.

What remains when capacity changes?

A person remains with a history, rights, and relationships, not merely a collection of functions whose diminished state we enumerate. It is only fair to consider their remaining capabilities as well as their needs, and to allow them space for giving, choosing, and resting. After considering the variations in aging, we return in the next chapter to a broader question: How do texts speak of age, lifespan, weakness, and strength, and what does it mean to invest our days?

Chapter Sources and Limits of Reasoning

[1] World Health Organization, Aging and Health; for varying paths and the influence of environment and functional capacity, not to determine the fate of a specific individual.

[2] MedlinePlus, Aging Changes in Organs, Tissues, and Cells; The concept of functional reserve was used without general numerical estimates.

[3] World Health Organization, Dementia; for definition and clarifying that it is not an inevitable part of aging and some functional markers.

[4] UK National Health Service, Sudden Confusion; for the need for urgent assessment and initial reassurance.

[5] US Food and Drug Administration, Five Tips for Drug Safety in Older Adults; for interactions, review, and a list of preparations.

[6] Centers for Disease Control and Prevention, Facts about Falls in Older Adults; for risk factors and effects of falls, without generalizing US statistics.

[7] The Holy Quran, Surah Al-Isra, verses 23–24; cited in full.

[8] Al-Kafi, vol. 2, Book of Social Relations, Chapter on the Obligation to Respect Elderly Muslims, Hadith 6; cited with the statement that the chain of transmission was not verified here.

Chapter 71: Age, the Appointed Term, and Weakness and Strength in the Texts

A person passes through stages in which they may imagine their strength to be a permanent attribute, only to learn that what seemed fixed was a changing gift. In this section, we have discussed birth, growth, puberty, maturity, and old age. This chapter, however, does not add a new age to the list of lifespans, but rather inquires into the meaning and limits of the journey: What do we do with the time we have been given, and how do we reconcile belief in an appointed term with responsibility for life itself?

From weakness to strength, then back to weakness

God Almighty says: “It is God who created you from weakness, then made you strong after weakness, then made you weak and old after strength. He creates what He wills, and He is the All-Knowing, the All-Powerful.” [Ar-Rum: 54] [1]

This verse places strength between two periods of weakness, preventing a person from defining themselves solely by their moment of strength. However, it does not prescribe a medical schedule that applies to all bodies, nor does it state that all people reach old age or undergo identical transformations. Rather, it serves as a reminder of the inherent need and the changing nature of life, not a formula for calculating the efficiency of muscles or the brain.

One of the fruits of this understanding is that the strong should look upon the weak without arrogance. Dependence on others is not a shameful trait that has befallen some people; we have known it since the beginning of our lives, and we may know it again. If our capabilities expand today, this expands our responsibilities, and it does not give us the right to humiliate those whose capabilities are limited.

The most decrepit stage of life is not a diminishment of one's worth.

God Almighty says: {And God created you, then He will cause you to die, and some of you will be brought back to the most decrepit stage of life so that, after having had knowledge, you will know nothing. Indeed, God is All-Knowing, All-Powerful.} [An-Nahl: 70] [2]

The Quranic expression “and among you” prevents generalizing this condition to everyone who lives a long life. Furthermore, describing a stage as one of weakness does not make the person in that stage despicable, nor does it negate their rights when their knowledge or independence declines. The verse does not offer a diagnosis of a specific neurological disease; medical designations require criteria and examination. Rather, the text points to the possibility of the loss of a capacity that a person once thought firmly established.

When an elderly person forgets, this forgetfulness is not evidence of divine punishment or a deficiency in their faith. We have no right to attribute to God a judgment on someone He has not revealed to us. We are accountable for how we treat them, not for inventing a mystical explanation for every change they experience.

Life is surrounded by knowledge, not revealed to us.

God Almighty said: “And God created you from dust, then from a sperm-drop, then made you mates. And no female conceives nor gives birth except with His knowledge. And no one is granted long life nor is his lifespan shortened except that it is in a record. Indeed, that, for God, is easy.” [Fatir: 11] [3]

The verse connects the beginning of creation, conception, birth, and the extension of life to God’s knowledge. However, the encompassing nature of divine knowledge does not extend to us, including the details of individuals’ lifespans. It is not permissible to deduce the date of a person's death from their physical appearance or illness, nor to transform a religious statement into a definitive prediction of their remaining lifespan.

There is a significant difference between saying, "Nothing is outside the knowledge of God," and saying, "We know why so-and-so died at this age." The first is an affirmation of God's all-encompassing knowledge; the second is a claim that requires evidence, which cannot be provided by simply observing the event.

The Predetermined and the Suspended Term

God Almighty says: {It is He who created you from clay, then decreed a term—and a term is specified with Him. Then you doubt.} [Al-An'am: 2] [4]

Al-Kulayni narrated on the authority of Humran that he asked Abu Ja'far al-Baqir (peace be upon him) about the two terms mentioned in the verse, and he said: “They are two terms: a fixed term and a suspended term.” The Thaqalayn website quotes al-Majlisi in Mir'at al-'Uqul, vol. 2, p. 138, as classifying it as “hasan or muwaththaq” (good or reliable, technical gradings), and quotes al-Bahbudi as authenticating it. This is a reference to the ruling presented on the website, not a claim of comparing

editions of the two books in this context. [5]

And God Almighty said: “God erases what He wills and confirms [what He wills], and with Him is the Mother of the Book.” [Ar-Ra'd: 39] [6]

These texts are discussed in the Imami tradition within the context of predestination, divine decree, and Bada'. It is essential that Bada' not be understood as new knowledge that God acquires after ignorance; Al-Saduq rejects this meaning, interpreting the concept of "bada'" (divine alteration of decrees) as the manifestation of the matter, not as regret after its concealment. We mention here his doctrinal statement as al-Saduq's own words, without treating it as an independent hadith or using it to establish every disputed detail. [7]

The educational conclusion we adopt is that divine knowledge does not equate to the negation of causes or human responsibility. However, detailing the levels of divine decree and explaining the differing narrations is a broader topic, and we do not reduce its disagreements to the claim that all texts explain lifespan in the same way.

Maintaining Kinship Ties and Increasing Lifespan: How Do We Interpret the Narration?

It is narrated in al-Kafi on the authority of Abu Abdullah al-Sadiq (peace be upon him): "Maintaining kinship ties and being a good neighbor prospers homes and increases lifespans." Al-Thaqalayn quotes al-Majlisi in Mir'at al-'Uqul, vol. 8, p. 372, describing the chain of transmission for this narration as "majhul" (unknown). Therefore, it is not correct to present it to the reader as having a sound chain of transmission simply because its wording is widely known. [8]

Distinguishing between the veracity of a report and its meaning protects research from two pitfalls: either abandoning the investigation because the wording is appealing, or ignoring an entire topic because one chain of transmission is unsubstantiated. This report, and others like it, have source locations and transmission routes, each of which requires examination; it is not permissible to consider the number of times it is repeated online as independent evidence of its veracity.

Reports of increased lifespan should not be transformed into a chart guaranteeing a calculated number of years for someone who visits a relative, nor should they be used as justification for accusing someone who dies prematurely of severing family ties. Furthermore, the mere alignment of a general meaning with a social benefit is insufficient to claim that a medical experiment has proven the promise concerning the unseen in all its details. Kindness remains essential, documentation remains necessary, and texts should not be used to harm those grieving.

When the appointed time comes

God Almighty says: “And God will never delay a soul when its appointed time has come. And God is All-Aware of what you do.” [Al-Munafiqun: 11] [9]

This verse does not give us permission to neglect saving a life, because we do not possess knowledge of the unseen before the action that would permit us to abandon

our duty. Just as the pursuit of sustenance is not disregarded on the grounds that it is predetermined, the care of oneself is not disregarded on the grounds that death has an appointed time. Faith here places a person between action and submission: one acts according to their ability and does not claim to control every outcome.

That life be long in obedience

In the Supplication of Noble Character from the Sahifa al-Sajjadiyya attributed to Imam Zayn al-Abidin (peace be upon him): “Let me live as long as my life is devoted to obeying You.” This is a portion of the twentieth supplication, not the entirety of it; and the chains and routes of transmission of the Sahifa have not been fully investigated here. [10]

The request is directed towards the meaning of life, not its mere number in isolation from what it is filled with. Obedience, in this context, is not limited to rituals alone, but encompasses truthfulness, justice, serving the needy, refraining from harming others, and restoring rights. A person may possess ample time and then squander it in endless disputes, while a single hour could be used to reconcile two hearts.

Investing in the Days Without the Slavery of Achievement

God Almighty says: “By time” [Al-Asr: 1]. And God Almighty said: “Indeed, mankind is in loss” [Al-Asr: 2]. And God Almighty said: “Except for those who have believed and done righteous deeds and advised one another to truth and advised one another to patience” [Al-Asr: 3]. [11]

Avoiding loss is not a race to the number of tasks completed; rather, the surah encompasses faith, righteous deeds, mutual exhortation to truth, and patience. Within this framework, there is room for those who work, those who care, those who learn, and those who patiently endure what they do not choose. The sick and the weak are not excluded from the meaning of life simply because they cannot produce what the healthy can.

Thus concludes the part on the stages of life: we began with a human being receiving care, then we saw them grow, choose, care, and develop needs. Behind these transformations remain questions about the self, the mind, the soul, and consciousness. We turn to these questions, maintaining the distinction between what the text states, what science investigates, and what philosophical reflection strives to explore.

Chapter Sources and Limits of Inference

[1] The Holy Quran, Ar-Rum: 54; the complete verse.

[2] The Holy Quran, An-Nahl: 70; the complete verse.

[3] The Holy Quran, Fatir: 11; the complete verse.

[4] The Holy Quran, Al-An'am: 2; the complete verse.

[5] Al-Kafi, Vol. 1, Book of Tawhid, Chapter on Bada', Hadith 4; the text of the hadith and the two gradings reported in the Thaqalayn database.

[6] The Holy Quran, Ar-Ra'd: 39; the complete verse.

[7] Al-Saduq, Kamal ad-Din wa Tamam an-Ni'mah, Chapter 16; distinguishing between the author's explanation and the hadith of the chapter, and citing his explanation to negate ignorance and regret.

[8] Al-Kafi, Vol. 2, Book of Faith and Disbelief, Chapter on Maintaining Kinship Ties, Hadith 14; with an explanation of the ruling transmitted on this chain of narration.

[9] The Holy Quran, Al-Munafiqun: 11; the complete verse.

[10] The Complete Sahifa al-Sajjadiyya, Supplication Twenty, p. 101 in the displayed edition; partial quotation with no definitive chain of transmission here.

[11] The Holy Quran, Surah Al-Asr, verses 1–3; complete version.

Part 8: The Brain, Self and Spirit

We have arrived at the human being carrying the history of his body and the history of his relationships, but describing the body's organs and the stages of life does not exhaust his questions about himself. He does not only ask how his hand moves, but why he chose to extend it for help or harm; and he does not only ask how an image reaches his nervous system, but how it becomes a scene he experiences and remembers.

In this part, we approach consciousness, memory, emotion, dreams, will, and spiritual life. We will not make the image of the brain a complete translation of the human being, nor will we dismiss what its sciences reveal by claiming that we have another language for the spirit. Every question has its instrument, and every answer its scope. When tools converge, our knowledge should increase in humility and precision, not be tempted by a claim to comprehensiveness.

Chapter 72: Self, Spirit, Intellect and Heart

A person might say: "My soul is weary," "My mind is preoccupied," or "My heart is at peace." They do not always intend to describe a specific organ or divide themselves into independent parts. When these words are applied to the Quran, Hadith, philosophy, and medicine, attention to context becomes essential for understanding; the wording may be the same, but the speaker's intended meaning may differ.

The Self (Nafs): Different Meanings in Different Contexts

God Almighty says: {Every soul will taste death, and We test you with evil and good as a trial; and to Us you will be returned.} [Al-Anbiya: 35] [1]

The discourse here is directed to those who experience trials, taste death, and return to God. It is inaccurate to interpret the word "self" in every instance as referring to a blameworthy desire, as the word appears in contexts related to the self, life, and responsibility, and the context determines how it is understood.

God Almighty said: {And I do not absolve myself. Indeed, the soul is ever inclined to evil, except the one on whom my Lord has mercy. Indeed, my Lord is Forgiving and Merciful.} [Yusuf: 53]. [2]

It is not permissible to extract the description of the soul as being inclined to evil and then use it as a definition that exhausts the essence of humanity, or as an argument that all desire is evil. The same verse contains an exception related to God's mercy, and in other places, the soul is described as being at peace. We will not resolve here the interpretive disagreement regarding the speaker of this verse; the point of reference is the use of the word and its accompanying description.

God Almighty said: “O tranquil soul” [Al-Fajr: 27]. And He said: “Return to your Lord, well-pleased and pleasing [to Him]” [Al-Fajr: 28]. [3]

These moral and spiritual descriptions are not names for brain lobes, nor is it correct to assign them to parts of the nervous system and then claim that anatomical study

has found the soul that incites to evil or the soul at peace. Likewise, they are not a clinical test: an anxiety disorder does not prove that someone is far from God, nor is outward calmness sufficient to judge their standing with Him.

The Soul in Sleep and Death

God Almighty says: “God takes the souls at the time of their death, and those that do not die [He takes] during their sleep. Then He withholds those for whom He has decreed death and releases the others until a specified term. Indeed in that are signs for a people who give thought.” [Az-Zumar: 42] [4]

The verse combines sleep and death in speaking of tawaffi, the taking of souls, but it distinguishes between the soul that has been decreed to die and the soul that is sent forth for a predetermined time. Therefore, the state of sleep is not equated with medically defined death, nor is the measurement of sleep waves a direct measure of tawaffi in its unseen sense. We will return to this verse when discussing dreams and death, while maintaining the distinction between religious knowledge and physiological description.

The Spirit (Ruh): Context Precedes Definition

God Almighty says: {And they ask you, [O Muhammad], about the spirit. Say, "The spirit is of the command of my Lord. And mankind has not been given of knowledge except a little."} [Al-Isra: 85]. [5]

The verse calls for humility in the claim of comprehensive knowledge. However, this does not justify calling every unknown aspect of the body spirit, or presenting a hypothesis about energy or electricity as a definitive explanation for it. The limits of combining the timing of texts with descriptions of embryonic development were already discussed in the chapter on the breathing of the spirit; therefore, we should not fill in what has not been proven with details we imagine.

God Almighty said: “The Trustworthy Spirit has brought it down” [Ash-Shu'ara: 193]. God Almighty also said: “Upon your heart, that you may be among the warners” [Ash-Shu'ara: 194]. [6]

In this context, Tabatabai interprets the Trustworthy Spirit as Gabriel, the angel of revelation, citing other verses concerning the revelation of the Quran. [7] This example is sufficient to alert the reader that grouping every instance of the word ruh (spirit) under a single definition of the human soul may distort the meaning. The difference in contexts does not mean that we have exhaustively explored all its uses here.

The Heart: Between Organ and the Discourse of Insight

God Almighty says: “Have they not traveled through the land so that they may have hearts by which to understand or ears by which to hear? For indeed, it is not the eyes that are blind, but it is the hearts which are in the breasts that are blind.” [Al-Hajj: 46] [8]

This verse is about reflection and insight, not about describing the chambers and

valves of the heart. In his interpretation of the two verses from Surah Ash-Shuʿara, Tabatabai argues that the heart, to which perception and feeling are attributed, refers to the human soul, not merely the physical organ. We attribute this guidance to him as an interpretation, not as the only possible expression in all schools of thought. [7]

It is a mistake to move from expressing faith in the heart to claiming that personal memory is stored in the heart muscle, or that organ transplantation transmits the donor's faith. These are other claims that require independent evidence; they do not arise merely from the shared use of the word in the discourse of guidance and the discourse of organs.

The Intellect: The Skill of Thinking and the Scale of Action

In a hadith attributed to Abu Abdullah al-Sadiq (peace be upon him), in response to a question about the intellect, it states: “That by which the Merciful is worshipped and Paradise is attained.” In its chain of transmission in al-Kafi, it is narrated “from some of our companions, who attributed it [to the Imam, omitting links in the chain],” so we do not consider it authentic here. [9]

This usage highlights the purpose of guidance and the proper direction of ability. A person may succeed in solving a problem or devising a plan, but his success is not a judgment on his justice or trustworthiness. Therefore, cognitive tests do not equate to all that reason signifies in the discourse of obligation and ethics, nor does that discourse absolve us from examining our arguments and errors.

When Terminology Enters Philosophy

In his book on the soul in Al-Shifa, Ibn Sina divides the inquiry into the vegetative, animal, and human souls. He connects the first to nourishment, growth, and reproduction; the second to perception of particulars and voluntary movement; and the third to action based on intellectual choice and the understanding of universals. This is an explanation of his philosophical terminology, not a report of a modern anatomical division or a hadith attributed to the Ahl al-Bayt (peace be upon them). [10]

When a philosopher uses the term "rational soul," we should not understand it merely as the production of sounds, thereby diminishing the humanity of those who cannot speak. Similarly, the vegetative soul should not be interpreted in this context in the same way as the soul is interpreted in the discourse of accountability and obligation. The similarity of names does not negate the difference in their subjects, nor does it make each usage an argument against the other.

The Brain in Medical Terminology

The brain is an organ in the head that includes structures such as the cerebrum, cerebellum, and brainstem. It is associated with functions such as learning, memory, movement, and the regulation of vital functions. Together with the spinal cord, it forms the central nervous system. [11] This is a definition of an organ and its functions, not a comprehensive definition of the spirit or a metaphysical judgment on

the nature of humanity.

In the pages of this part, we will use the term "brain" when referring to the organ and its networks, and "cognitive processes" when referring to attention, memory, and the like. We will clarify the context of the terms "soul," "spirit," and "heart" when they appear. This is a principle of understanding, not a claim that existence is divided into disconnected boxes.

Before Seeking an Answer

Let us first ask: Are we searching for the meaning of a word in a verse, the authenticity of a narration, a philosophical argument, or the result of an experiment? An answer that is valid in one of these contexts may not suffice in another. Thus, we can move to the question of consciousness without labeling every neural signal as spirit, or making respect for the spirit a reason to disregard the brain.

Sources of the Chapter and Limits of Reasoning

[1] The Holy Quran, Al-Anbiya: 35; the complete verse.

[2] The Holy Quran, Yusuf: 53; the complete verse, without resolving the identity of the speaker in the interpretive dispute.

[3] The Holy Quran, Al-Fajr: 27–28; both verses are complete.

[4] The Holy Quran, Az-Zumar: 42; the complete verse.

[5] The Holy Quran, Al-Isra: 85; the complete verse.

[6] The Holy Quran, Ash-Shu'ara: 193–194; both verses are complete.

[7] Al-Tabataba'i, Al-Mizan, Tafsir Ash-Shu'ara 192–227; to identify the trustworthy spirit and explain his interpretation of the meaning of the heart.

[8] The Holy Quran, Al-Hajj: 46; the complete verse.

[9] Al-Kafi, Vol. 1, Book of Intellect and Ignorance, Hadith 3; partial transmission with note of ambiguity and omission in the chain of transmission.

[10] Ibn Sina, The Soul from the Book of Healing, First Article, Chapter Five, p. 55 in the edition presented; terminology from the text, not from the editor's commentary.

[11] National Cancer Institute, Glossary of Terms, Entry on the Brain; for general anatomical use, not for definitively defining consciousness.

Chapter 73: Consciousness and Perception

You might look at a familiar face and know you've seen it before, yet take time to recall the name. You might hear a sentence while lost in thought, and only grasp its meaning when the speaker repeats it. These immediate experiences raise a broader question: How does what happens around us become an experience we live through, rather than merely a stimulus passing through the body?

What do we mean by consciousness here?

In this chapter, we are referring to the aspect of experience where a person has a sensation of something: a color they see, a pain they feel, a thought they are aware

of, or a sense of their presence. This is a clarification of the work in the following pages, not a claim that all researchers agree on a definition that exhausts consciousness. The question of the content of the experience is different from the question of whether one can wake up, respond, or describe the experience verbally.

To clarify: opening the eyelid, performing a movement when asked, and recounting what happened are different things that should not be reduced to a single sign. Speech may be our familiar means of accessing another person's experience, but it is not the only possible window to it, and experience does not cease to exist simply because this means is unavailable.

What reaches the eye is not everything we pay attention to.

In the Simons and Chabris experiment published in 1999, viewers were asked to follow ball passes between players, and in some scenes, a person wearing a gorilla suit passed by. Some participants did not notice the unexpected event, and their attention to it was affected by the conditions of the task and the scene. This type of experiment shows that the presence of something clearly in front of the eye does not guarantee conscious attention to it in all circumstances. [1]

The experiment does not prove that humans do not see anything outside their field of attention, or that human testimony is worthless. It teaches us to be wary of equating our confidence with complete awareness. A more accurate statement in a given situation might be: I did not notice it, not: it could not have been there.

How does a researcher study an experience they do not directly observe?

The research compares what is presented to the participant, what they do or report experiencing, and the recorded neural activity. The task, the duration of the presentation, or the conditions of attention may vary. Thus, a broad term is broken down into smaller, testable questions, without a single measurement becoming synonymous with everything we mean by consciousness.

Electroencephalography (EEG), in its usual form, records electrical activity using electrodes placed on the scalp and connected to a recording device. Movement affects the signal, and tasks or sleep may be required during the scan. [2] The waves displayed on the screen are not words spoken by the mind; they are a measurement that requires context and interpretation.

Functional magnetic resonance imaging (fMRI) detects changes in blood flow associated with brain activity and is used to study functions and plan interventions. It is sensitive to head movement, and its usefulness may depend on the individual's ability to perform the required task. [3] Therefore, a color image should not be treated as a photograph of the idea itself.

From Activity to Meaning: A Step Requiring Evidence

Poldrack discussed the problem of reverse inference: observing activity in an area previously associated with a cognitive process leads us to conclude that the same process has now occurred. This conclusion is not certain simply by analogy; its

strength depends on the specificity of the activity to that process and the context of the task. It may be probabilistic, but it does not justify labeling every activity with the same meaning as a single feeling. [4]

For example, and this is meant to illustrate rather than as a result of a specific experiment: if a site is involved in more than one type of processing, the mere fact of its activity does not tell us which type occurred. Hence, it is necessary to distinguish between what was measured, what the researcher concluded, and what was added by the newspaper headline or the reader's imagination.

Theories Compete and are not resolved by a single image

Among the proposed theories are the global neuronal workspace theory, which emphasizes the large-scale availability of information in brain networks, and the integrated information theory, which focuses on the organization of the system and the integration of its information. This is an approximation of the idea, not a mathematical explanation of either, and not an exhaustive list of all theories of consciousness. The Allen Institute has described its participation in a competitive test of some of their predictions. [5]

In the Cogitate Consortium study published in 2025, the design and predictions were predetermined, and 256 participants viewed visual stimuli using various methods to measure activity. The results supported some predictions but challenged important elements of both theories. The published abstract clarifies that the experiment tested specific predictions about visual consciousness; it is not presented as a definitive explanation of all consciousness or a declaration of victory for any theory without qualification. [6]

This result is not a failure of the research idea; testing that narrows the scope of a claim or reveals its need for modification adds to our knowledge. However, transforming the incompleteness of a theory into proof of another interpretation, without testing that interpretation, is a transition not provided by the result.

When a person cannot demonstrate what they understand

A 2024 study by Bodien et al. examined a convenience sample of 353 adults with disorders of consciousness. Among the 241 participants who did not exhibit behavioral responses to commands, 60 individuals—about a quarter—showed responses to cognitive tasks using fMRI or EEG. This paradox is called cognitive-motor dissociation: abilities that appear on neurological testing but not in typical motor behavior. [7]

This percentage does not represent a quarter of all comatose patients, as the sample included diverse groups and was not a survey of all patients. Furthermore, the tests did not detect responses in all those who did respond behaviorally; therefore, the absence of a signal in a particular task is not sufficient to negate consciousness. The study does not include individuals diagnosed as dead, so it cannot be used to overturn the criteria for death or to prove the return of the soul after death. [7]

Joint recommendations issued in 2018 by neurological and rehabilitation bodies emphasize the importance of addressing confounding factors, improving alertness,

and conducting frequent standardized assessments, along with pain assessment and treatment. [8] We mention these principles; this book does not offer a diagnosis or treatment plan for any individual case, nor does it promise that all cases will recover.

Humility does not mean negating knowledge.

Between over-interpreting a measurement and denying its value lies a more honest path: to give the evidence its due weight. A different instrument may reveal what another instrument does not, but it does not make every subjective sensation an accurate account of the external world. The lack of a definitive answer about consciousness does not invalidate the knowledge gained about the brain and its functions.

Likewise, the spirit is not measured in these experiments as an electrical quantity or a colored area. Philosophical questions about the relationship between experience and physical existence need to be presented and named, not subtly inserted into descriptions of results. We will dedicate a later chapter to the mind-body relationship.

The Trust of Hearing, Sight, and the Heart

God Almighty says: “And do not pursue that of which you have no knowledge. Indeed, the hearing, the sight, and the heart—all of those will be questioned.” [Al-Isra: 36] [9]

We invoke this verse as a standard for cognitive responsibility, not as an explanation of imaging devices. Truthfulness includes not attributing to an experiment what it did not test, and not using our ignorance to slander the patient or their family. Those who cannot express what they are experiencing do not lose their right to care and respect.

The present experience reaches us, but memory extends it: some scenes leave a mark, others fade, and memories return in a form altered by time. How does this happen? This is what we will explore in the next chapter.

Chapter Sources and Limits of Inference

[1] Simons and Chabris, 1999, Inattentive Blindness; text of the study from one of its authors' websites, without generalizing the results of the task to all perception.

[2] MedlinePlus, EEG; for general recording methods and the effect of movement, not for reading thoughts.

[3] RadiologyInfo, FMRI; principles of measurement and its practical limitations.

[4] Poldrack, 2006, Can cognitive processes be inferred from neuroimaging data?; for reverse inference and its probabilistic limitations.

[5] Allen Institute, Participating Institution Report on Theories of Consciousness Experiment, April 30, 2025; for preliminary approximation, not for adopting all media simplifications.

[6] Cogitate Consortium, Nature, 2025, DOI: 10.1038/s41586-025-08888-1; research citations here are limited to the abstract available in PubMed.

[7] Bodien et al., NEJM, 2024, DOI: 10.1056/NEJMoa2400645; text available in the University of

Liège repository, for sample, results, and sensitivity limits.

[8] Giacino et al., Summary of Disorders of Consciousness Recommendations, 2018; the summary is used for general principles without reproducing dosages or claiming to review the full guidelines.

[9] The Holy Quran, Al-Isra: 36; the complete verse, and the recall is a cognitive-ethical one.

Chapter 74: Memory, Learning and Forgetting

The smell of bread might bring back memories of a house we haven't entered in years, while we forget where we put a key just minutes ago. Memory is not a vault where everything is equal, nor a machine that stores everything that passes before it. It is part of how our history is formed, how we understand our present, and how we learn what we didn't know before.

From Experience to Remembering

The description of memory distinguishes between encoding, that is, processing information to allow its representation, retaining it, and retrieving it when needed. Difficulty may arise in any of these areas: perhaps we didn't pay close attention to the name the first time, or its memory trace was not consolidated, or it's impossible to recall now. These stages are not separate physical chambers in the mind, but rather tools for describing processes. [1]

Working memory, which helps retain and process information during a task, differs from long-term memory. In the latter, we distinguish between remembering lived events and knowing facts and meanings, and skills and learning effects that may appear in performance without a detailed verbal account. Remembering a trip is not the same as knowing the meaning of a word, and mastering a movement is not the same as explaining all the steps of learning it. [1]

There is no single repository for all memories.

Multiple regions and networks are involved in memory. The hippocampus plays an important role in forming some declarative memories and linking aspects of experience, the amygdala is related to the influence of emotion on remembering, and frontal regions and other structures are involved in various processes, including some aspects of skill learning. This does not mean that every memory has a single address, or that the hippocampus is a box in which all the details of a lifetime are stored forever. [2]

One of the mechanisms of learning is synaptic plasticity: the change in the strength of connections between neurons according to activity and experience. Connections may strengthen or weaken, thus changing the way the network functions. [3] To understand this idea, we don't need to imagine that every piece of information creates a new cell, or that an increase in the number of cells alone explains the quality of learning; discussing the pattern of relationships is also important.

The neural map does not diminish the specificity of memory. When we describe the mechanisms by which a person learns their mother's face, we don't claim to have

fully captured the meaning of motherhood for them. The research explains one aspect of how the information is formed and retrieved, while the individual's story encompasses what they experienced and what that experience meant to them.

Why do we forget?

Previous learning may hinder the retrieval of new material, or more recent information may crowd out what we learned beforehand. One might feel a word on the tip of their tongue, yet be unable to recall it at the required moment. This is different from asserting that the information has been completely erased; difficulty in accessing it is not always proof that the memory trace has disappeared. [4]

Occasional forgetting should not be transformed into a permanent accusation of apathy. It is possible for a person to be loving and forget an appointment, or to be diligent and struggle to recall information. But understanding this does not negate the need for means to help fulfill obligations; empathy and responsibility are not mutually exclusive.

Remembering is not replaying a recorded tape.

A memory can be influenced by what we learn later, by how we ask about it, and by information provided by others. The source of information may become confused: Did we hear it or see it? And who said it? Some of this is called memory reconstruction, and errors may occur without intentional lying. Therefore, the strength of conviction alone is not a guarantee of the accuracy of every detail. [4]

Even memories associated with intensely emotional events may remain vivid in our consciousness, though some details may change over time. [2] Clarity of feeling and accuracy of facts are not the same thing. This does not mean that every painful memory is false; rather, it means that investigating facts requires evidence, and that listening to the afflicted does not require fabricating certainty about what we have not verified.

Part of storytelling is distinguishing between what we remember, what we infer, and what we report. The phrase "as far as I recall" may be more honest than a definitive account that we fear admitting contains gaps. This honesty becomes even more crucial when the story involves the rights of others.

Learning Beyond Familiarity

A 2013 study by Dunlosky and colleagues reviewed ten learning techniques. The publisher's report highlighted the benefits of practice tests and distributing study sessions over time. The lower overall rating of some techniques does not mean that reading or summarizing is entirely useless; rather, their effectiveness depends on how they are applied and the type of task. [5]

In a suggested learning application: read a short passage, then close it and try to explain its main idea. Afterward, review the errors and return to it later. The goal is to uncover what you can recall and understand, not to judge yourself based on a single attempt. This application does not require a rigid schedule that works for everyone and every subject.

Organizing information into meaningful units, connecting new information to prior knowledge, and formulating understandable notes facilitates learning and recall. Sleep also plays a role in consolidating some of what we learn. [6] We do not interpret these principles as a promise of a phenomenal memory, nor do we make any particular method a prerequisite for every learner's success.

When does a complaint require evaluation?

If memory problems begin to affect daily life, or persist and worsen, a medical evaluation is important. They may have treatable causes, and the appropriate treatment will depend on the underlying cause. It may be helpful to have someone accompany you who can describe the changes, while respecting the complainant's wishes and privacy. Dementia is not diagnosed based on a single instance of forgetfulness, nor should the problem be ignored simply because the person is elderly. [7]

As for sudden changes in consciousness or confusion, the chapter on aging has already highlighted the need for immediate attention. A comprehensive evaluation should not be replaced by a common prescription or a phone test that claims to measure all of a person's abilities in minutes.

Writing: A Memory That Cooperates with Another

Al-Kulayni narrated on the authority of Abu Abdullah al-Sadiq (peace be upon him): “Preserve your books, for you will need them.” Al-Majlisi judged this narration, which is the tenth hadith in the chapter on the narration of books and hadith, and the virtue of writing and holding onto books, to be “muwaththaq ka-l-sahih” (reliable, akin to sound). [8]

In the same chapter, it is narrated: “Write, for you will not memorize until you write.” It is also reported in an address to al-Mufaddal ibn Umar: “Write and spread your knowledge among your brothers. If you die, bequeath your books to your sons, for a time of turmoil will come upon people when they will find solace only in their books.” Al-Majlisi judged the ninth and eleventh hadiths to be “weak according to the majority opinion.” We do not combine these three narrations into one hadith, nor do we transfer the ruling of one to the other. [8]

Here, we emphasize the value of preserving knowledge and the possibility of referring back to it, not a theory claiming the impossibility of oral memorization or proving the superiority of a specific study method through experiment. A book preserves what its author might forget, provided we are careful about the accuracy of what we write and distinguish the quoted text from our own commentary.

Human Forgetfulness and the Plea for Mercy

God Almighty says: “God does not burden any soul beyond its capacity. It will have [the consequence of] what it has earned, and it will bear [the consequence of] what it has incurred. Our Lord, do not hold us accountable if we forget or make a mistake. Our Lord, do not place upon us a burden like that which You placed upon those before us. Our Lord, do not burden us with that which we cannot bear. Pardon us,

forgive us, and have mercy upon us. You are our Protector, so grant us victory over the disbelieving people.” [Al-Baqarah: 286] [9]

In supplication, we meet the acknowledgment of limitations and the request for forgiveness and mercy. We do not derive from this invocation a detailed ruling on every instance of forgetfulness or a waiver of others’ rights; rather, we learn not to treat human limitations with contempt, nor to make the inability to remember a measure of a person's worth.

Memory carries our joys, fears, and expectations, but it does not operate in isolation from emotion and motivation. Therefore, the following chapter shifts our focus from the question of what we remember to what we feel and what motivates us, and how personality is shaped through the body, upbringing, and experience.

Chapter Sources and Limits of Reasoning

[1] OpenStax, Psychology 2e, Section 8.1; on encoding, retention, retrieval, and types of memory, without relying on an absolute capacity or a single duration for all.

[2] Ibid., Section 8.2; for multiple memory participation and the limits of emotional memory accuracy, without oversimplifying all functions in a single organ.

[3] Queensland Brain Institute, University of Queensland, Plasticity and Learning; an explanation of synaptic plasticity was used without inferences about the generation of new human neurons with each learning.

[4] OpenStax, Psychology 2e, Section 8.3; for interference, retrieval difficulties, reconstruction, and suggestibility.

[5] Association for Psychological Science, publisher's presentation of the review by Dunlosky et al., 2013; for comparing learning techniques, not a claim to have read the full report.

[6] OpenStax, Psychology 2e, Section 8.4; for organization, association, meaning, and sleep, without generalizing the claim of new neuronal formation due to exercise.

[7] British National Health Service, Memory Loss; When to request a review and the nature of the general assessment.

[8] Al-Majlisi, Mir'at al-'Uqul, vol. 1, p. 180; Includes the texts of the hadiths of al-Kafi 9–11 from the aforementioned chapter and their distinct rulings.

[9] The Holy Quran, Al-Baqarah: 286; the complete verse, without turning the reflection into an individual fatwa.

Chapter 75: Emotions, Motivation and Personality

You may receive the same piece of news with both joy and fear: joy at a new opportunity, and fear of what it demands of you. You may love someone and be angry at their actions, or grieve while still holding onto hope. Inner life does not proceed in a linear fashion, and we do not understand it well if we make every feeling a final judgment on the person experiencing it.

What happens when we feel?

Emotional experience involves overlapping aspects: what we feel, how we interpret the situation, what manifests in expression and behavior, and what changes in the

body, such as heart rate and perspiration. Theories differ in their ordering of these aspects and their relationships. Experience and cultural context also influence how emotions are experienced and expressed; a similar situation does not necessarily mean that what is happening inside two people is identical. [1]

Neural networks are involved in these processes; the amygdala, for example, is involved in emotional learning and in connecting sensory information to responses, and it has connections to structures that regulate autonomic and hormonal aspects. [1] But it is not a malevolent entity in the brain, nor a single repository for all fear; the chapter on consciousness demonstrated the error of inferring a complete experience from the activity of a single location.

It is important to distinguish between observing a feeling and judging it. To say, “I am angry,” is a description that needs to be understood. To say, “Then I have the right to insult,” is a transition to an action that is not justified by the first statement. Similarly, fear does not prove that danger has occurred, and sadness does not prove that all doors to the future are closed.

Motivation: Why do we move towards something?

Motives are needs and desires that direct behavior towards goals. Some are related to bodily needs, while others relate to meaning and satisfaction with the action, or to what we expect in terms of reward and appreciation. Internal and external motives may combine in the same action and change over time. For example, seeking knowledge may combine a love of learning, preparation for a profession, and a desire to please one's family; it is not limited to a single reason. [2]

Therefore, intentions cannot be judged by appearances alone. Two people may perform the same action but be motivated by different reasons, and a person's understanding of their motive may change when they honestly reflect on themselves. In education, it is beneficial to ask what hinders participation or gives it meaning, rather than simply labeling the learner as lazy or obedient.

Motivation research points to the importance of feeling respected and belonging, and of tasks that challenge the learner without exceeding their capabilities, with adequate space for choice and understanding of purpose. The effect of rewards is not uniform in all circumstances; their type, anticipation, and method of delivery are important. [2] Education should not be reduced to constant reward or constant deprivation.

Inherited Temperament and Acquired Experience

Temperament encompasses tendencies such as activity level, responsiveness, perseverance, and sociability. Both genetic and environmental factors contribute to its variation, and it is not transmitted in a simple pattern where a single gene determines every behavior. [3] Therefore, it is wrong to assume that a child's resemblance to one of their parents is a prediction of their future, or to blame the family alone for every difficulty they encounter.

The phrase "This is just my nature" may explain a tendency, but it does not negate its impact on others. Similarly, the demand for change should not become a denial of the

differences between people. There is a difference between asking someone not to harm others and asking them to become a carbon copy of someone else in their speech, social interactions, and expression.

Personality traits are not closed cards.

One model for describing personality is the Five Factor Model: openness to experience, conscientiousness or discipline, extraversion, agreeableness or cooperativeness, and neuroticism, meaning a tendency toward negative emotions. These dimensions are measured on a continuum, not in boxes that categorize a person into one of five types. They possess a degree of relative stability, though they can change throughout life. [4]

The term "neuroticism" here does not imply a diagnosis of a neurological disorder, nor does a high degree of extraversion make someone morally superior to a calm person. Models help describe patterns, but they do not replace understanding a person in their context, nor do they justify judging their integrity or fate based on the results of a brief test.

A person might talk a lot among their family and be silent in a new gathering, or be decisive in a task they are familiar with and hesitant in an unfamiliar one. These examples remind us not to reduce a person's life to a single situation. If measuring tools are used, their boundaries and conditions should be clear, not judgments we inscribe on ourselves, thus preventing our growth.

Emotion in Relationships

Ways of expressing emotions are not the same in all environments; what is considered acceptable in public expression, tone of voice, and body language may vary. [1] Therefore, a person's silence is not enough to conclude that they do not care for others, nor is a smile enough to deny their pain. Respectful questioning and listening remain more accurate than claiming to read a person’s inner state from a single gesture.

A simple ethical application is to describe what hurt us without turning it into a fixed identity for the other person: "Your delayed response worried me," instead of "You don't care about anyone." This is not a cure-all that guarantees a resolution to every dispute, but rather a method of review that allows for understanding and reduces accusations without evidence.

Grief does not take one out of faith.

God Almighty said, as narrated by Jacob, peace be upon him: “He said, ‘I only complain of my grief and sorrow to God, and I know from God that which you do not know.’” [Yusuf: 86] [5]

This verse combines supplication to God, grief, and hope. We need not deny grief to demonstrate faith, nor interpret tears as objections to every decree. Nor should we derive a modern psychological diagnosis from the story of a prophet; diagnosis has its own tools. The text here reveals to us the meaning of supplication in the midst of hardship.

Suppressing anger does not permit humiliation.

God Almighty says: {Those who spend in prosperity and adversity, and those who restrain anger and pardon people; and God loves the doers of good.} [Al Imran: 134] [6]

Al-Kulayni narrated on the authority of Abu Abdullah al-Sadiq (peace be upon him) that Ali ibn al-Husayn (peace be upon them both) used to say: “I would not accept the finest red camels in exchange for humiliating myself, and I have never swallowed a draught more beloved to me than a draught of anger with which I do not retaliate against the one who wronged me.” Al-Majlisi judged the first hadith in the chapter on suppressing anger to be “hasan ka-l-sahih” (good, akin to sound). [7]

In his commentary, al-Majlisi distinguishes between the involuntary occurrence of anger and acting upon it when one has the power to choose. This is the commentator’s statement, not the continuation of the hadith. [8] From this perspective, we understand that refinement is not synonymous with the impossible—that no feeling should ever cross one’s mind—but also with how one responds to it.

Forgiveness should not be used to pressure the wronged party into remaining in a dangerous position, or to conceal repeated aggression. Refraining from harmful revenge does not preclude seeking protection or redressing injustice through legitimate means. Moral value is not achieved by maintaining the peace of a gathering while allowing someone to be humiliated within it.

Regulation and Care

Regular habits, adequate sleep, connecting with trusted people, and limiting exposure to stressful news can help when stress is high. If stress becomes persistent and debilitating, seeking help from a trusted healthcare provider is important. [9] These steps are not a substitute for addressing violence, poverty, or illness, nor are they a promise that good organization alone will eliminate them.

In ethical reading, a person needs to know what they feel, what they are capable of doing, and where they need help. We do not demand that they be like stone, nor do we grant them, in the name of feelings, the right to crush others. Between feeling, motivation, and action lies a space for learning and responsibility, which we will return to in the chapter on will and choice.

When we sleep, internal experiences continue, sometimes combining fear, hope, images, and memories in strange scenes. Is every dream a message, and how do we distinguish between research into dreams and religious texts about visions? This is the subject of the next chapter.

Chapter Sources and Limits of Inference

[1] OpenStax, Psychology 2e, Section 10.4; for aspects of emotion, the involvement of neural structures, and the influence of culture, without national generalizations or diagnosis based on facial expression.

[2] Ibid., Section 10.1; for the interplay of motivations, educational context, and the varying effects of rewards.

[3] MedlinePlus Genetics, Is Temperament Determined by Heredity? The multifactorial framework was used without deterministic ratios or attributing behavior to a single gene.

[4] OpenStax, Psychology 2e, Section 11.7; for the five factors, their graded dimensions, and relative stability, not for moral classification or medical diagnosis.

[5] The Holy Quran, Yusuf: 86; the complete verse.

[6] The Holy Quran, Al Imran: 134; the complete verse.

[7] Al-Majlisi, Mir'at al-'Uqul, vol. 8, p. 197, chapter on suppressing anger, hadith 1; the beginning of the text and its ruling, and its continuation on the following page.

[8] The same reference, vol. 8, p. 198; the continuation of the text and an explanation of the difference between experiencing anger and acting upon it.

[9] World Health Organization, Questions and Answers on Stress; for supportive habits and seeking help, not for treating an individual case.

Chapter 76: Dreams and Visions

A person closes their eyes on their room and finds themselves in a city they have never visited, or with someone they lost years ago. They speak, rejoice, and fear, then wake up to find nothing of that world but a trace in their heart. The vision may be so pleasant that one longs to return to it, or so frightening that one wishes they had never seen it. Here, two questions intersect, and neither should be allowed to overshadow the other: How does the dreaming experience occur? And what are we entitled to understand from it?

Dreaming Can Be Studied; It Does Not Reveal All That Is Unseen

It is inaccurate to equate dreaming with a single type of sleep. In a study by Siclari and colleagues, published in 2017, participants' reports after waking were compared with high-density electroencephalography (EEG). Reporting a dream was associated with decreased low-frequency activity in posterior cortical regions, both in REM sleep and non-REM sleep. Monitoring this activity was able to predict, under the experimental conditions, whether a person would report a dreaming experience. This is a summary of the published abstract, not a claim to read the sleeper's mind or to know the truth of their visions. [1]

This example separates the observation of the connection from the interpretation of the entire existence. The researcher records an activity and then compares it to what the participant remembers and says; they do not have a screen displaying the dream as a room camera would. What a person does not remember may be difficult for the researcher to verify. Questions about the function of dreams, their diversity, and their relationship to experience and memory remain research questions that cannot be resolved by a single interpretation for each dream.

Joseph: The Truth of the Vision and the Necessity of Understanding its Context

God Almighty said: {When Joseph said to his father, “O my father, indeed I have seen [in a dream] eleven stars and the sun and the moon; I saw them prostrating to me.”}

[Yusuf: 4]

And He, the Exalted, said when the family was gathered: “And he raised his parents upon the throne, and they fell down prostrating before him. And he said, ‘O my father, this is the interpretation of my dream of before. My Lord has made it true. And He was gracious to me when He took me out of prison and brought you from the desert after Satan had sown discord between me and my brothers. Indeed, my Lord is Subtle in what He wills. Indeed, He is the Knowing, the Wise.’” [Yusuf: 100].

Between a dream and its interpretation lies a long journey of hardship and grace. The Quran does not provide us with a dictionary stating that every planet in every dream signifies the same person, but rather recounts a specific event in the life of a prophet. The symbolic significance in this event does not grant every interpreter the knowledge of Joseph, nor does the similarity between two dreams guarantee the shared destiny of their dreamers.

It is also important not to take the words of the characters in the story out of context and attribute them to God's final judgment. The king's advisors said about his dream: “They said, ‘These are confused dreams, and we are not skilled in the interpretation of dreams’” [Yusuf: 44]. Then the context of the surah indicates Joseph's interpretation of it and the resulting plan for the coming years. The verse conveys their inability and judgment, and does not assert that the king's dream was meaningless. [2]

The visions of the prophets are not a license for our dreams.

And God Almighty said in the story of Abraham and his son: “And when he reached with him [the age of] exertion, he said, ‘O my son, indeed I have seen in a dream that I [must] sacrifice you, so see what you think.’ He said, ‘O my father, do as you are commanded. You will find me, if God wills, of the patient ones.’” [As-Saffat: 102]

Then He, the Exalted, said: “And We called to him, ‘O Abraham!’” [As-Saffat: 104] “You have fulfilled the vision. Indeed, this is how We reward the doers of good.” [As-Saffat: 105]

This is the story of a prophet’s trial, the truth of which is attested to by divine revelation itself, and which is followed in the context by redemption. It is not a rule that permits anyone to harm themselves or others because of a dream that commanded them to do so. A private dream does not permit bloodshed, nor does it remove a human being’s inviolability. Whoever is troubled by a violent dream should seek support, not turn their anxiety into action.

Regarding the vision of the Prophet Muhammad (peace and blessings be upon him and his family), God Almighty said: “God has indeed fulfilled the vision for His Messenger in truth. You will surely enter the Sacred Mosque, if God wills, in safety, with your heads shaved and your hair cut short, not fearing [anyone]. He knew what you did not know and has granted you, besides that, an imminent victory.” [Al-Fath: 27]

The difference in all of this is not merely the intensity of the dreamer's sensation, but rather the prophetic station and the divine confirmation conveyed to us by the

Quran. Therefore, it is not permissible to transfer the authority of these texts to a contemporary claim that he saw a new obligation or knew the fate of the people. [3, 4]

Narration: Not all dreams fall under one category.

Al-Kulayni narrated from Imam al-Sadiq (peace be upon him): “Dreams are of three kinds: glad tidings from God for the believer, a warning from Satan, and confused dreams.” This is the sixty-first hadith in al-Rawda, and al-Majlisi graded it as “hasan” (good) in Mir’at al-‘Uqul, vol. 25, p. 205. The word “warning” is the one established in the text we reviewed; as for the possibility of “sorrow” mentioned by al-Majlisi, it is a discussion of the wording, so we do not silently replace it as if it were an agreed-upon text. [5]

Within its religious context, the narration indicates that grouping all dreams into one category is a mistake. However, it does not provide every dreamer with an infallible means of determining the category of their dream, nor does it offer a medical test to prove that a particular person’s nightmare is from Satan. Therefore, a believer’s status is not measured by the number of their dreams, nor is someone who experiences disturbed sleep accused of having corrupted faith. The mere fact that a person finds solace in a dream is not sufficient to bind others to its interpretation.

Al-Bahrani, in his Al-Hada’iq al-Nadhira, quotes a narration from Umar ibn Udhayna in Al-Kafi, in which Imam al-Sadiq (peace be upon him) says: “For the religion of God is too precious to be seen in a dream,” in the context of denying that the origin of the call to prayer (adhan) stemmed from a person’s dream. Al-Bahrani describes its chain of transmission as “sahih or hasan” (sound or good). We attribute the ruling to him verbatim, and we do not claim here to have conducted an independent biographical investigation of all the chains of transmission. The intention here is to safeguard the source of legislation, not to deny the visions of the prophets mentioned in the Quran. [6]

Nightmares and Sleep Paralysis

A person may wake up aware of their bedroom but temporarily unable to move or speak, perhaps feeling the presence of someone or pressure. This is medically described as sleep paralysis, which occurs during the transition to or from sleep. It can be frightening, but it does not, in itself, prove an attack by a supernatural being. Regular sleep helps, and frequent episodes accompanied by intense fear of sleep or persistent fatigue warrant a professional consultation. [7]

Nightmares are not the same as night terrors: the person experiencing a nightmare may wake up and remember their dream, while someone experiencing night terrors may move or scream in their sleep and not remember the event. Their safety and a calm demeanor should be considered. If nightmares are frequent and affect sleep and daily life, or are linked to a traumatic experience, appropriate evaluation and treatment are preferable to frightening them with a definitive explanation. [8]

How can we preserve meaning without creating illusions?

A person may find personal solace in a pleasant dream, or encouragement to do good whose basis is independently established, such as maintaining family ties, giving charity, or offering an apology. However, it should not be used as evidence against a relative, as proof of a financial debt owed by another, as a reason to discontinue treatment, or as a substitute for considering marriage or travel. Goodness remains good because of its evidence, not because the dream established its ruling.

In the same vein of interpretation, the phrase "I don't know" should be respected. Not every detail is symbolic, and not every coincidence is the fulfillment of a prophecy. We may reconstruct the meaning of a dream after the event has occurred, believing we knew it beforehand. Therefore, we distinguish between what was narrated before the event and what was added afterward, and between a powerful impression and verifiable evidence. These are precautions for understanding, not judgments that every personal experience is false.

A person goes to sleep carrying within them a history of love, fear, and anticipation, and wakes up needing compassion, not exploitation. We respect the role of dreams in religious texts, the role of science in studying sleep, and the patient's right to care. We do not allow a vague dream to override the clarity of responsibility in waking life.

Sources and Limitations of Documentation

[1] Siclari et al., The neural correlates of dreaming, Nature Neuroscience, 2017, 20:872–878, DOI: 10.1038/nn.4545; based on the abstract available in the PubMed archive, not on a full examination of the study.

[2] The Holy Quran, Yusuf: 4, 43–49, 100; the description of “confused dreams” should be read as the speech of the story's characters within its context.

[3] The Holy Quran, As-Saffat: 102–107; verses 102, 104, and 105 are quoted in full.

[4] The Holy Quran, Al-Fath: 27.

[5] Al-Kafi, Al-Rawda, Hadith 61; Mir'at al-'Uqul, vol. 25, p. 205: The text and the grading "hasan" (good) and a discussion of the word "warning." We consulted the same commentary; the volume number in some electronic indexes is inaccurate.

[6] Al-Bahrani, Al-Hada'iq al-Nadhira, vol. 7, p. 436, quoting Al-Kafi, Book of Prayer, Chapter on Rare Narrations, the narration of 'Umar ibn Udhayna; the grading of the chain is quoted according to Al-Bahrani's wording, without claiming consensus on it.

[7] NHS, Sleep paralysis; a description of the phenomenon and when to seek help, without prescribing medication for the reader.

[8] NHS, Night terrors and nightmares; distinguishing between the two phenomena and seeking evaluation when the symptoms recur.

Chapter 77: Will, Choice and Responsibility

A person stands before a door and decides to enter, while another stands before their anger and decides not to harm. Both are actions, but the difference between them is broader than a mere muscular movement. The second involves memory, values, fear of consequences, and the capacity for reflection. When we ask, "Is man free?" we

should not reduce the entire question to a single act of pressing a finger, nor should we evade the influence of the body and environment by claiming that will exists outside of life.

What kind of choice do we mean?

By choice, we may mean the absence of external coercion, or the ability to understand alternatives and choose one over the other. Philosophically, we may inquire about the relationship between an action and its underlying causes. These are interconnected questions, not synonymous ones. Someone acting under threat is not the same as someone acting in safety, someone ignorant of the consequences of their actions is not the same as someone who understands them, and someone afflicted with a disorder affecting their perception cannot be described in a general statement about the nature of the brain.

The fact that an action involves neural processes does not necessarily mean it was performed by someone other than the person performing it; the brain is part of the human being, not an adversary residing within them. Conversely, the statement "I felt I made a choice" alone is insufficient to resolve all issues of causality and consciousness. We need to accurately describe the experience and then discuss the conclusion we wish to draw from it.

Libet’s Experiment: The Outcome and Limits of Moving From It

In a 1983 study by Libet and colleagues, the electrical activity preceding a simple voluntary movement was compared to the time participants reported feeling the urge to move. The onset of the "readiness potential" preceded this reported time by hundreds of milliseconds, and the study included five participants in repeated sessions. Estimating the time of intention relied on recalling the position of a moving marker. The researchers concluded that the initiation of an action may precede the recallable awareness of its initiation. This is a summary of the study’s abstract, not an experiment directly testing a complex moral decision. [1]

There is a logical distance between saying that a neural predisposition appeared before the reporting of intent and saying that all human decisions are fixed and unchangeable before any conscious awareness. The measurement concerns a specific signal, a temporal report, and a defined task. Generalizing it to repentance, fulfilling a promise, or making a decision after days of reflection requires a different argument, not simply expanding the name of the experiment.

Why didn't the research stop at this explanation?

In 2012, Schurger, Sitt, and Dehaene proposed a model that explains the readiness potential, in a task with an unspecified timing, as an accumulation of neural fluctuations until the threshold for movement is reached. The gradual increase may appear when the recordings are aligned to the moment of movement and averaged. According to this model, the beginning of the curve need not always be interpreted as a moment of complete decision long before conscious awareness. It is an experimental explanation of a specific phenomenon, not proof that randomness alone confers freedom or responsibility. [2]

In a 2019 study by Maoz et al., arbitrary choices were compared with deliberate choices within a nonprofit donation task. The expected readiness potential appeared in the former, but not in the latter, according to their results. This finding limits the generalization of some experiments in arbitrary motion to meaningful decisions, but it does not, on its own, prove a complete metaphysical conception of the will. The reference here is to the abstract of the study published in the repository of an institution involved in the research. [3]

It is therefore not honest to declare that science has abolished choice, nor to claim that another experiment has proven everything a school of thought says. Neuroscience research can correct our understanding of processes, while the concepts of agent, cause, and merit also require philosophical and ethical refinement. Collaboration among questions is more fruitful than allowing each question to disregard its own boundaries.

The Quran: Responsibility in a World Not Independent of God

God Almighty says: {Indeed, We guided him to the way, whether he be grateful or ungrateful.} [Al-Insan: 3]

And He, the Exalted, says: {For whoever wills among you to take a straight path.} [At-Takwir: 28], {And you do not will except that God, Lord of the worlds, wills.} [At-Takwir: 29]

Let us read the two verses together: human will, and dependence on the Lord of the worlds. We do not take the first to declare man's escape from the dominion of his Creator, nor do we take the second to negate all divine commands, prohibitions, and calls to righteousness. This is the approach of the Imami reading, which preserves divine justice while acknowledging the creature's dependence on God. As for the precise nature of this relationship, theologians and philosophers have elaborated on it in various ways. [4]

God Almighty said: {And that man shall have nothing but what he strives for} [An-Najm: 39].

Striving is man's action within the limits of his capacity, not a promise that all his worldly goals will be achieved. He may exert himself and not be cured, or he may strive and not obtain a job. We do not conflate his responsibility for his actions with his ownership of all outcomes, nor do we use the verse to condemn those whose circumstances beyond their control have prevented them. [5]

Neither Compulsion nor Absolute Delegation: Meaning Does Not Replace Verification of the Chain

It is narrated in al-Kafi, in the chapter on Compulsion, Predestination, and the Intermediate Matter, on the authority of Imam al-Sadiq (peace be upon him): “There is neither compulsion nor absolute delegation, but rather a matter between the two.” This is followed by the example of a man who was forbidden from committing a sin but did not desist, so the one who forbade him left him alone, and he committed the sin. The fact that the one who forbade him left him alone does not make the one who forbade him an orderer of the sin. The chain of narration for this report includes

“from the one who narrated it to him.” Al-Majlisi described the thirteenth hadith as “mursal” (a hadith with a missing link in the chain of narration) in Mir’at al-‘Uqul, vol. 2, p. 195. We mention its widespread familiarity and its meaning, but we do not use its widespread familiarity to authenticate this particular chain of narration. [6]

And in the fourteenth hadith of the same chapter: “God is too generous to burden people with what they cannot bear, and God is too mighty to have anything in His dominion that He does not will.” Al-Majlisi judged this hadith to be “sahih” (authentic). Therefore, we do not equate the ruling of the two reports merely because of their proximity or similarity in subject matter. [6]

The intended meaning here is this: Man is not a machine compelled to sin and then punished for it, nor is he an independent being who is self-sufficient and independent of God and His power. Ability, life, and opportunity are not created by man himself, but his use of his abilities does not negate the attribution of his actions to him. “Between the two” is not a matter of half compulsion and half independence in a mathematical sense, but rather a negation of the two opposing conceptions. This is an approximate explanation of the meaning, not the text of another hadith, nor a comprehensive account of all the details of the Imami schools of thought.

Responsibility requires justice and mercy.

God Almighty says: “Indeed, God does not wrong anyone even by an atom’s weight; and if there is a good deed, He multiplies it and gives from Himself a great reward.” [An-Nisa: 40]

This principle prevents us from imagining divine judgment as a judgment blind to power, knowledge, and circumstances. As for assigning legal or religious responsibility to a specific person, this is not derived from a brain image or a general chapter; rather, it requires knowledge of the facts and expertise in evaluation, jurisprudence, and law, depending on the issue. A diagnosis of mental illness is not an automatic judgment absolving one of all responsibility, just as the retention of some responsibility does not permit denying the patient treatment. [7]

In our daily lives, we can combine acknowledging the influences upon us with working to change: we distance ourselves from what triggers our aggression, we seek help, we learn to pause before we speak, and we repair what we have damaged. We don't tell someone who has been hurt that their wound doesn't exist, nor do we tell them that their past is an eternal sentence for their future. Turning away from wrongdoing does not deny its causes; it introduces new causes to build a different life.

Will and choice remain one of humanity's most complex questions, but its complexity does not preclude the sincerity of an apology or the value of fairness. What we need at the end of this chapter is intellectual humility that does not negate responsibility, a belief in justice that does not erase human weakness, and scientific inquiry that expands our knowledge without claiming to have answered every question.

Chapter Sources and Limitations

[1] Libet et al., 1983, Brain 106:623–642, DOI: 10.1093/brain/106.3.623; abstract in Penn State

Repository, including sample size and time-reporting method.

[2] Schurger, Sitt, and Dehaene, 2012, An accumulator model for spontaneous neural activity prior to self-initiated movement, DOI: 10.1073/pnas.1210467109; based on the authors' abstract in Chapman Repository.

[3] Maoz et al., 2019, Neural precursors of decisions that matter, eLife 8:e39787; abstract in CaltechAUTHORS, not a full review of all study data.

[4] The Holy Quran, Al-Insan: 3; At-Takwir: 28–29.

[5] The Holy Quran, An-Najm: 39.

[6] Al-Kafi, Kitab At-Tawhid, Bab Al-Jabr wa Al-Qadar wa Al-Amr Bayn Al-Amrayn, Hadiths 13 and 14; Mir'at Al-'Uqul, vol. 2, p. 195: The first is mursal (a hadith with a missing link in the chain of narrators) and the second is sahih (authentic) according to Al-Majlisi. The text of each hadith and its reported ruling were compared with its separate page in the Thaqalayn Library; and the textual indexing of Mir'at Al-'Uqul supports the attribution of the two rulings to Al-Majlisi. This is a comparison of the reported texts, not an independent biographical investigation.

[7] The Holy Quran, An-Nisa': 40; the discussion of responsibility here is a general principle, not an individual fatwa or a judicial ruling.

Chapter 78: The Relationship between Self and Body

A short message can arrive and change the rhythm of an entire day: a person is reassured of the well-being of an absent loved one, or hears frightening news and feels their whole body react. It might begin from the other side: pain disrupts sleep, or illness diminishes activity, making what was easy yesterday burdensome. This shared experience opens the door to questioning, but it doesn't absolve us from distinguishing between what we observe, what we interpret, and what we believe.

Three Levels of Inquiry

The physician asks about symptoms, functions, possible causes, and methods of treatment. The philosopher asks about the nature of the self, whether consciousness can be reduced to bodily processes, and how we understand the unity of the human being and of their experience. The believer asks about the soul, responsibility, and destiny in light of revelation. These questions may overlap, but the answer to one is not automatically the answer to the others.

Establishing a connection between a psychological experience and neural activity does not, in itself, constitute proof of the non-existence of all immaterial things. Similarly, belief in the self does not justify denying the effect of brain injury on speech or memory. We presented examples of these connections in the chapters on the nervous system and perception; we present them here as they are, without adding the claim that a medical device has imaged the soul or measured the degree of belief.

From the Gut to Psychological Experience

A medical example is irritable bowel syndrome (IBS), which is a disorder of the interaction between the brain and the gut. The sensitivity and motility of the intestines may change, so some patients experience pain with a certain amount of

gas or intestinal contents that does not cause the same pain in others. The condition cannot be reduced to a single cause; the factors vary between individuals, and stressful experiences, previous infections, and other factors may interact. This does not mean that the patient imagines a non-existent intestine, nor does it prove that all abdominal pain has a psychological cause. [1]

The lesson is broader than a single organ: describing the pathway by which a signal travels does not negate the reality of the experience. When a person is in pain, they are not required to first present a picture of a wound to deserve our attention. At the same time, respecting their description does not mean skipping the examination or assuming the cause based on a story we heard about someone similar.

Chronic Illness and Depression: A Relationship, Not Accusation

Information from the National Institute of Mental Health indicates that chronic illness can increase the likelihood of depression through its burdens, biological changes, or the effects of certain medications, and that depression can make it more difficult to manage health and access care. The two conditions can coexist and increase suffering. However, this relationship is not a predetermined fate for every patient, nor does it make the sufferer guilty for not being optimistic enough. Depression is treatable even in the presence of a chronic illness. [2]

Therefore, we do not compartmentalize support: we listen to their physical complaints, respectfully inquire about their sleep, their sadness, and their ability to get through the day, and we do not treat discussion of psychological well-being as an accusation. However, choosing a treatment and assessing its effects and interactions is the responsibility of a specialist who considers the patient's condition, and is not an automatic consequence of the title of this chapter.

When the cause is unclear

Genuine symptoms may persist even if available tests haven't yet provided a satisfactory explanation. Health guidelines emphasize that this doesn't make them artificial. The assessment includes a description of the onset, changes, medications, and the impact of symptoms on daily life. It may combine examination with psychological support or rehabilitation, depending on the case. The lack of a clear cause doesn't mean help is impossible, and a second medical opinion can be sought if anxiety persists about an unidentified cause. [3]

We avoid two hurtful phrases: "It's all in your head," intended to dismiss the issue, and "Every normal test proves the doctors don't know anything." The first erases the person's suffering, and the second may prevent them from seeking care. It's more accurate to say: This is the extent of our understanding so far, this is the follow-up plan, and these are the changes that warrant reassessment. Not all unexplained symptoms should be categorized under a single psychological diagnosis.

Feeling better isn't the only measure.

In a small experimental study on asthma, the active ingredient albuterol was compared to a placebo inhaler, sham acupuncture, and no intervention.

Measurements of forced expiratory volume in one second showed greater improvement with the active ingredient, while the improvement reported by patients after the sham interventions was close to their perceived improvement with the medication. The published results demonstrate an important distinction between subjective experience and lung function, not that the sham intervention is a safe alternative to asthma treatment. [4]

This means that listening, reassurance, and the expectation of benefit may play a role in the treatment experience, but relief alone should not be taken as proof of disease resolution or the success of an unknown prescription. Medication is evaluated based on its suitability to the disease and its safety, not solely on anecdotal evidence. Nor should we dismiss the value of relief simply because another effect needs to be measured; the goal is to complete the picture, not to erase half of it.

A reference to philosophical inquiry

In his book on the soul in Al-Shifa, Ibn Sina invites us to imagine a human being created fully formed, yet deprived of sensation of the external world and of their own bodily organs. He then asks about this person’s affirmation of their own existence without affirming awareness of these organs. This is a thought experiment in self-awareness, intended to highlight the existence and distinctiveness of the soul, not an experiment conducted on a body suspended in a laboratory. The question of the validity of moving from self-awareness to the reality of its essence is a philosophical one, not resolved by descriptions of imagination alone. [5]

With Sadr al-Din al-Shirazi, we find the statement that the soul is "corporeal in origin" even though it is "spiritual in its persistence," along with his discussion of the connection and unity between the soul and the body. We attribute this conception to his philosophical project and do not call it a Quranic text or a hadith from the Imam. Nor do we consider its terminology as direct synonyms for cell development or the formation of the cerebral cortex; it has its own premises and meanings. [6]

This distinction helps the reader avoid confusing the layers of discourse: the philosopher's statement requires understanding his argument, the narrative requires examining its transmission and meaning, and the medical conclusion requires its experimental methodology. A book can present them all in a single dialogue without one being used to validate the other without evidence.

Spiritual tranquility does not mean immunity from illness.

God Almighty says: {Those who believe and whose hearts find rest in the remembrance of God. Verily, in the remembrance of God do hearts find rest.} [Ar-Ra'd: 28]

This tranquility concerns a person’s relationship with their Lord, rather than a laboratory result guaranteeing that a believer will experience no clinical anxiety or bodily disorder. Sincere faith can coexist with a need for medication or psychological treatment. We do not use the verse to accuse the patient, or reduce remembrance of God to a technique for changing a bodily measure; worship goes beyond its possible health benefits. [7]

And Abraham, peace be upon him, said, as the Quran recounts: “And when I am ill, it is He who cures me” [Ash-Shu'ara: 80].

The believer turns to God as the source of blessings and healing, and seeks His help through whatever means are available to him. This verse is not a promise that every illness will disappear in this world immediately upon supplication, nor is it a command to abandon the doctor. In the well-known, traditional language of supplication, as discussed in the chapter on muscles, the request for strength of limbs and steadfastness of will are combined; it is a picture of a person's worship through their body and intention, not a description of an anatomical mechanism of the soul. [8]

This leads us to a care that does not conflict with the individual: their body is not treated while they are humiliated, their soul is not preached to while their pain is ignored, and they are not sold illusions in the name of science or religion. We may disagree on philosophical details, but their right to truth, compassion, and care does not wait for the resolution of all philosophical disputes.

Chapter Sources and Limits of Documentation

[1] NIDDK, Symptoms & Causes of Irritable Bowel Syndrome; Brain-gut interaction and multiple factors. Irritable bowel syndrome is not diagnosed from this passage.

[2] NIMH, Understanding the Link Between Chronic Disease and Depression, Revised 2024; increased likelihood does not imply certainty.

[3] NHS, Medically unexplained symptoms; the reality of the symptoms and the importance of follow-up, without resorting to reducing all cases mentioned to a psychological cause.

[4] Wechsler et al., Active albuterol or placebo, sham acupuncture, or no intervention in asthma, NEJM, 2011, 365:119–126, DOI: 10.1056/NEJMoa1103319; the results shown in the general index of the article were used, not a claim to a full review of the article.

[5] Ibn Sina, The Soul from the Book of Healing, edited by Hasan Zadeh Amoli, First Article, end of the first chapter, pp. 26–27; distinguishing the text from the editor's annotations.

[6] Sadr al-Din al-Shirazi, Transcendent Wisdom in the Four Intellectual Journeys, vol. 8, p. 109, Dar Ihya al-Turath al-Arabi edition; presenting a philosophical statement, not attributing it to an infallible source.

[7] The Holy Quran, Ar-Ra'd: 28.

[8] The Holy Quran, Ash-Shu'ara: 80; and the supplication alluding to the supplication of Kumayl according to the text referred to in Chapter 38, while retaining the qualification that its complete chain of transmission has not been independently verified.

Chapter 79: Spiritual Life and Purification of the Self

A person may know the names of their bones and nerves, and explain how they remember and become angry, yet remain incapable of apologizing to those they have wronged. Knowledge of the body and soul broadens one's perspective, but it alone does not replace true self-cultivation. Herein lies the beginning of self-purification: to inquire not only about what one is capable of doing, but also about what one ought to do, and about the person one becomes through repeated choices.

The soul has two paths.

God Almighty says: “And by the soul and He who fashioned it” [Ash-Shams: 7], “and inspired it with its wickedness and its righteousness” [Ash-Shams: 8], “He has certainly succeeded who purifies it” [Ash-Shams: 9], “And he has certainly failed who corrupts it” [Ash-Shams: 10].

The soul is not presented here as a neglected entity with no meaning to its destiny, but rather as a place of success and failure. Purification in this ethical context is not a claim to perfection, nor a declaration that its possessor is above accountability. The more a person becomes aware of their weakness, the more they need honesty, and the more good they find within themselves, the more they need gratitude to protect themselves from arrogance. [1]

Prayer and Fasting: Worship with a Moral Impact

God Almighty says: “Recite what has been revealed to you of the Book and establish prayer. Indeed, prayer prohibits immorality and wrongdoing, and the remembrance of God is greater. And God knows that which you do.” [Al-Ankabut: 45]

Prayer necessitates a moment of reflection, a renewed questioning of the purpose of life. If a worshipper goes out and harms others, he should not use his performance of the ritual as a shield against criticism, but rather examine the gap between his worship and his actions. The intention is not to judge the acceptance of others' worship based on outward appearances; their acceptance rests with God. However, outward injustice remains a duty to denounce and rectify. [2]

And He, the Exalted, said: “O you who have believed, decreed upon you is fasting as it was decreed upon those before you that you may become righteous.” [Al-Baqarah: 183]

The purpose here is mentioned in the name of righteousness, not in the name of weight loss or proving a person's ability to endure. Therefore, we do not measure the value of worship by the degree of artificial hardship, nor do we impose upon the sick what harms them on our own initiative. For acts of worship have their conditions, rulings, and dispensations, which are known from their respective sources. This chapter is not a medical guide to fasting, nor is it a substitute for consulting specialists in a specific case. [3]

Remembrance that is present when choosing

Al-Kulayni narrated from Imam al-Sadiq (peace be upon him) regarding the remembrance of God: “I do not mean saying ‘Subhan Allah’ (Glory be to God), ‘Alhamdulillah’ (Praise be to God), ‘La ilaha illa Allah’ (There is no god but God), and ‘Allahu Akbar’ (God is the Greatest), even though these are part of it. Rather, I mean remembering God when He permits or forbids something. If it is an act of obedience, then one should perform it; if it is a sin, then one should refrain from it.” The phrase “even though these are part of it” is important, for the text does not negate the virtue of verbal remembrance, but also directs us to its presence when acting. Al-Majlisi described the fourth hadith in the chapter on avoiding forbidden things as “hasan ka-l-sahih” (good, akin to sound). [4]

Thus, remembrance becomes present when one is able to lie but tells the truth, or to betray but fulfills a trust, or to humiliate a weak person but refrains from speaking ill of them. His true test is not how much people know of his litanies, but his connection with God when they are not watching. There is no contradiction between a litany that softens the heart and an action that improves society, as long as one is not used as a cover for neglecting the other.

Purification is inseparable from wealth and the rights of people.

God Almighty says: “Take from their wealth a charity by which you purify them and cause them to grow in goodness, and invoke blessings upon them. Indeed, your invocations are reassurance for them. And God is Hearing and Knowing.” [At-Tawbah: 103]

Here, wealth is connected to purification and spiritual growth, so spiritual life is not limited to internal emotion. The poor have a right to be respected, not to be made a spectacle for the rich to display their piety. As for the amounts of financial obligations and their distribution, these are determined by their respective legal rulings, and we do not derive them from this general reflection. [5]

And He, the Exalted, said: “O you who have believed, avoid much [negative] assumption. Indeed, some assumption is sin. And do not spy or backbite each other. Would one of you like to eat the flesh of his brother when dead? You would detest it. And fear Allah; indeed, Allah is Accepting of repentance and Merciful.” [Al-Hujurat: 12]

Privacy, speech, and suspicion are at the heart of education. Searching for people's faults is not an act of worship simply because it is disguised as moral zeal, just as protecting someone's honor does not mean silencing someone seeking protection from injustice or aggression. We distinguish defamation and spying from responsible reporting and seeking help. In cases of doubt, we refer to knowledge and justice, not to the emotional outbursts of the group. [6]

Accountability opens the door to reform

God Almighty says: “O you who have believed, fear God. And let every soul look to what it has put forth for tomorrow - and fear God. Indeed, God is Acquainted with what you do.” [Al-Hashr: 18]

In al-Kafi, on the authority of Abu al-Hasan al-Madi, Imam Musa al-Kadhim (peace be upon him): “He is not one of us who does not hold himself accountable every day. If he has done good, he asks God for more; and if he has done evil, he seeks God’s forgiveness and repents to Him.” The hadith index quotes al-Majlisi’s ruling that it is “hasan” (good), with a reference to Mir’at al-‘Uqul, vol. 11, p. 358. We distinguish this quotation from an independent investigation of all the narrators in the chain of transmission. [7, 8]

Self-accountability can be reduced to a few clear questions: What good should I thank God for and maintain? Who has been harmed by my actions, and how can I rectify the harm? What step can I take tomorrow? This is an educational suggestion for organizing self-reflection, not a fixed number of prescribed recitations. Its aim is

to perform good deeds, not to spend hours in doubt or to express self-loathing.

Hope does not excuse wrongdoing, and fear does not preclude mercy.

God Almighty says: “Say, ‘O My servants who have transgressed against themselves [by sinning], do not despair of the mercy of God. Indeed, God forgives all sins. Indeed, He is the Forgiving, the Merciful.’” [Az-Zumar: 53]

The call to hope does not mean belittling sin or the rights of others, but rather dispelling the illusion that repentance is impossible. Beneficial fear awakens one to correction; it does not permit a preacher to judge a specific person as being excluded from mercy. Whoever repents of injustice must take seriously the rectification of what he has corrupted, according to what justice and its circumstances require, and not merely be content with feelings of remorse that leave the victim alone. [9]

Humility in Al-Sahifa Al-Sajjadiyya

In the supplication for noble character traits from Al-Sahifa Al-Sajjadiyya, we read: “Grant me honor and do not afflict me with pride, make me worship You and do not corrupt my worship with conceit, and let good flow to people through my hands and do not nullify it by reminding people of my favors.” And we read: “Do not raise me in the eyes of people except that You humble me in my own eyes by the same degree.” We present the famous supplication attributed to Imam Zayn al-Abidin, peace be upon him, without claiming to have verified the complete chain of transmission of the Sahifa in this chapter. [10]

These words combine honor and the negation of pride, worship and the negation of conceit, and doing good and refraining from reminding people of favors. Humility is not accepting humiliation from an aggressor, nor is it despising the abilities that God has bestowed upon humankind; Rather, he should know that his ability is a trust, and that the favors he receives from others do not diminish his worth. If good deeds become a cause for his arrogance, he needs to rectify how he carries this goodness.

The claim of spiritual guidance does not grant anyone absolute power over another's conscience, wealth, or body. Those who demand harmful secrets, blind obedience, or the cessation of care for the sick do not derive legitimacy from a title or an esoteric experience they claim to possess. The measure of the path is not obscurity, but truth, mercy, integrity, respect for the limits of the law, and human dignity.

With this, Part Eight concludes its journey: from the brain, memory, and emotion to consciousness and choice, and then to the question of the agent's own self-purification. We do not possess the key to all the secrets of the soul at its conclusion, but we do possess a clear call to the truth of knowledge and the righteousness of action. In the following part, we encounter the human being when he is ill, to see how knowledge, care, and faith can coexist without burdening the afflicted beyond their capacity.

Sources of the Chapter and Limits of Documentation

[1] The Holy Quran, Ash-Shams: 7–10; each verse is quoted in full.

[2] The Holy Quran, Al-Ankabut: 45.

[3] The Holy Quran, Al-Baqarah: 183; the rulings concerning illness and travel are mentioned in the context of the following verses, and the detailed application of these rulings is a matter of jurisprudence.

[4] Al-Kafi, Book of Faith and Disbelief, Chapter on Avoiding Prohibited Matters, Hadith 4; the text is in the Dar Al-Hadith edition, pp. 207–208 of the presented volume. The ruling is “hasan ka-l-sahih” (good, akin to sound) in Mir’at Al-‘Uqul, vol. 8, p. 342, according to the textual index of the commentary.

[5] The Holy Quran, At-Tawbah: 103.

[6] The Holy Quran, Al-Hujurat: 12.

[7] The Holy Quran, Al-Hashr: 18.

[8] Al-Kafi, Chapter on Accountability for Deeds, Hadith 2, 2/453 in the common numbering; the Arabic text, with the ruling of Al-Majlisi quoted in the index. We did not adopt the inaccurate identification of the Imam in the English translation of the page.

[9] The Holy Quran, Az-Zumar: 53, and it is read with the call to turn back to God in the following context.

[10] Al-Sahifa Al-Sajjadiyya, The Twentieth Supplication on Noble Character, p. 100 in the digital edition shown. The quotation is from the supplication, not from a modern commentary on it.

Part 9: Illness, Frailty and Treatment

We have followed the human being as they develop, grow, feel, think, and choose. Now we see them when something familiar is disrupted: breath becomes difficult, pain persists, an ability declines, or medical news rearranges their days. They enter this part with a name, a history, relationships, hopes, and rights. What we write about illness should deepen our understanding of the person, not make us quicker to accuse them.

We will begin with the concepts that explain the occurrence of illness, then move on to infection, immunity, genetics, tumors, chronic diseases, injuries, and mental health. After learning about diagnosis and treatment, we will return to religious texts on patience, healing, and the rights of the patient, as well as the guidelines for what is attributed to traditional medicine. This is a roadmap for understanding, not an encyclopedia of prescriptions, and it does not replace individualized care.

Chapter 80: How Does Disease Arise?

A patient might say, "My illness began on Thursday morning," meaning the day they felt pain. The doctor may discover that the change began earlier, perhaps unnoticed by anyone. Illness is not always a single, visible moment, but rather a process involving intertwined causes, responses, and compensations, which then manifests in a person's life. To understand it, we need a language that doesn't confuse feeling with cause, nor probability with certainty.

Cause and risk factor are not the same thing.

A risk factor is something that increases the likelihood of developing an illness. It may be something that can be modified, such as a specific exposure, or something that a person cannot choose, such as their age or certain genetic characteristics. The presence of a factor alone does not tell us that the illness will inevitably occur, and its absence does not guarantee the impossibility of developing the illness. Knowing risk factors helps guide prevention and evaluation, not predict an individual's fate before they are examined. [1]

Investigating the cause, however, asks about the role of the factor in causing the illness, not merely its association with it. There may be multiple contributing factors, such that one alone is not sufficient. The component-cause model explains that illness may occur through different pathways; If we eliminate one factor in a pathway, the risk along that pathway decreases, even if other pathways remain. Therefore, a non-smoker's cancer does not negate the causative role of smoking, nor does the absence of cancer in a particular smoker make exposure safe. [2]

In some infectious diseases, a model combining the pathogen, the susceptible individual, and the environment that allows exposure is useful. However, this model is not a comprehensive answer for all diseases. The presence of the factor alone may not be sufficient; the individual's condition, the dose, and the circumstances all play a role in the outcome. It is a way to structure the question, not a substitute for

knowing the specific disease. [2]

How does the cause differ from the mechanism of disease?

Saying that a factor contributes to the occurrence of a disease differs from describing the chain of events through which its effect reaches tissues and functions. We may know a strong causal link before understanding all the links in the mechanism, and we may understand a change within a cell without knowing why it occurred in that individual. This is a difference in the level of inquiry: Where did the defect begin? How did it develop? And what did it cause?

The preceding sections provide us with a framework for understanding these pathways: cell function, perfusion, hormonal regulation, immune response, and repair. We do not use them to reduce every disease to "immune weakness" or "accumulated toxins." Such statements, when uttered without definition or measurement, may seem like an explanation, but they do not identify anything that can be tested or treated on a clear basis.

Symptom, Sign, and Syndrome

A symptom is what a person experiences and describes, such as nausea, pain, or fatigue. No one can experience it in the same way as the person experiencing it, and therefore, listening to the patient remains an essential part of medical knowledge. The difficulty in measuring the experience itself does not necessarily mean it is unreal. [3]

A sign is what can be observed or found through examination or testing, such as visible swelling, measured temperature, or elevated blood pressure. The patient's description and the examiner's observations combine to form a picture, and neither is always sufficient without the other. A single sign may indicate multiple possibilities, so the name of the disease is not necessarily known from a single sign. [4]

A syndrome, on the other hand, is a group of manifestations or conditions that come together and indicate a known pattern. Naming it helps organize understanding, but it does not in itself mean that we have identified a single, fixed cause for everyone who bears that name. Therefore, the reader should ask what the term means in their diagnosis, not assume that “syndrome” means a phantom or an illness for which no care is available. [5]

A path that begins before we see it

The natural history of a disease refers to its development over time in the absence of treatment. Symptoms may be preceded by changes that the person does not notice, then a mild or severe form appears, and some cases may not even reach a noticeable stage. The time and course vary among people, and prevention and treatment change what would have happened without intervention. Therefore, the story of one case does not mean that it is the future for everyone with the same diagnosis. [6]

The ability to transmit a particular infection does not always begin with the onset of symptoms. Some infected individuals may transmit the pathogen before symptoms

appear or without showing any obvious signs, depending on the infection. However, this rule cannot be generalized to all diseases, nor can the duration of isolation be determined based on it. Each disease has its own specific characteristics and guidelines. We will differentiate between infection and inflammation in the next chapter. [6]

A physician may use the term "acute" to describe symptoms or signs that begin and worsen rapidly. This describes the timeframe and progression within a specific context, not a statement that every acute case is more severe than a prolonged one. A helpful question for the patient is: What is expected in my case? What should I monitor? It is not sufficient to guess the risk based on a single word. [7]

How do we know which explanation is more likely than another?

Investigating the causes of an illness requires appropriate comparison. If patients consumed a particular food before becoming ill, we should also inquire about the food consumed by those who did not become ill under the same circumstances. Otherwise, we might describe a common food and assume it to be the cause. Epidemiological studies distinguish between observations of exposures as they occur and experiments where the researcher defines the intervention within controlled parameters. Comparison helps in testing the hypothesis, while paying attention to what may differ between groups. [8]

Hence, the statement "After I did this, this happened" is insufficient to establish causation. It is the beginning of a potentially important question, not its conclusion. Similarly, a person's improvement after using a product is not enough to prove that it caused the improvement; the condition may change spontaneously or with another treatment. We will return to the evaluation of treatments in Chapter 87, so as not to confuse personal testimony with the evidence that allows for generalization.

Disease does not originate solely within the body.

Housing, education, work, food, income, discrimination, and displacement all affect opportunities for health, illness, and access to care. The World Health Organization emphasizes that addressing these social determinants is part of prevention and equity, not separate from health. It is insufficient to advise someone to avoid a risk if their environment does not offer a safe alternative, nor is seeking treatment the same for those who can access it as for those whose access has been cut off. [9]

This does not negate the role of personal choice, but it prevents turning every illness into an individual trial. It is society's responsibility to make water, work, housing, and care safer, and it is the responsibility of health discourse to explain what can be done without humiliating those who do not have the same circumstances.

Weakness is not a loss of value.

God Almighty says: {God desires to lighten your burden, for mankind was created weak.} [An-Nisa: 28]

This verse comes in a legislative context, so we should not take it as a medical definition of illness or an explanation of a specific mechanism. However, it reminds

us, in ethical reflection, that divine discourse does not ignore human limitations and the need for relief. It is unjust to recognize these limitations and then demand that the patient be a hero who never tires, never asks, and never needs anything. [10]

When we ask how a disease occurs, we seek understanding that will aid in prevention and care. We are not looking to accuse the patient, nor for an artificial certainty that closes the door to further inquiry. Perhaps the first ethical step is to tell them honestly: We will take your complaint seriously, investigate what we know, and disclose what we do not yet know.

Sources and Limitations of Documentation

[1] NCI, Definition of risk factor; Explanation of the difference between increased probability and determinism.

[2] CDC, Principles of Epidemiology, Lesson 1, Section 8: Models of Disease Occurrence and Component Causes. Archival educational material, not a source for current treatment updates or prevalence figures.

[3] NCI, Definition of symptom.

[4] NCI, Definition of sign.

[5] NCI, Definition of syndrome; The name alone does not determine the cause of every case.

[6] CDC, same educational resource, Section 9: Natural History and Disease Spectrum; general concepts were used without transferring or generalizing historical incubation tables.

[7] NCI, definition of acute; general usage does not replace the meaning of the term in the specific disease.

[8] CDC, Lesson 1, Section 7: Analytical Epidemiology and the Role of the Comparison Group.

[9] WHO, Social Determinants of Health, May 6, 2025; qualitative presentation without transferring numerical estimates that require contextualization.

[10] The Holy Quran, An-Nisa: 28; the reference here is ethical while preserving the legal context.

Chapter 81: Infection, Inflammation and Immune Disorders

Two people may complain of pain in the same joint, one suffering from an infection and the other from an autoimmune disease. Similarly, skin may redden after a cut or contact with an allergen. The symptoms may resemble each other, but the path to the disease and its treatment are not identical. Therefore, before seeking medication, we need to clarify our terminology: infection is not synonymous with every inflammation, allergy is not the name for every side effect, and an immune disorder does not always imply a weakened immune system. Precise terminology is not a linguistic luxury; it can protect a person from unnecessary treatment or prevent delays in treatment that is urgently needed.

1. The Pathogen, the Pathway, and the Susceptible Person

Pathogens include bacteria, viruses, fungi, and parasites, and they are not all transmitted in the same way. Transmission can be understood by considering the

pathogen itself, its source, its point of exit, its mode of transmission, its point of entry, and the individual's susceptibility. Transmission may be related to contact, inhalation, contaminated food and water, a sharp instrument, or a living vector, depending on the pathogen and the circumstances. This is not a list stating that every route is valid for every disease; rather, it is a map of questions that helps in choosing the appropriate prevention instead of vague fear of everything. [1]

It is not enough to find a microbe to conclude that it is the cause of the symptoms. Organisms may be present on or in the body without causing the disease in question; the concept of microbial colonization is used in this context. A colonized person can transmit some microbes. Conversely, we have already seen that an infection may be asymptomatic; therefore, the absence of symptoms alone should not be used as a definition that separates all colonization cases from all infections. Examination should be interpreted in conjunction with the location of the sample and the clinical presentation, not solely based on fear of the name of the germ. [2] [See Chapter 80]

2. Inflammation is a response, not a germ.

Inflammation is part of the body's response to injury or infection, involving chemical signals, cells, and defense and repair mechanisms. Therefore, it can occur without infection and may be present in various diseases. If inflammation persists inappropriately, it can contribute to tissue damage. For this reason, the word "inflammation" does not inherently offer a cure: we need to know its cause, location, and severity, and to distinguish between a beneficial response in its specific context and a harmful or persistent one. [3]

The term "strong immunity" also requires caution. The criterion is not that every response should be as strong as possible, but rather that it should be appropriate to the target, time, and place. This is a conceptual conclusion that encompasses what will follow regarding allergies, autoimmunity, and immunodeficiency, not a test one can perform on oneself based on feeling tired or energetic. Advertisements should not reduce this diverse system to a button pressed under the name "Immune Booster."

3. When the Response Itself Becomes Dangerous

Sepsis is a life-threatening condition that arises from a severe response to infection and can rapidly progress to organ damage. It is not simply a matter of fever, and the name of the infection does not need to be known to the family before seeking help. Worrying signs in someone with or suspected of having an infection include new confusion, shortness of breath, severe pain or marked worsening, sweaty or cold, clammy skin, and a rapid or weak pulse. These signs alone do not confirm the diagnosis, but they warrant urgent evaluation and may necessitate immediate contact with local emergency services. The reader should not wait for all of these signs to be present, and this chapter should not be relied upon to rule out emergencies. [4]

4. Allergies: A Response to a Substance That Doesn't Harm Most People

In allergies, the immune system reacts to a substance that does not cause the same problem for most people, such as certain foods, pollen, or medications. Symptoms can vary and may include sneezing, itching, rashes, swelling, and more. A thorough medical history, physical examination, and appropriate testing help determine an allergy. A symptom occurring after a food is eaten is not enough to establish an allergy to that food, and the label “allergy” does not explain everything that happens after taking a medicine. [5]

Anaphylaxis, a severe allergic reaction, can be life-threatening. Difficulty breathing, swelling of the tongue or throat, or fainting after potential exposure to an allergen requires an immediate call to local emergency medical services. Those with a prescribed epinephrine auto-injector should use it according to their medical plan and call for emergency medical assistance, not waiting for the symptoms to resolve on their own. Do not stand or walk during the reaction, even if you feel better. This is a safety precaution and not a substitute for training in the patient's emergency plan. [6]

5. Autoimmunity is not contagious

In autoimmune diseases, the immune response attacks components of the body's own tissues. The diseases and organs affected vary; examples include type 1 diabetes and rheumatoid arthritis. Genetic predispositions and environmental factors may intertwine, and there is no single, comprehensive explanation for all cases. These diseases are not contagious, unlike some infections. Symptoms may fluctuate between periods of activity and remission, and diagnosis and treatment vary depending on the specific disease. Therefore, it is inappropriate to apply a single prescription or to consider all widespread pain as evidence of an autoimmune disease. [7]

This highlights the importance of listening to the patient without haste: acknowledging that their pain is real does not necessitate inventing a diagnosis, just as a delayed diagnosis does not justify accusing them of imagining their illness. A responsible approach encompasses two things simultaneously: taking the suffering seriously and recognizing that some questions require further investigation before they become clear.

6. Immunodeficiency: Multiple Causes, Not a Single Accusation

Immunodeficiency means a weakened or absent part of the immune response. It may be inherited or acquired due to certain diseases, treatments, or other conditions. Frequent or unusually severe infections, or slow recovery, may warrant medical evaluation, but do not, on their own, confirm the diagnosis. Taking immunosuppressive therapy may be necessary for a specific illness; it should not be stopped out of fear of its name, but rather its benefits, risks, and prevention plan should be discussed with the healthcare team. Immunodeficiency is not reduced to a single disease or a judgment of a person's behavior. [8]

7. Appropriate Medication and Shared Responsibility

Antibiotics treat certain types of bacterial infections, but not viruses. They can cause harm if used unnecessarily. When prescribed, they should be taken as directed by the healthcare professional; they should not be shared with others, an old prescription should not be used for a new illness, and their use should not be changed independently based on improvement or the occurrence of a problem. The treatment plan should be reviewed with the doctor or pharmacist. The choice is not based on whether the most expensive, newest, or injectable drug is best for each patient, but rather on diagnosis and suitability. [9]

Antimicrobial resistance is a characteristic that develops in microbes; it does not mean that the patient's body has become "resistant" to the antibiotic. It can make infections more difficult to treat. [10] Simple forms of preventive responsibility include hand hygiene and respecting appropriate care precautions, without turning protective measures into humiliation of the patient or social isolation without medical justification. [2]

Chapter Summary

This chapter does not cover all infectious and immune diseases, but it provides key points to prevent confusion between them. A person with an illness is not a social danger simply because of the name of their disease, and compassion does not mean ignoring infection precautions when necessary. Knowledge liberates care from two opposing extremes: exaggeration that wounds dignity, and trivialization that delays treatment. In the next chapter, we will move on to causes that may begin before birth or be carried in genetic material, without allowing genetic history to dictate a person's worth or future life.

Sources and Limitations of Documentation

[1] CDC/NIOSH, “Chain of Infection”; the chain of transmission framework was used for simplification, without generalizing a transmission route to all pathogens.

[2] CDC, “Infection Control Basics”; colonization, transmission routes, and hand hygiene. The simplification of the absence of symptoms was limited by what was previously stated regarding asymptomatic infections.

[3] National Cancer Institute, Glossary: “Inflammation”; definition of inflammation and differentiation between a transient response and chronic inflammation.

[4] CDC, “About Sepsis”; nature of the condition and some emergency signs, without converting the list into a home diagnostic tool.

[5] MedlinePlus, “Allergy”; the concept of allergies and the diversity of causes and symptoms.

[6] NHS, “Anaphylaxis”; Warning signs, calling for emergency medical assistance, the auto-injector, and not standing or walking.

[7] MedlinePlus, “Autoimmune Diseases”; the diversity of diseases, their causes, and the limitations of diagnosis and treatment.

[8] MedlinePlus Medical Encyclopedia, “Immunodeficiency Disorders”; genetic and acquired causes and assessment indicators.

[9] CDC, “Healthy Habits: Antibiotic Do’s and Don’ts”; the limits of efficacy and prescription use.

[10] CDC, “About Antimicrobial Resistance”; distinguishing between microbial resistance and human body resistance, according to the general text available in the catalog.

Chapter 82: Genetic and Congenital Diseases

When parents hear that their child has a congenital condition, their medical questions may be preceded by painful questions: Did we make a mistake? Will he live like everyone else? Does the name mean everything is settled? Good care begins by acknowledging these concerns and then gradually unpacking them. The name of a condition is not the whole story of a person, and knowing its cause doesn't always mean knowing everything that will come next. Genetics may provide an important answer, but it doesn't give us the right to reduce a child to a chromosome, or a family to a probability.

1. Similar Words, Different Questions

The word “congenital” describes a condition that developed before birth and was present at birth, even if it was not discovered until later. Medicine studies structural variations, such as certain heart defects, along with functional disorders, which we discussed in Chapter 32. “Genetic” refers to a relationship with hereditary material, and “inherited” to transmission from parents. These are different perspectives; there may be a congenital condition with no known genetic cause, and a new genetic variation may arise that is not inherited from either parent. [1; see Chapter 14]

An inherited disease may not show symptoms at birth. In Huntington's disease, for example, the most common form begins in adulthood, with a less common form starting earlier. This example illustrates the difference between the presence of a genetic cause and the onset of symptoms, and does not allow us to predict the timing of a person's illness simply by knowing the disease’s name. [2]

2. Different Pathways to the Disorder

A disorder may be linked to a significant change in a single gene, a change in the number or structure of chromosomes, or the interaction of multiple genetic and environmental factors. Not every DNA variation is a disease; natural variation is widespread. Furthermore, identifying a variant does not negate the need to inquire about its function and evidence of its connection to the condition. Assessment relies on personal and family history, examination, and appropriate testing, rather than simply resembling physical features or relying on anecdotal evidence from a distant relative. [3]

Patterns of inheritance are reviewed in Chapter Fourteen; these are tools for understanding, not a substitute for a personal family assessment. [4]

3. Why don't the stories match?

The condition may not manifest in some carriers of a particular variant, and its features and severity may vary among those affected; these are what we explained as penetrance and variable expressivity. Therefore, the experience of one relative is not sufficient to predict the future of all family members. [5] The intention is not to

provide false reassurance that there is no risk, but rather to prevent excessive certainty when the evidence only allows for probability.

Prognosis assessment includes the onset of symptoms, the rate of change, potential complications, the ability to perform daily activities, and the impact of available care. It may be difficult to estimate in very rare or undiagnosed cases. Even when good data are available, the assessment remains a probability and a trajectory, not a guaranteed personal date. The specialist discusses what they know and what they don't know, and the statistical average should not be interpreted as a definitive judgment on a person's lifespan. [6]

4. What does the result say, and what does it leave unsaid?

The genetic result is interpreted according to the test question. It may confirm a diagnosis, identify carrier status for a variant, or indicate an increased likelihood of a disease; however, these results do not all mean the same thing. A negative result means that the test did not find the variant it was looking for; it does not necessarily rule out every possible genetic cause. It may also reveal an "variant of uncertain significance" for which there is insufficient information to determine its relationship to the disease. Therefore, an ambiguity should not be treated as a definitive diagnosis, nor as proof that all risk is absent. The result may require expert interpretation or subsequent reassessment. [7]

Helpful questions before screening include: What are we looking for? What will change in care if we find it? What won't the result answer? These are suggested editorial questions for the reader, not a laboratory protocol. They protect the reader's right to understand; a sheet of letters and numbers does not explain itself, and the anxiety it raises deserves a dialogue, not the automatic delivery of printed material.

5. Early screening is not a definitive declaration

Newborn screening programs look for selected conditions that may be beneficial to detect before symptoms appear. These may include blood tests, hearing tests, and screening for certain heart conditions, depending on the local program. However, screening alone does not diagnose all the conditions it targets; a result that warrants attention needs follow-up and timely confirmatory tests. Furthermore, a normal screening result does not rule out all illnesses in the child. The team is asked about the available program, the timeframe for results, and how the family can access follow-up if requested, without generalizing one country’s list of conditions to the entire world. [8]

6. Counseling, Not Blaming

Genetic counseling may be helpful with a relevant family history, a test result that needs interpretation, a known disorder in a child, or specific reproductive questions. Consanguinity between two people planning to have children is a legitimate reason to discuss the possibility of certain genetic conditions with a specialist; however, it does not mean that every child they have will be affected, nor does it allow for an individual risk assessment based solely on consanguinity. [9]

Gathering a family history should not become a way to shame or stigmatize. The goal is to understand the probabilities and improve care, not to assign blame between two families. A disease can occur in the absence of known risk factors, and a risk factor may be present without the condition occurring. In congenital variations, the causes of many cases are not fully understood. [1] Therefore, saying “we don’t know yet” is more truthful and compassionate than a definitive account that blames the mother’s fear, food, or fleeting thought for what happened without evidence.

7. Treatment is broader than gene repair

Care varies depending on the disorder: it may include symptom management, controlled nutritional therapy for some metabolic disorders, enzyme replacement in certain cases, or surgical intervention for a structural problem. These examples are not suitable for self-experimentation with diet or medication, as needs can vary greatly. The inability to eliminate the genetic cause does not mean that nothing can be done for comfort, function, and prevention of complications. [10]

Some gene therapies have entered approved use; a landmark example is the FDA’s December 2023 announcement authorizing two cell-based gene therapies for specific cases of sickle cell disease. This does not mean that all genetic diseases are cured, nor that the intervention is simple or risk-free; the announcement itself describes treatment preparation, follow-up, and significant side effects. The example provided illustrates the evolution of the field; it is neither a product recommendation nor a presentation of current regulatory requirements in each country. [11]

Chapter Summary

Between the gene and life lies a vast expanse of knowledge, care, and responsible choice. Progress is measured not only by the ability to alter genetic material, but also by our capacity to honestly explain what we know, provide treatment and rehabilitation, and safeguard family privacy. Human value is not a laboratory result; it is neither increased by a reassuring examination nor diminished by a difficult diagnosis. In the following chapter, we see another facet of cellular dysfunction: how growth, which builds the body, becomes uncontrolled in tumors.

Chapter Sources and Limitations of Documentation

[1] CDC, “About Birth Defects”; structural differences, varying outcomes, and limited knowledge of causes. The concept of functional disorders is supplemented by sources in Chapter 32.

[2] MedlinePlus Genetics, “Huntington’s disease”; an example of varying age of symptom onset, without conveying personal age estimates.

[3] MedlinePlus, “Genetic Disorders”; General categories and assessment, without relying on a simplification that confines every non-inherited change to somatic cells.

[4] MedlinePlus Genetics, “What are the different ways a genetic condition can be inherited?”; brief follow-up to the explanation of Chapter 14.

[5] MedlinePlus Genetics, “What are reduced penetrance and variable expressivity?”; conceptual reference supplementing Chapter 14.

[6] MedlinePlus Genetics, “What is the prognosis of a genetic condition?”; prognosis elements and predictive limitations.

[7] MedlinePlus Genetics, “What do the results of genetic tests mean?”; positive, negative, and inconclusive results.

[8] MedlinePlus Medical Encyclopedia, “Newborn screening tests”; general principles and confirmatory follow-up, not the historical test numbers listed on the page.

[9] MedlinePlus Genetics, “Why might someone have a genetic consultation?”; examples of reasons for seeking a consultation, without converting them into a standardized, mandatory list.

[10] MedlinePlus Genetics, “How are genetic conditions treated or managed?”; examples of care. The page’s blanket description of gene therapy as experimental was not adopted.

[11] FDA, December 8, 2023 announcement of the first two gene therapies for sickle cell disease; a documented historical example, not a current list of treatments or eligibility criteria.

Chapter 83: Tumours and Cancer

The word “tumor” may be more jarring to the ear than all the pages of the report. Hearing it brings to mind familiar faces and frightened stories, and perhaps one's imagination even anticipates what the doctor said. But the medical narrative doesn't begin with the sound of the name, but with defining what it means: What type of cells? Where are they located? And how do they behave? What did the tests actually reveal? A calm explanation isn't about minimizing the risk of the disease, but rather a way to put the question into perspective and keep the patient involved in understanding instead of being trapped by a single word.

1. A tumor is not always cancerous.

A tumor is a mass of tissue that may be benign or malignant. Benign tumors don't invade and spread in the way that cancer does, but they can still cause significant harm due to their location or size; therefore, the word "benign" doesn't mean that no care is needed. Malignant tumors, on the other hand, have the potential to invade tissues and spread. Some cancers, like leukemia, don't usually present as a solid mass. A mass alone is not the definition of cancer, and its absence doesn't rule out all types. [1]

In cancer, the regulation of cell growth, survival, and interaction with the environment is disrupted. Cells may bypass stop signals or evade certain defense mechanisms. If breast cancer cells spread to the lungs, for example, the metastasis is considered metastatic breast cancer, not primary lung cancer, simply because of its new location. Therefore, understanding the location is inseparable from understanding the origin of the cells. [1]

2. Genetic does not necessarily mean inherited in all cases

Cancers are linked to changes in the genes that regulate cell function and growth. These changes may arise during cell division or with harmful exposures, and a predisposition that increases the risk may be inherited. However, a change present in tumor cells does not, in itself, mean that offspring will inherit it; inherited changes pass through reproductive cells and may confer susceptibility rather than certainty of disease. Furthermore, the presence of cancer in a family does not, on its own, prove a specific genetic syndrome; a shared environment or other factors may be

involved. Family history and appropriate screening should be discussed with a specialist, without generalizing a single fear to every relative. [2]

Designating a risk factor does not definitively establish a cause in a particular individual. The patient should not be questioned accusingly, "Why did you bring this on yourself?" Prevention is a responsibility worth pursuing, but turning it into blaming the patient adds nothing and may deprive them of the support they need.

3. From Suspicion to Diagnosis

The evaluation may begin with a symptom or a screening finding. The physician will then gather the patient's medical history, conduct a physical examination, and order laboratory tests and imaging, depending on the case. In many instances, determining the nature of the tumor requires a biopsy and histological examination. No single test is suitable for diagnosing all cancers; nor does every increase or decrease in blood test results definitively establish a diagnosis. Results should be interpreted collectively and should not be replaced by a common image or a casual comparison between two reports. [3]

Tumor markers have uses in diagnosis, treatment selection, and follow-up, but they are not a simple "cancer" or "no cancer" stamp. Some markers may be elevated in non-cancerous conditions and may not be elevated in some patients. Therefore, they should be interpreted within their context, and requesting a wide range of them without a specific medical question should not be interpreted as a blanket guarantee of safety. [4]

4. Stage and Grade: Two Languages, Not One Word

Stage describes the extent of cancer: its location, size, or local spread, its relationship to lymph nodes, and the presence of distant metastases, according to the appropriate classification system. The TNM system uses these aspects for many types, but it is not applied the same way to all cancers. Therefore, the term "stage II" alone is not sufficient to compare two different diseases or to choose a treatment. [5]

Grade relates to the characteristics of cells and tissue under a microscope, including their degree of resemblance to normal structures, and helps estimate expected behavior. The systems for determining grade vary among types. A tumor may be graded high without this being synonymous with its spread to distant organs. The description of grade and stage is combined with other information; one does not replace the other. [6]

The patient has the right to ask for an explanation of both terms in understandable language: What was actually found? What is still being evaluated? What does this mean for the treatment plan? The goal is not to become an oncologist, but to be able to understand the decision that affects their life.

5. Why does treatment differ between two patients?

There are many treatment options: surgery, radiation therapy, chemotherapy, hormone therapy for some types, targeted therapies, immunotherapy, and others. A single treatment may be used, or a combination of treatments may be used in a

specific order. The choice depends on the type of cancer, its stage, and other factors. A treatment suitable for one person does not automatically become suitable for another merely because the names are similar. This is a map for identifying categories, not a treatment protocol or a fixed order of preference. [7]

Biomarkers, including specific gene changes or proteins, may help in selecting a treatment that is likely to benefit a particular tumor. Examining tumor characteristics for this purpose differs from examining inherited genetic predisposition, although some of their results may be related. Furthermore, testing does not guarantee finding a suitable treatment for every result; the value depends on what the marker means for that type of cancer and the available evidence. [8]

6. Side Effect Management Is Part of Treatment

Illness and its treatment can affect energy, nutrition, pain, sleep, and other functions, and treatment can damage healthy tissue. Discussing problems early helps manage or alleviate many side effects. Patients don't need to hide their suffering to appear brave, nor do they need to stop treatment on their own to prove they can't take it anymore; rather, they need a clear way to communicate with the team and know when to contact them urgently. [9]

Care should also extend to what isn't visible on the radiograph: concerns for children, work disruptions, the cost of access, and the need for someone to listen without bombarding them with other people's stories. These are human issues that aren't reduced to measuring tumor size, but they are no less real in the patient's life.

7. Hope That Doesn't Need False Promises

Prognosis depends on the type, stage, and characteristics of the cancer, as well as the patient's health and response. Survival statistics describe groups and don't accurately predict what will happen to an individual. Remission, meaning a partial or complete decrease in the signs and symptoms of the disease, differs from a promise that it will never return. Follow-up is discussed on a case-by-case basis, and the phrase "five years" should not be interpreted as a date on which life ends or a guaranteed cure. [10]

Cancer is not transmitted through everyday contact, although some infectious agents increase the risk of certain types. Abstaining from sugar alone has not been proven to eliminate tumors, nor are commonly promoted herbal preparations proven substitutes for cancer treatment; some products may interact with medications. Furthermore, sadness or a lack of optimism should not be blamed for the outcome of the disease. Patients should inform their team about what they are using, and support should be provided without requiring a constant smile. [11]

Chapter Summary

Cancer is a name that encompasses a variety of diseases, not a single judgment on all those who have it. Care begins with accurate diagnosis and extends to appropriate treatment, alleviating suffering, and supporting the individual throughout their life. Hope is not a denial of difficult information; it is about not

closing the doors to possible action and not promising what we cannot deliver. As long as the individual is present before us, the duty of honesty and compassion remains, whether the disease can be cured or the goal is to manage it and care for the person.

Chapter Sources and Documentation Limits

[1] National Cancer Institute (NCI), “What Is Cancer?”; benign, malignant, metastasis, and metastasis origin, without generalizing all cancer characteristics to every cell.

[2] NCI, “The Genetics of Cancer”; acquired changes, inherited predisposition, and familial clustering.

[3] NCI, “How Cancer Is Diagnosed”; Integration of diagnostic methods and limitations of individual tests.

[4] NCI, “Tumor Markers”; use of markers and their sensitivity and specificity limits, without claiming to screen for all cancers.

[5] NCI, “Cancer Staging”; disease extent and variety of staging systems.

[6] NCI, “Tumor Grade”; microscopic characteristics and differentiation from stage.

[7] NCI, “Types of Cancer Treatment”; definition of treatment categories, no individual recommendation of any of them.

[8] NCI, “Biomarker Testing for Cancer Treatment”; treatment selection and differentiation from genetic predisposition testing.

[9] NCI, “Side Effects of Cancer Treatment”; importance of reporting and managing problems.

[10] NCI, “Cancer Prognosis”; Limits of survival statistics and the difference between remission and cure. The different survival measures were not equated with each other.

[11] NCI, “Common Cancer Myths and Misconceptions”; Contact, sugar, herbal products, and psychological attitude. This statement does not exclude proven medicines derived from plants.

Chapter 84: Chronic and Degenerative Diseases

Not every illness is a short incident that ends with the doctor leaving and the file being closed. Illness can become a long-term companion, altering daily schedules, work plans, eating habits, and outlook on the future. Here, it is not enough to ask: Has the disease disappeared? Other questions arise: Has its impact lessened? Has an important function been preserved? Can a person live a meaningful life while receiving care? These questions do not compete with the desire for a cure, but rather broaden our understanding of what life is worth when a cure is not quick or possible.

1. Chronic and Degenerative Are Not Synonymous

The term "chronic" refers to the ongoing nature and effects of a disease, which may vary in severity from mild to severe. Symptoms need not be the same every day, nor does the disease need to have an obvious onset. In addition to its physical impact, it can affect work, activities, relationships, and living expenses. A variety of physical and mental illnesses fall under the category of chronic conditions; they cannot be reduced to a single system or age group. [1]

The term "degenerative," on the other hand, refers to the deterioration of the

structure or function of a tissue or organ over time, as seen in examples of joint and nervous system diseases. [2] It describes a disease progression, not a judgment that the person is "fading away," nor does it permit abandoning care. While chronic and degenerative diseases may overlap, the two terms address different questions: the duration of the condition and the nature of its change.

2. Cardiovascular Disease: A Long Course, and an Event That May Be Acute

Cardiovascular disease encompasses a variety of forms, including disease of the arteries that supply the heart, brain, and limbs. Vascular disease may develop without obvious symptoms before an acute event, such as a heart attack or stroke, occurs. Factors such as smoking, blood pressure, diabetes, cholesterol, and environmental factors interact, and not all cases can be attributed to a single cause. [3]

The fact that a disease is chronic does not excuse delaying treatment for a sudden change. New chest pain or pressure, especially with shortness of breath, sweating, or fainting, or sudden weakness on one side of the body or difficulty speaking, calls for urgent contact with local emergency medical services. This is not an exhaustive list, and the absence of a single symptom does not rule out danger. An emergency may occur on the basis of a long-standing disease, or it may be the first sign of it. [3]

3. Diabetes: More Than a Single Number

Diabetes is associated with insufficient insulin production or the body's ineffective use of insulin. Type 1 diabetes is characterized by insulin deficiency requiring replacement, while type 2 diabetes involves impaired insulin response and other factors. Chronic high blood sugar can damage blood vessels, nerves, eyes, and kidneys, but a diagnosis does not necessarily mean all complications will occur. Monitoring, appropriate treatment, and screening for complications can reduce or delay risks. A person's condition is not assessed based on a single reading, nor should their medication be changed simply because a reading is similar to that of a relative. [4]

The important lesson here is that follow-up is not a moral test where the patient passes or fails. It's helpful to understand what complicates the plan: Are the instructions clear? Is the medication available? Can the person implement what's required in their circumstances? With these questions, knowledge becomes a source of support, rather than test results becoming grounds for reprimand.

4. Respiration and Kidneys: What Early Symptoms May Not Reveal

In COPD, airflow narrows, leading to problems such as shortness of breath, coughing, and fatigue. Risk factors include tobacco smoke, pollution, occupational exposures, and other factors; not everyone with COPD is a smoker. Spirometry helps confirm the diagnosis, and the course may be punctuated by episodes of worsening that require evaluation and treatment. Care, depending on the case, includes exposure reduction, prescribed medications, and pulmonary rehabilitation. Oxygen is not used, nor are inhalers changed simply for comparison with another patient. [5]

Chronic kidney disease may be asymptomatic in its early stages and may be detected through blood and urine tests. It has multiple causes, including diabetes, high blood pressure, and other kidney diseases. Not every diagnosis means dialysis is imminent; the stages and pathways vary. Care focuses on the cause, complications, and preserving function, while compensatory methods are explored in appropriate advanced cases. Therefore, feeling well is not enough to forgo necessary follow-up, nor is the word "kidney" sufficient to assume the worst. [6]

5. When Movement and Memory Are Affected

Parkinson's disease is associated with the loss of nerve cells in specific areas and a deficiency of dopamine. Slowness of movement, stiffness, and tremors may appear, along with non-motor symptoms. Not all tremors are Parkinson's, and a tremor does not represent the entirety of the patient's experience. Assessment and care are tailored to the individual case and may include medication, physical and occupational therapy, and other interventions in selected cases. What matters to the family is not just the name of the symptom, but its impact on walking, dressing, speaking, sleeping, and independence. [7]

Alzheimer's is a cause of dementia, and it is not the typical forgetfulness that accompanies aging. Memory, language, planning, and self-care may be affected gradually, with varying degrees of severity. Furthermore, a complaint of memory problems does not confirm Alzheimer's disease; it requires evaluation. [8] In the chapter on aging, we distinguished between age-related changes and disease; here, we reiterate the principle: we do not delay seeking medical advice simply because we say, "This is normal with age," nor do we frighten everyone who forgets a name by claiming they are losing their mind.

6. More Than One Disease, One Person

Multiple chronic conditions refer to the presence of two or more chronic illnesses in a person. [1] A patient may consult multiple specialists, but their life is not divided like clinics. Hence the need for coordinated care, consideration of the treatment burden and patient priorities, and minimizing harm from medications or uncoordinated plans. This is one of the stated objectives of the NICE guideline on multimorbidity. [9]

Simplifying treatment does not mean that the reader should eliminate medication on their own. The goal is for the team, in collaboration with the patient, to fully understand the plan: what the patient is taking, for what purpose, and what challenges they face. Practical questions might include: Who should I contact if my condition worsens? Which appointments take priority? How do I take a clear list of my medications to clinics? These are suggested organizational examples, not a prescription modification or a detailed application of the guidelines.

7. A Life Not Reduced by Follow-Up

A patient may need assistance with some tasks while retaining considerable autonomy in others. They should not have all their decisions taken away simply because they need medication, a wheelchair, or reminders. Nor should they be forced

to prove their independence by refusing help. Respecting them means asking what they want, what they are capable of, and what they need, while acknowledging their capacity to decide on specific matters, rather than treating them as a file passed around by the family.

The family itself needs a realistic distribution of responsibilities. Love is not a promise that one person will do everything all the time, nor is exhaustion a sign of insufficient devotion. The honest words, “We need additional support,” can be the beginning of equitable care for all. We will return to the ethical obligations of society and the rights of the patient, so that responsibility is not confined behind the door of the home.

Chapter Summary

Chronic diseases have taught us that care is an ongoing process, not a single visit; that improved function, pain relief, or the avoidance of complications can be a genuine achievement. Degenerative diseases have taught us that acknowledging a change in ability does not equate to a loss of dignity. In the next chapter, we will approach rehabilitation and disability: how to broaden participation, modify the environment, and help people find their way, rather than demanding that they adapt to every obstacle alone.

Chapter Sources and Limitations

[1] Australian Institute of Health and Welfare (AIHW), “Chronic Disease: Overview”; the extent, impact, and multiplicity of diseases, without adopting a single time frame for all definitions.

[2] NCI, definition of “degenerative disease”: a change in structure or function for the worse over time.

[3] WHO, “Cardiovascular diseases”; Variation in cases, risk factors, and signs of infarction and stroke, without details of home emergency treatment.

[4] WHO, “Diabetes”; General patterns, complications, and care, without medication dosages or individual blood-glucose targets.

[5] WHO, “Chronic obstructive pulmonary disease”; Multiple factors, assessment, and general care. The need for oxygen was not generalized to all patients.

[6] NHS, “Chronic kidney disease”; Absence of early symptoms, variability in stages, and care, without generalization of disease progression rates.

[7] NHS, “Parkinson’s disease”; Motor and non-motor features and care. No generalizations were made regarding longevity or negation of disease-related death.

[8] NHS, “Alzheimer’s disease”; Symptoms and differentiation from normal aging, not an exhaustive account of recent tests and treatments.

[9] NICE, NG56, “Multimorbidity: clinical assessment and management”; the quotation was limited to the objectives of the guide as shown in the official index, and a full review of its recommendations was not possible.

Chapter 85: Injury, Disability and Rehabilitation

A person may leave the hospital having survived the danger, only to find that

entering their own home is more difficult than exiting the operating room. They may regain their ability to speak, but others may not give them enough time to complete a sentence. Between survival and returning to life lies a distance that cannot be measured by the number of stitches or the image of the bone alone. There is movement, work, communication, and privacy, and there is a society that may pave the way or increase the obstacle. This is where the discussion of rehabilitation begins: not how to make a person a copy of someone else, but how to help them function and participate according to their condition and goals.

1. The injury alone does not tell the whole story.

The effects of an injury vary depending on its location, severity, and the available care. Spinal cord injuries illustrate this: they can affect movement, sensation, bladder and bowel function, breathing, and the regulation of some involuntary functions, depending on the level and severity. The injury may be traumatic or non-traumatic. Care needs to address pain, skin problems, infections, and other complications, not just movement. Participation is also affected by the availability of rehabilitation, assistive devices, and the environment. The location of the injury alone does not explain everything a person can do in their life. [1]

This example does not provide a first aid manual or home exercises for a recent injury; transportation, treatment, and rehabilitation are determined by qualified teams based on safety. The book does not promise a return to a specific function after a fixed period, nor does it use an individual recovery story as a benchmark to blame those whose paths differ. A difference in outcome does not prove a difference in will or the sincerity of hope.

2. Disability and the Relationship Between People and Their Environment

Disability is understood through the interaction of health conditions with personal and environmental factors. A mobility impairment is significant, but the lack of appropriate accessibility measures exacerbates its impact. A hearing impairment is important, but the absence of accessible information increases the communication barrier. Stigma, discrimination, poverty, and difficulty accessing care may further compound these challenges. People with disabilities are not a homogenous group in terms of their needs or abilities; therefore, support should not be based on a single, presumed model applicable to everyone. [2]

One ethical consequence of this understanding is that we should not always tell a person, "Overcome your disability," and then provide only stairs at the entrance to a service, and the information in a format they cannot use. Some change may be required from the institution, the pathway, and the method of communication, not just from the body. This does not negate the reality of pain or the importance of treatment; rather, it prevents placing the burden of responsibility on the individual for everything they encounter.

3. What Does Rehabilitation Do?

Rehabilitation aims to improve function and reduce the impact of disability on a

person's interaction with their environment. A child, adult, or elderly person may need it after an illness, injury, or surgery, and it is not a service postponed until all other treatments have failed. Examples include communication training after a brain injury, improving mobility and balance, adapting everyday tasks or the environment, and assistive device training. Interventions are chosen according to the individual's goals and preferences and may begin at an appropriate time, alongside medical care. [3]

Multiple disciplines collaborate as needed, such as rehabilitation medicine, physical and occupational therapy, speech and hearing therapy, nursing, orthotics, prosthetics, and psychological support. [3] The multiplicity of disciplines does not mean that the person in need is the last to speak. Their priority today may be safely getting into a chair, eating more independently, or returning to work they enjoy. These are illustrative examples of goals that can be discussed, not a plan suitable for every injury.

4. The Tool That Expands the Scope

Assistive technology includes products and services such as wheelchairs, glasses, hearing aids, prosthetics, white canes, and digital means of communication or displaying text. It may be used temporarily or long-term. Its value lies not merely in its novelty, but in its suitability to the individual and their function, and its availability within an accessible service. Barriers include cost, a shortage of suitable products, and inadequate services. Therefore, the involvement of the user and their family in the accessibility process is crucial. [4]

A wheelchair is not a symbol of surrender when it opens a path to education or work, nor is giving it up obligatory to appease others. The goal is not to conceal the device to conform to a predetermined image, but rather to ensure it serves its user safely and with dignity. No onlooker has the right to define the meaning of the tool in the life of its user.

5. Amputation and the Pain of the Missing Limb

Severe illness or injury may necessitate the amputation of part of a limb. Wound care, recovery, rehabilitation, and assessment of the prosthesis's suitability then follow, depending on the individual case. A person may experience a sensation or pain that seems to originate from the missing limb; this is called phantom limb sensation or phantom limb pain. The term "phantom" does not mean that the pain is fabricated or that the person is faking it. This is also different from pain in the remaining limb, which may have other causes that need to be evaluated. Management options are discussed with the team and are not replaced by a one-size-fits-all prescription for all pain after amputation. [5]

The loss of a limb may bring grief that is not eliminated by the success of the operation, and not everyone experiences the same feelings. No one is forced to grieve, nor are they expected to move on immediately because someone else is "more severely affected." Listening is important without comparison, and support is offered without assuming that asking for it is a sign of weakness.

6. Removing hardship, not excluding participation

“There is no blame upon the blind, nor is there blame upon the lame, nor is there blame upon the sick. And whoever obeys Allah and His Messenger - He will admit him to gardens beneath which rivers flow. But whoever turns away - He will punish him with a painful punishment.” [Al-Fath: 17]

This verse comes in the context of discussing going out to fight, thus removing hardship from those with the aforementioned excuses. It is not permissible to take it out of context to absolve every person with a disability of all responsibility, or to prevent them from working, learning, and participating. Considering ability is not erasing one's personality, and easing restrictions is not exclusion. The details of religious obligations and their prescribed alternatives are referred to their respective chapters on jurisprudence, according to the type of excuse and the conditions of the ruling, not to a generalization that the reader can extract from a reflective passage. [6]

7. From Transient Kindness to Protected Rights

In Imam Ali's (peace be upon him) covenant to Malik al-Ashtar, he mentions caring for the poor, the needy, and "the afflicted and the disabled," then says: "Safeguard for God what He has entrusted to you of His right concerning them," and orders that a portion of public funds be allocated to them, then: "And do not turn your cheek away from them." This is followed by attending to those who cannot reach the governor, those whom people despise or look down upon. [7]

We present this passage from Nahj al-Balaghah for its ethical and social significance, without claiming to verify the chains of transmission of the covenant in this chapter. The term “lower class” in its context describes a position of need and deprivation, not a license to humiliate a person or rank people according to their perceived worth. Furthermore, the historical term al-zamna (people with chronic infirmities) does not encompass all modern classifications of disability. The crucial point here is that need is not contingent upon the ability to speak out; there is a duty to check on those whose circumstances prevent them from accessing services.

From this understanding, we derive a contemporary application, inspired by its principles, not a literal translation: providing services, listening to the individual directly, not photographing them or publishing their story without their consent, and not treating assistance as a favor that deprives them of the right to object. Compassion that demands a price in the dignity of the person in need requires a re-examination of its meaning.

Chapter Summary

A person may regain a function, learn a new skill, or require long-term support. In all cases, rehabilitation is not a test of their worthiness of respect. Treatment is a right to care, and participation is not a reward for recovery. When we build a broader environment, listen to the person with the experience, and distinguish between what is possible and what is merely a false promise, we empower people to live, not just to endure in silence.

Chapter Sources and Limitations of Documentation

[1] World Health Organization, “Spinal cord injury”; variability of impact, complications, and environmental barriers, without instructions for transport or emergency intervention.

[2] World Health Organization, “Disability”; interaction with the environment, diversity of needs, and causes of health inequities.

[3] World Health Organization, “Rehabilitation”; goals, specializations, and integration of rehabilitation with care, not an individualized plan.

[4] World Health Organization, “Assistive technology”; products, services, and accessibility.

[5] NHS, “Amputation”; recovery, rehabilitation, and distinguishing phantom limb pain from fabricated pain, without conveying a list of treatments as a prescription.

[6] The Holy Quran, Al-Fath: 17; the text of the verse is presented with due consideration of the context of the preceding verses, without basing a detailed ruling on it here.

[7] Nahj al-Balaghah, Letter 53, The Covenant of Malik al-Ashtar, the section on caring for the needy; the Arabic text was compared with its location in the digital version and with the commentary of Muhammad Abduh, Vol. 3, pp. 100–101. The chains of transmission for the covenant were not assessed here.

The collated version: Nahj al-Balaghah, commentary by Muhammad Abduh, Vol. 3, p. 100, which includes the beginning of the section and an explanation of the historical term al-zamna.

Chapter 86: Mental Health and Mental Disorders

A person may find someone to ask about their blood pressure and blood sugar, yet find no one they can tell that they no longer enjoy anything, or that fear follows them into even their simplest tasks. The question might be avoided because one has heard mental illness used as an insult, or because one has heard that a believer does not grieve or become distressed. This is where the responsibility of language begins: to open the door to understanding, so that we do not label every emotion as illness, nor deny a genuine disorder simply because the person experiencing it appears outwardly healthy.

1. When do we speak of a disorder?

Mental disorders involve clinically significant changes in thinking, emotional regulation, or behavior, usually associated with distress or impact in important areas of life. Biological, psychological, familial, and social factors intertwine in mental health, and no single cause can explain it in all people. Therefore, a short online list is insufficient for diagnosing oneself or others; context, severity, course, and functional impact require a qualified assessment. [1]

A person's difference from their family's expectations does not justify assigning them a diagnosis. Nor does their success in one area of life justify denying their struggles in another. What is needed is listening and assessment, not finding a medical label for every disagreement or a moral accusation for every symptom.

2. Depression, Anxiety, and Bipolar Disorder

Depression is not just fleeting sadness; it may include low mood or loss of interest, changes in sleep, appetite, energy, and concentration, and symptoms that affect work and life. It may also occur alongside a physical illness or other disorder. It is not diagnosed from a single symptom, nor does it necessarily disappear simply by telling the person to “think positively.” [2]

Ordinary worry is a part of life, but anxiety disorders go beyond occasional anxiety to persistent or recurrent, debilitating fear or anxiety. These include generalized anxiety disorder, panic disorder, social anxiety, and some phobias. [3] We should not automatically attribute new chest pain or severe shortness of breath to anxiety; we have already explained the need to assess emergency warning signs.

In bipolar disorder, there are episodes and marked changes in mood, energy, and activity levels. It may include mania, hypomania, and depression, depending on the type and course. It is not simply a change of opinion or distress followed by pleasure during ordinary conversation. Its management requires appropriate assessment and follow-up, and it is incorrect to assume that all depression is treated in the same way. [4]

3. Obsessive-Compulsive Disorder and Trauma

Obsessions may take the form of unwanted intrusive thoughts, mental images, or urges, accompanied by repetitive actions or rituals to relieve distress. Their content may be religious or related to contamination or harm, but the occurrence of the disliked thought is not a choice or acceptance of it. Conversely, not every repetitive habit is obsessive-compulsive disorder; the assessment considers the nature of the experience, what it consumes, and what it hinders. [5]

Post-traumatic stress disorder may develop after a traumatic experience, with distressing reliving the experience, avoidance, vigilance, and other changes. Not everyone who experiences a difficult event develops PTSD, and no one should be forced to recount painful details to prove their need for support. Responses and trajectories vary, and a professional will determine the appropriate assessment and treatment. [6]

4. Psychosis is not a single diagnosis

Psychosis refers to symptoms in which a person's connection to reality is affected. These may include hallucinations, delusions, or disturbances in thinking and speech. It can be associated with psychological or neurological conditions, medications, substances, or other circumstances; not all psychosis is schizophrenia. Early intervention, a comprehensive assessment, and coordinated care are beneficial. A diagnosis does not make someone a target of ridicule, nor does it give those around them the right to confirm a frightening belief without evidence or to engage in a demeaning confrontation. [7]

Nor do we diagnose psychosis based solely on religious belief, cultural difference, or an unconventional opinion. This book is not a tool for judging people's sanity; a professional assessment is broader than simply quoting a phrase or watching a video

clip.

5. Other images that shouldn't be overlooked

Eating disorders are illnesses that can severely harm physical and mental health; they are not a luxury or a simple matter of willpower. They can occur in people of varying weights and appearances, so don't rule them out just because they seem "normal." They encompass multiple patterns that require appropriate care, not praise for weight loss or the imposition of punitive diets. [8]

Substance use disorders may coexist with other mental health disorders, and symptoms and causes may overlap. Therefore, a coordinated assessment and plan are necessary, including appropriate psychological, pharmacological, and supportive interventions. Shaming is not a substitute for treatment, and addressing dependency does not mean ignoring the actual harm or responsibilities. [9]

The classifications also include neurodevelopmental conditions, such as autism spectrum disorder and attention deficit hyperactivity disorder (ADHD), with a wide range of abilities and needs. [1] Mentioning them here is not to equate them with psychosis or to deny neurodiversity, but rather to remind us that support should be tailored to the actual need, without reducing the individual to a diagnosis.

6. Treatment is a partnership, not an obedience test.

There are psychological, pharmacological, and social intervention therapies that vary depending on the condition. Psychiatric medications vary in their benefits and risks; it is inaccurate to describe them all as narcotics or as having no side effects. The plan requires monitoring treatment response, problems, and interactions. The patient should not start, stop, or change the dosage of medication on their own. This should be discussed with the specialist, including any difficulties that might prevent continuation. [10]

The family can be supportive when they help access care, respect privacy, and listen, not when they treat every conversation as an interrogation. It is not permissible to abuse, starve, imprison, or disrupt the patient's treatment under the guise of spiritual healing. A believer can find meaning and support in prayer and worship, without making this a condition that denies treatment to those who have not improved.

7. “Heart disease” in the Quranic discourse is not a psychological diagnosis.

“In their hearts is a disease, so Allah has increased their disease; and for them is a painful punishment because they used to lie.” [Al-Baqarah: 10]

This verse comes in the context of describing hypocrisy and lying, not in defining depression, obsessive-compulsive disorder, or psychosis in its medical sense. Therefore, it is not permissible to apply the condemnation contained in that context to someone diagnosed with a mental disorder. The different uses of the word “disease” necessitate distinguishing the meaning, not grouping disparate judgments under a single term. Likewise, sadness does not prove weakness of faith; we have

already considered the words of Jacob, peace be upon him, and his complaint to God in chapter seventy-five. [11]

8. When Safety Becomes Urgent

Talk of suicide or self-harm is taken seriously, not dismissed as a mere request for attention. Professional support is sought promptly, and in the event of an imminent threat to life, local emergency services are contacted immediately. Those expressing an intention to die by suicide are not left alone; a trusted person is consulted, and no promise of confidentiality is made that would compromise their protection. A calm, direct question about suicidal thoughts does not plant the seed of the idea. These are general safety principles, not individual risk assessments. [12]

Chapter Summary

Compassion does not require denying illness, nor does diagnosis reduce a person to their condition. Acknowledging the need for help does not deprive someone of their sanity, faith, or dignity. We need a science that listens attentively, a society that does not stigmatize seeking treatment, and a religious discourse that supports the suffering without adding unfounded accusations to their pain.

Chapter Sources and Limitations of Documentation

[1] World Health Organization, “Mental Disorders”; concept, factors, and neurodevelopmental conditions, without setting out full diagnostic criteria.

[2] NIMH, “Depression”; symptoms and overlap of conditions, no self-diagnosis test.

[3] NIMH, “Anxiety Disorders”; difference from typical anxiety and examples of types.

[4] NIMH, “Bipolar Disorder”; episodes, energy changes, and the need for follow-up, with a supplementary definition in the Depression Leaflet.

[5] NIMH, “Obsessive-Compulsive Disorder: When Unwanted Thoughts or Repetitive Behaviors Take Over”; intrusive thoughts and compulsive actions, and their distinction from habits.

[6] NIMH, “Post-Traumatic Stress Disorder”; varying responses to trauma, without detailing self-treatment procedures.

[7] NIMH, “Understanding Psychosis”; multiple symptoms and causes and early care.

[8] NIMH, “Eating Disorders: What You Need to Know”; the severity of disorders and the variability in weights and manifestations.

[9] NIMH, “Finding Help for Co-Occurring Substance Use and Mental Disorders”; assessment and integrated care.

[10] NIMH, “Mental Health Medications”; variations in categories, follow-up, benefits, and risks, without dose transfer or medication selection.

[11] The Holy Quran, Al-Baqarah: 10, in the context of verses 8–16; Semantic distinction here does not equate to passing judgment on a specific individual.

[12] NIMH, “Frequently Asked Questions About Suicide”; seeking help, not leaving the threatened person alone, and asking directly. Country-specific service numbers were not generalized to all readers.

Chapter 87: Diagnosis, Medicines and Surgery

Good care doesn't begin with the most tests or the longest prescription, but with a clear question: What problem are we trying to understand or treat? Listening to a description of symptoms may be more accurate than ordering an image when we don't know what to look for. Systematic waiting and follow-up may be part of the plan, and urgent intervention may become necessary. Between action and delay, impressions alone are insufficient; we need evidence, experience, and knowledge of the individual we are dealing with.

1. Examination is part of the evidence dialogue

Medical history, physical examination, laboratory results, and imaging help build a complete picture. Analysis alone doesn't tell the whole story; it may be ordered for diagnosis, follow-up, risk assessment, or to help choose a treatment. Therefore, it is beneficial for the patient to know why it was ordered and how the result will change the plan. [1]

The reference range in the report is not a boundary separating health from disease in every case; a result outside the range may fall in a healthy person, or within it in someone with a problem. Units, measurement methods, and reference ranges vary between laboratories, so comparisons must take this into account. False positives and false negatives also occur; "positive" and "negative" should not be understood in isolation from the medical question. The required preparation should be followed, and the team should be informed of any relevant medications and supplements, rather than fasting or discontinuing medication on their own. [1]

2. The Image: A Window with Limitations

X-rays and CT scans use ionizing radiation and are useful for diagnosis, monitoring, and guiding many interventions. However, their benefits are balanced against the risks of exposure, and unnecessary imaging should be reduced and radiation doses minimized while still meeting the medical purpose. Mere fear should not prevent a necessary examination, nor should the desire for reassurance justify imaging without a specific question. The team should be informed of the possibility of pregnancy, and any necessary precautions or contrast material should be discussed. [2]

MRI does not use ionizing radiation, but it is not without safety considerations: the magnetic field, implanted devices, metallic objects, and some contrast materials need to be evaluated. Therefore, safety questions are answered carefully, and it is not assumed that every implanted device prevents or allows MRI; its characteristics and conditions are reviewed. [3] The newest method is not the best for every question, and the image does not represent a judgment in isolation from the rest of the data.

3. How do we know if a treatment works?

A result in a petri dish or animal is not enough to prove the effectiveness of a treatment in humans. Clinical trials are designed with specific questions, participation criteria, measurements, and follow-up, and may include a control group

and methods to reduce bias. The purposes of the development phases vary, from checking safety and dosage to evaluating efficacy and harms in larger groups. These are general principles; there is no identical path for every intervention, nor is there a guarantee of success for every treatment that reaches the research stage. [4]

Hence, when reading news about a treatment, we ask: Is the study on humans? What outcome was measured? Was the comparison appropriate? Was the improvement significant for the patient, or merely a change in an indicator? Were the harms and benefits communicated? These are questions for critical reading, not an invitation for non-experts to judge all trials. They explain why a single testimony, however credible, does not constitute sufficient evidence for the cause of improvement.

Monitoring drug safety continues after licensing; trials do not initially reveal everything that may emerge with wider use and longer duration. Subsequent information may lead to revised warnings or other actions. [5] Correcting knowledge when new evidence emerges is part of integrity; there is no reason to reject all medical knowledge outright.

4. Drugs: A Benefit-Risk Relationship

Drugs have potential benefits and undesirable effects, whether prescription or over-the-counter. They may interact with other drugs, foods, or herbal supplements. Carrying an up-to-date list of what you are taking and informing your healthcare provider about allergies, pregnancy, breastfeeding, and any difficulties with administration contributes to safer care. Patients can ask about the medicine’s purpose, how to use it, the duration of treatment, what to do if a dose is missed, and when to contact the care team. [6]

The term “natural” does not mean the product is risk-free, nor does the list of side effects mean that every user will experience them. The goal is to assess the drug's suitability to the individual case, not to weigh two abstract fears. Adjusting the dose or discontinuing treatment is left to the professional team, especially when discontinuation requires a gradual plan or follow-up. [6]

5. Surgery and Informed Consent

Before any planned intervention, the procedure should be explained, along with its expected benefits, risks, reasonable alternatives, and potential consequences without intervention. Informed consent is not a signature that replaces understanding; its ethical foundation rests on information, choice, and the ability to decide. The specifics of handling emergencies or loss of capacity vary according to the relevant professional, legal, and jurisprudential standards; therefore, no single universal rule applies to all cases. [7]

The patient has the right to ask questions to understand, not to be tested on terminology. Suggested questions might include: What is the goal of the procedure? What can I expect during recovery? Who will follow up with me after discharge? When should I contact them? These questions do not pass judgment on whether to have surgery or not, but they do clarify the decision and subsequent care. We will discuss bodily integrity and consent in ethical detail in the next part.

6. Prevention and Vaccinations

Vaccines introduce the immune system to an antigen or to instructions for its production, depending on the type, to generate a response and memory that are helpful upon subsequent exposure. Some vaccines may require multiple doses. Protection is not absolute, and vaccine suitability varies depending on age, condition, and contraindications; therefore, the appropriateness depends on the local program and medical assessment, not on a standardized schedule assumed to be suitable for every country and time. [8]

Vaccines are subject to testing, review, and safety monitoring after use. Side effects may occur, usually mild and transient, with the possibility of rare but serious effects. Furthermore, an event occurring after vaccination does not, in itself, prove that the vaccine caused it; correlation is investigated and cases are reviewed, without ignoring the complaint or transforming the chronological sequence into causal certainty. [9] Responsible trust allows for questioning and reporting, and is not based on a promise that medical intervention cannot carry any risk.

7. Appropriate Screening, Not Screening for Everything

Screening targets individuals who do not exhibit symptoms of the condition in question, to identify a possibility worthy of evaluation before the disease becomes apparent. The program is chosen when its expected benefits outweigh its risks to the target group. It may lead to additional tests, unnecessary anxiety or intervention, and may miss an existing case; a previous reassuring screening result does not justify disregarding new symptoms. [10]

The overall meaning of this chapter is that care is not about consuming the most technology. It is about choosing what serves a genuine question, interpreting it, and monitoring its impact. It is a mistake to measure a physician's concern solely by the length of the prescription or the soundness of the plan by the cost of the device used.

Chapter Summary

Medical knowledge is a disciplined path to minimizing error, not eliminating it. Respect for human dignity is present in questioning, examination, explaining results, obtaining consent, managing side effects, and in the treatment itself. Following these principles, we return to the Quran and the narrations of the Ahl al-Bayt (peace be upon them): How are illness, trials, patience, and treatment understood, without turning religious texts into prescriptions lacking evidence of suitability?

Chapter Sources and Documentation Limits

[1] MedlinePlus, “How to Understand Your Lab Results”; integration of results, reference range, potential error, and preparation, without absolutely prohibiting professional comparison between different laboratories.

[2] FDA, “Medical X-ray Imaging”; benefits of ionizing imaging, balancing its risks, and minimizing unnecessary exposure.

[3] FDA, “MRI: Benefits and Risks”; Absence of ionizing radiation, field considerations, and implanted devices.

[4] FDA, “Step 3: Clinical Research”; study design and phase objectives, without generalizing participant numbers or timeframes.

[5] FDA, “Step 5: Post-Market Drug Safety Monitoring”; continued collection of safety information post-licensing.

[6] FDA, “Think It Through: Managing the Benefits and Risks of Medicines”; interactions, communication, and use as directed.

[7] NHS, “Consent to treatment”; general consent principles were used, not generalizing details of English law to readers.

[8] WHO, “How do vaccines work?”; antigens, memory, and variability of protection. No absolute negation of any disease risk was adopted with all live vaccines and in all cases.

[9] World Health Organization, “Vaccines and Immunization: Vaccine Safety”; Testing, surveillance, and distinguishing between sequence and causation.

[10] NHS, “NHS Screening”; Principles, benefits, and limitations of screening; no country-specific screening schedule.

Chapter 88: Illness in the Qur'an and Narrations of the Ahl al-Bayt

When illness enters a home, the questions change. A person no longer asks only how the lungs function, but also, “Why have I been afflicted? Does God hear my fear? Is seeking painkillers an objection to the affliction?” Here, the body needs treatment, and the soul needs words that do not exacerbate its pain. Religious pronouncements should not become a court of law around the patient's bedside, nor should we claim to know their standing with God based on the results of tests or the length of their suffering.

1. Trials are not an indictment.

God Almighty says: {And We will surely test you with something of fear and hunger and a loss of wealth and lives and fruits, but give good tidings to the patient.} [Al-Baqarah: 155]

{Those who, when afflicted with a calamity, say, "Indeed, we belong to God, and indeed, to Him we will return."} [Al-Baqarah: 156]

“Those are the ones upon whom are blessings from their Lord and mercy. And it is those who are the [rightly] guided.” [Al-Baqarah: 157]

These verses do not promise the believer a life free from fear and loss, but rather place their experience within the framework of returning to God. Conversely, they do not provide us with a tool to assign a hidden cause to every illness. There is a vast difference between relying on my faith to cope with what has befallen me, and having someone else stand above my pain and tell me that God is punishing me. The first is a gateway to hope; the second is a judgment on the unseen, which is beyond one's control.

The Prophet Job is present in the Quran not as a man whose dignity was diminished by illness, but as a servant who called upon his Lord: “And [mention] Job, when he

called to his Lord, ‘Indeed, adversity has touched me, and You are the Most Merciful of the merciful.’” [Al-Anbiya: 83]

“So We responded to him and removed what afflicted him of adversity. And We gave him [back] his family and the like of them with them as mercy from Us and a reminder for the worshippers.” [Al-Anbiya: 84]

We adhere to what the text states, without adding disturbing details or unproven modern diagnoses to Job's body. His story does not promise that every patient will be cured in the same way or within the timeframe he desires; rather, it teaches that pain does not preclude supplication, and that mentioning one's affliction does not contradict the etiquette of servitude.

2. Patience Does Not Necessitate Silence

Al-Kulayni narrated from Imam al-Sadiq (peace be upon him), in explaining the limits of a patient's complaint: "A man may say, 'I had a fever today and stayed up all night,' and he is telling the truth; this is not considered a complaint." He then distinguished this from expressions that make the afflicted person claim to have suffered something no one else has. Al-Majlisi deemed the narration "good." [1]

This distinction opens an important point: truthfully reporting one's pain is not a betrayal of patience. A patient can say that his night was severe, that the treatment exhausted him, and that he needs assistance. The rest of the narrative should not be used to condemn every fleeting cry of despair or every expression uttered under psychological distress. Understanding words requires considering the speaker's state of mind, and care begins with listening, not with nitpicking.

In the chapter on emotions, we presented Jacob's complaint to God. We should not treat tears as contrary to faith, nor pain as evidence of failed spiritual growth. The patience that helps a person face their reality is different from silencing the patient so as not to disturb those around them. It is compassionate to ask them what they need and to allow them the freedom to speak or rest, without imposing upon them the role of the "ideal patient" who always smiles.

3. Seeking treatment is not a departure from reliance on God.

Abraham, peace be upon him, said in defining his Lord: {And when I am ill, it is He who cures me} [Ash-Shu'ara: 80]. Attributing healing to God does not make every claim of treatment true, nor does it prescribe a specific medicine. In a faith-based reading, this does not contradict the search for the causes that God has placed in His creation.

In Rawdat al-Kafi, Yunus ibn Yaqub asked Imam al-Sadiq (peace be upon him) about a man who takes medicine and undergoes bloodletting, and it might benefit him or kill him. The Imam replied, “He may undergo the bloodletting and take the medicine.” Al-Majlisi graded it as “hasan or muwaththaq” (good or reliable) in “Mir’at al-‘Uqul,” vol. 26, p. 94. [2]

This narration has a historical therapeutic context and is not an endorsement of conducting a dangerous experiment on any human being, nor is it a recommendation

today to cut veins. What we learn from it in this context is that the mere possibility of harm does not invalidate the principle of treatment. However, determining benefit, risk, practitioner competence, and consent is a separate matter. The concise answer cannot be interpreted as absolving the practitioner of responsibility or as a guarantee of the medicine's success.

Therefore, we do not place supplication and medical prescription in competition: the patient may supplicate while receiving treatment, and may draw strength from worship to endure. However, the persistence of the illness does not prove the weakness of his supplication, nor does it justify demanding that he discontinue treatment to prove his trust in God. We have not established in this chapter the validity of any specific prescription or that every disease known today has a readily available cure.

4. Visiting the Sick is an Act of Worship When It Takes the Person into Consideration

In al-Kafi, it is narrated from Imam al-Sadiq (peace be upon him): “Whoever visits a sick person, seventy thousand angels accompany him, seeking forgiveness for him until he returns home.” Al-Majlisi deemed this narration “muwaththaq” (reliable). This is a statement about the virtue of offering comfort and its unseen reward, not a clinical measurement of the visit's effect on the speed of recovery. [3]

Regarding the duration of a visit, it is narrated from him (peace be upon him): “A visit should be as long as a brief interval in a camel’s milking, or the milking of a camel.” Al-Majlisi graded this narration “hasan” (good) in “Mir’at al-‘Uqul,” vol. 13, p. 270; the full text of the narration is on the following page. The intention is not to derive from this analogy a fixed schedule of minutes for every medical department, but rather to point out that the length of the visit is not necessarily a sign of affection. The patient's condition, wishes, and the organization of their care remain paramount in the application. [4]

A visit might involve a brief phone call with their permission, assistance to the family, or providing something they request. Postponing the visit might be more considerate. We should not enter the patient's room to recount our frightening experiences, demand their hospitality, or publicize their image and story. These are ethical principles we adopt to protect human dignity, not mere words we claim are found verbatim in the aforementioned narratives.

5. Weakness alters ability but does not negate value.

God Almighty said, in the context of those excused from fighting: “There is no blame upon the weak, nor upon the sick, nor upon those who do not find anything to spend, if they are sincere to God and His Messenger. There is no way [of blame] upon the doers of good. And God is Forgiving and Merciful.” [At-Tawbah: 91]

We do not take this verse out of context to absolve every sick person of all obligations. Rather, it reveals the error of judging people by the same action despite differences in their ability to perform it. The details of a sick person's prayer, fasting, purification, and other matters are referred to their respective chapters of Islamic

jurisprudence and the rulings of their religious authority after understanding their medical condition. It is not appropriate for a visitor to invent obligations that increase their pain or cause them harm.

Conversely, weakness does not negate a person's right to ask questions, make decisions, and maintain privacy. They may need help dressing, but they do not need to be treated like a child or as if they were absent. Their body does not become the property of the family or the institution simply by virtue of being admitted to the hospital. These rights will be discussed in detail in the next part, because ethics here are not an embellishment added to medicine, but rather an integral part of the meaning of care.

6. Between Hope and Reality

A patient does not need a false promise for us to preserve their hope. We can say: We are with you, we will do what we can, and we ask God to grant you recovery, without claiming to know the outcome. Thus, patience is combined with treatment, hope with sincerity, and worship with alleviating suffering. The next step remains crucial: If we receive a prescription attributed to the Ahl al-Bayt (peace be upon them), how do we verify its authenticity and the meaning of its use?

Chapter Sources and Documentation Notes

The Holy Qur'an: Al-Baqarah 155–157, Al-Anbiya' 83–84, Ash-Shu'ara' 80, At-Tawbah 91; the verses are cited in full, taking into account their varying contexts.

[1] Al-Kulayni, Al-Kafi, Book of Funerals, Chapter on the Limits of Complaint, Hadith 1; Arabic text.

Ruling on Hadith [1]: Al-Majlisi, Mir'at al-'Uqul, Vol. 13, p. 268; "The first hadith: Hasan" (good), with the text of the narration compared in the same place.

[2] Al-Kafi, Vol. 8, p. 194, Hadith 230. The text and Al-Majlisi's ruling ("Hasan" or "Muwaththaq") were compared with Mir'at al-'Uqul, Vol. 26, p. 94. The reference on Thaqalayn lists volume 16, but the corresponding volume is 26. The citation does not include a recommendation for a historical therapeutic procedure.

[3] Al-Kafi, Book of Funerals, Chapter on the Reward of Visiting the Sick, Hadith 2; Arabic text.

Ruling on Hadith [3]: Mir'at al-'Uqul, vol. 13, p. 274; “The second hadith: muwaththaq (reliable),” from the available original text.

[4] Al-Kafi, Book of Funerals, Chapter on the Duration of Visits, Hadith 2. Al-Majlisi's ruling of “good” was compared in Mir'at al-'Uqul, vol. 13, p. 270, and the rest of the text is on p. 271. We did not convert the analogy into a fixed medical duration.

Chapter 89: Treatments Attributed to the Transmitted Medical Tradition

A person may receive a prescription in a short message, preceded by the phrase “from the Imam,” and be asked to try it with complete confidence. They may fear that questioning its source might be considered casting doubt on the Ahl al-Bayt (peace be upon them). But honest questioning safeguards what is attributed to them

just as it protects the patient: Has it been proven that they said this? What did they mean? Is the substance being circulated the same? Is it suitable for this disease and this person? Love does not necessitate ignoring these questions; rather, it prevents us from attributing to them what we do not know.

1. Three questions, none of which answers the others.

The first is a question of history and hadith transmission: How was the report transmitted, and what is the status of its narrators and text? The second is semantic: Is the statement general or a response to a specific incident? Is it a prescription, a piece of advice, or a supplication? The third is applied medical: What is the effect of a specific intervention, with a specific dose and method, on specific patients? We may have a partial answer to one of these questions but not to the others. This is the methodological distinction we adopt in this book.

A plant may have a therapeutic effect proven by study, without the report attributed to the Imam regarding it being proven. Similarly, a directive may be issued to a specific person, without us knowing the circumstances that would allow for its generalization. The authenticity of a report may remain uncertain, and it is incorrect to label it false simply because its veracity is not established. Between absolute belief and absolute rejection lies a space for investigation and reflection.

2. An Ancient Note Within the Imami Tradition

Attention to this issue did not begin in the modern era. Shaykh al-Saduq dedicated a chapter in his book "al-I'tiqadat" to reports related to medicine, mentioning several categories: those connected to the climate of Mecca and Medina, those based on the questioner's temperament, those involving deception, and those where the narrator erred or remembered some parts while forgetting others. This is al-Saduq's assessment of reports, not a hadith attributed to an Imam. [1]

Among his statements: "Among them is what the scholar, peace be upon him, reported based on his knowledge of the questioner's temperament, without exceeding its bounds, as he was more knowledgeable about the questioner's temperament than the questioner himself." The possibility that the answer might be specific to the questioner's condition prevents us from jumping directly from a historical prescription to a label applicable to everyone. Furthermore, mentioning the possibility of error and fabrication does not justify accusing contemporary individuals or groups without evidence, nor does it mean that every medical report is fabricated. [1]

In the same text, al-Saduq interpreted some hadiths using the language of traditional medicine, including restricting the healing effect of honey to what he called a “cold disease.” We record his statement to understand his historical approach, and we do not transform the classification of hot and cold here into a modern biological diagnosis or treatment protocol. The chapter also contains hadiths about supplications; therefore, its introduction should not be read in isolation as a rejection of supplication or a denial of all that has been transmitted. [1]

In “Correcting the Beliefs of the Imamiyyah,” Sheikh al-Mufid pointed out the

varying conditions of those who benefit from medicine and mentioned an interpretation of some incidents based on the Imam’s specific knowledge of the patient’s condition, and that generalizing its use afterward might cause harm. However, he also began his discussion with an opinion on the origin of medical science and its connection to revelation; therefore, we do not quote his practical observation while omitting the context in which he expressed it. These are the opinions of an Imami scholar, to be discussed in their proper place, and are not empirical proof of the history of every medical discovery. [2]

3. The investigation begins with the book, not the card.

First, we need the name of the source, the location of the report, and its full text. A phrase repeated across a hundred pages may all originate from a single source, rather than being a hundred independent chains of transmission. The statement may be the author's commentary, not a narration, or the excerpted sentence may be part of a question, or a later source may be quoting a report from an earlier book that should be consulted. The title "Medicine of the Imams" on a printed cover does not, in itself, validate everything beneath it.

Then, the methods of transmission, the reliability of the narrators, and the continuity of the chain of transmission are examined, paying attention to the differing methodologies of scholars in their judgments. Therefore, whenever possible, we have committed to attributing the authentication or weakening of a report to its source, and not filling the gaps in the investigation with the label "authentic." If verification proves impossible, we state so. A report’s presence in al-Kafi or Bihar al-Anwar is a starting point for investigation and documentation, not a substitute for them.

Following this is a reading of the wording: the names of ancient diseases and herbs may not correspond literally to our terminology. A common name for a plant substance may have different meanings depending on the context. Determining the intended quantity or preparation may require independent linguistic and historical study. If we don't know which substance we're talking about, jumping to its use is not a faithful application of the text, but rather an uninformed addition.

4. Meaning does not grant exemption from testing

A distinction must be made between advocating moderation, describing the effect of food, prescribing a remedy, offering a prayer, and reporting a miracle. A miracle, even if proven, does not automatically translate into a procedure that everyone can replicate with the same result. Similarly, the agreement of a substance's name between a report and a study is insufficient to conclude that the study has confirmed all the report's implications; it may have examined a different extract or method of application.

From the perspective of medical research, we return to the questions of Chapter 87: What is the comparison? What is the measured result? Does a decrease in one symptom equal a cure? And what about those who did not improve or were harmed? Are they included in the calculation? These are questions about the practical application of the claim, not a referendum on the researcher's faith. A person of

religious belief can propose a hypothesis inspired by their heritage and then honestly declare the results of its testing, whether they agree with or contradict their expectations.

5. Honey as an example of the necessity of specifying meaning

God Almighty says: “Then eat from all the fruits and follow the ways of your Lord laid down for you. There emerges from their bellies a drink, varying in colors, in which there is healing for people. Indeed in that is a sign for a people who give thought.” [An-Nahl: 69]

The wording of the verse confirms the mention of healing, but it does not list diseases or dosages, nor does it state that any quantity is suitable for every age and in every method of use. Therefore, we should not make respect for the verse contingent upon a claim not explicitly stated in its text, such as honey being sufficient for all medicine or incapable of harming anyone. Exploring the areas of benefit and their limits does not contradict reflecting on the blessing.

A clear example of safety is that the Centers for Disease Control and Prevention (CDC) recommends against giving honey to infants under one year old due to its association with the risk of botulism in babies. The substance may carry spores that can germinate in their intestines and produce the toxin. We do not need to deny all benefits of honey to prove this danger; the age difference alone is sufficient to invalidate the slogan "suitable for everyone without exception." [3]

6. Natural is not synonymous with safe.

The National Center for Complementary and Integrative Health guidelines state that some supplements may interact with medications or cause harm, and that labeling them as "natural" does not guarantee their safety. Actual contents may differ from what is advertised, and safety during pregnancy, breastfeeding, or childhood is not adequately studied. Therefore, the healthcare team should be informed about what is being used, especially before surgery. [4]

Selling a product under a religious name does not equate to proving its source, purity, or effectiveness. We ask about ingredients, the responsible party, and evidence, just as we would for any other intervention. A patient should not be condemned if they do not benefit from an unproven product, nor should they be told that their lack of healing revealed their ill intent. This accusation renders the claim immune to scrutiny and burdens the sufferer with a failure they did not cause.

7. What does this book adhere to?

We do not present here an encyclopedia of prescriptions or a definitive judgment on every medical book attributed to the imams. We establish what can be documented, separate the transmission from its interpretation, and state the limits of the evidence. We do not replace necessary treatment with an unknown substance, nor do we advocate experimentation that might delay urgent care. As for supplication and remembrance, they have their place of worship, and their practice should not be made into a competition against medicine or a harsh test of the patient's faith.

Thus ends the part on illness and treatment, leading to a question greater than medicine: What makes a person worthy of care even when they are unable to work or speak? The answer leads us to the dignity of the body and the responsibility of caring for it; to the patient's right to knowledge, the elderly's right to compassion, and every human being's right not to be reduced to a mere organ that can be repaired or a burden to be disposed of.

Chapter Sources and Documentation Notes

[1] Shaykh al-Saduq, Al-I'tiqadat, Chapter on Beliefs in Narrations Concerning Medicine, pp. 115–116, edited by Issam Abd al-Sayyid. The phrase “the questioner’s temperament” was compared to this version to avoid an electronic copying error in another presentation. The historical medical opinions mentioned are not treatment recommendations for this book.

[2] Shaykh al-Mufid, Tasheeh I'tiqadat al-Imamiyya, Chapter on Medicine; the beginning of the discussion was compared to p. 144, and the section on differing circumstances and generalizations was completed from its transmission in Bihar al-Anwar, vol. 59, p. 75 in the available digital edition. We do not present his statement as a hadith with a chain of transmission.

[3] CDC, Botulism Prevention, Section on Infant Botulism; prohibiting the giving of honey before one year of age. The reference here is for safety purposes, not to limit the benefits or harms of honey.

[4] NCCIH, Using Dietary Supplements Wisely; Risks of Interactions, Content, and Caution in Special Categories. The reference is limited to safety principles, not to outdated statistics or generalizations of US regulations to other countries.

The Holy Quran: Surah An-Nahl, Verse 69. The methodological meaning extracted from the text is presented as a reading of the text, not as a list of prescriptions attributed to it.

Part 10: The Body: A Trust and a Dignity

We have learned something about the structure of the body, its strengths and weaknesses, but knowledge is incomplete if it does not change the way we treat its owner. A person may know the details of an organ but remain oblivious to the fear of the one who carries it. One may possess advanced medical tools but lack the words to preserve dignity. Therefore, the book shifts from the question: How does a person function? to the question: How should we protect their life, their body, and their right to be heard?

The chapters in this section address the ethics of care, prevention, marital relations, procreation, donation, and medical research. They do not replace medical consultation or seeking a ruling from a qualified authority in a specific case. We will distinguish the ethical principle from the specific legal ruling, personal choice from the authority of others over it, and keep the human element present when interests and decisions conflict.

Chapter 90: Human Dignity and the Inviolability of the Body

Two people may enter a treatment room: one famous and the other unknown; but their bleeding is not measured by the number of people who know their names. One may regain their ability to work while the other does not, but the latter is not less deserving of compassion. These are not sentimental details; they are a test of what we mean when we say that human beings are dignified.

1. Dignity Does Not Wait for Power

God Almighty says: “And We have certainly honored the children of Adam and carried them on land and sea and provided for them of the good things and preferred them over much of what We have created, with [clear] preference.” [Al-Isra: 70]

This address is to all of humanity, not just to those with strong bodies. We draw upon its generality here to reject the reduction of human value to one's productive capacity or physical appearance. This does not mean erasing the moral distinction between justice and injustice, or between actions. Speaking of human dignity is not about justifying every behavior, but rather about rejecting the notion that a person should be treated as something permissible to insult simply because we disagree with them or their abilities are diminished.

In the covenant of the Commander of the Faithful, peace be upon him, to Malik al-Ashtar: “Fill your heart with mercy for your subjects, love for them, and kindness towards them,” and then he said: “For they are of two kinds: either a brother to you in faith, or a fellow human being.” We present the text as it appears in Nahj al-Balaghah, without claiming to have independently verified the authenticity of the covenant. [1]

The covenant addresses a governor, not a doctor in a modern hospital. However, we

derive from it a clear ethical principle: authority over the needs of others necessitates mercy, not the exploitation of their weakness. From this principle, we draw a clear moral lesson: care should not become a reward for the patient's agreement with us in their sect, opinion, or social class. We call this an inspiration, and we do not attribute the details of modern healthcare systems to the wording of the covenant.

2. The body is not booty for others.

God Almighty says: “O you who have believed, do not consume one another’s wealth unjustly, but only in trade by mutual consent. And do not kill yourselves. Indeed, God is ever Merciful to you.” [An-Nisa: 29]

The juxtaposition of the sanctity of life and mercy in the verse reminds us that a human being is not a commodity to be easily manipulated. We cannot derive from this alone the details of every surgery, donation, or end-of-life decision; these matters require their own evidence and a thorough examination of the subject matter. Rather, we establish a preliminary ethical boundary: the desire of someone in a position of power or the interests of an institution is insufficient to justify tampering with a human body.

Describing the body as a trust does not mean that its owner's relatives possess it, nor that its best interests are determined by the loudest voice. It also does not mean neglecting it in the name of asceticism. Caring for it may be a responsibility, and taking precautions for it may be an act of mercy, but making such a decision in a medical context is inseparable from knowledge, listening, and appropriate guidelines.

3. Knowledge Before Consent

Informed consent is based on understanding the intervention, its benefits, risks, and alternatives, and on voluntary choice and the capacity to decide. Signing a document is insufficient if understanding is lacking or if family pressure replaces the individual's will. Detailed rules are understood according to the specific system in question, not from a general summary transmitted between countries. [2]

To illustrate: A patient asks about the possibility of pain after a procedure and is told to “sign.” The problem here is not just the lack of information, but the treatment of the question as an obstacle. A more appropriate response would be to provide an explanation the patient can understand and to ask about anything that remains unclear. If communication through ordinary language is impossible, finding a suitable way to understand is preferable to assuming silence is consent.

The Lisbon Declaration of the World Medical Association recognizes the patient’s right to information, decision-making, and a second medical opinion, to participate in decision-making to the extent possible when incapacitated, and to protection for those unable to express their will. Emergency treatment and legal representation remain subject to their respective conditions, and the Declaration does not grant any particular relative absolute authority simply because of kinship. [3]

This does not mean that every disagreement with a doctor should be considered

proof of their error, or that a cursory search should be equated with years of experience. The intention is a consultative relationship, not a power struggle: the specialist presents their knowledge and limitations, the patient presents their goals and concerns, and any disagreements are addressed. This ethical discussion does not replace a religious ruling on accepting or refusing treatment when a particular risk is involved.

4. A person has a private space that must not be violated.

God Almighty says: “O you who have believed, do not enter houses other than your own houses until you have asked permission and greeted their inhabitants. That is better for you; perhaps you will be reminded.” [An-Nur: 27]

This verse pertains to the etiquette of entering homes and is not a detailed text on medical records. We invoke this here to reflect on the meaning of seeking permission: having the ability to enter does not mean having the right to enter. One of the practices we adopt in care is that private parts should only be exposed to the extent necessary and within the bounds of what is permitted, and that moments of vulnerability should not be turned into a spectacle for the public or a source of entertainment.

The Lisbon Declaration affirms the patient's privacy and the confidentiality of their information, even after death, and that data sharing is not unrestricted. There are instances of disclosure governed by law and ethics; therefore, it is not permissible to promise a patient absolute confidentiality in every circumstance, nor is it permissible to use the existence of exceptions as a pretext for publishing their file unnecessarily. [3]

In our daily lives, the test arises even before reaching the legal point: Do we publish a picture of an unconscious relative to gather prayers without regard for their privacy? Do we recount the details of a colleague's illness simply because we learned them by chance? Helping a patient may necessitate sharing essential information with their caregiver, but curiosity is not a therapeutic need, and good intentions do not make every disclosure legitimate.

5. Justice in Times of Limited Resources

Resources may not be sufficient for all requests at the same time. The Lisbon Declaration emphasizes the need for equitable selection based on medical criteria when treatment is scarce, with no discrimination, continuity of care, and no abandonment of the patient. This is not a promise that every required treatment is available or appropriate; rather, it is a commitment that the reason for priority must be declared, understandable, and accountable. [3]

Justice does not mean treating different needs as one. Someone who is deaf may need a means of communication, someone who is immobile may need an accessible entrance, and someone who does not understand the language may need appropriate explanations. These are practical approaches we propose to achieve respect, not privileges that diminish others. Ignoring the barrier and then saying, “We treated everyone the same,” may actually keep some people out of care.

6. What Remains When Everything Else Falters

Treatment options may dwindle, but the question of dignity does not end. Name, privacy, hygiene, and reassurance still have their place, and asking about a person’s wishes remains more important than speaking of them as if they do not exist. In the chapters on the end of life, we will see that the limitations of treatment are not a license to abandon the patient, and that alleviating suffering is no less humane than combating the cause of illness.

In this sense, regarding the body as a trust is not merely a slogan; it is a way of addressing, preserving, and balancing what is done to it. Prevention also begins here: not a race to produce a perfect body, but a reasonable effort to preserve the capacity for life, within the available means and circumstances, and without disdain for those who are ill.

Chapter Sources and Documentation Notes

The Holy Quran: Al-Isra 70; An-Nisa 29; An-Nur 27. The context of each verse is explained, and the moral inspiration is distinguished from the derivation of detailed rulings.

[1] Nahj al-Balaghah, Letter 53, Covenant of Malik al-Ashtar; the passage beginning “And fill your heart with mercy for the people,” in the numerical division of Thaqalayn No. 284. The text is quoted without an independent assessment of the covenant's authenticity.

[2] NHS, Consent to Treatment; principles of understanding, voluntariness, and capacity only, with reference to Chapter 87. Details of English law or provisions for discontinuing treatment are not generalized.

[3] World Medical Association, Lisbon Declaration on Patient Rights; principles of information, decision, confidentiality, and fairness. This is a professional ethical document, not a single law applicable in all countries or a religious legal ruling.

Chapter 91: Nutrition, Hygiene, Movement and Prevention

Caring for the body is not something we postpone until we become ill. It consists of small things: food we choose, hands we wash, movement we are able to do, and rest we are not ashamed of. These actions may seem ordinary, but they give a person's knowledge of their body an impact on their daily life. We do not want to turn this into constant anxiety or a judgment of people's bodies; prevention is an effort to reduce risk, not a guarantee against disease.

1. Moderation is broader than counting bites.

God Almighty says: “O Children of Adam, take your adornment at every mosque, and eat and drink, but do not be excessive. Indeed, He does not like the excessive.” [Al-A'raf: 31]

This verse does not negate the human need for food, nor does it make deprivation of it an end in itself. The prohibition against extravagance does not automatically translate into a single calorie count suitable for children, pregnant women, workers,

and the sick. When we read it in this context, we are reminded of the responsibility to treat food with care and respect for our bodies, and we leave the assessment of detailed nutritional needs to specialists.

Among the principles of healthy eating are a variety of food sources and sufficient quantities, while limiting excessive salt, free sugars, and unhealthy fats. The specifics vary according to age, health, activity level, and available food. The point is not to buy an expensive product labeled "healthy," but rather to adopt a sustainable lifestyle that meets one's needs. [1]

We have no right to interpret physical appearance as a measure of someone’s moral worth or shortcomings. We have studied the multitude of causes of illness and the varying circumstances that influence it. Furthermore, advice that disregards a family's income or access to food may be easy for the giver but burdensome for the listener. A complete discussion about food requires remembering the hungry, not just focusing on those who have the power to choose their meals.

2. Hygiene is a preventative measure, not an accusation against the patient.

Washing hands with running water and soap helps reduce the transmission of respiratory and intestinal infections. Important times for handwashing include preparing and eating food, after using the toilet, and before and after wound care. Guidelines recommend rubbing hands with soap for at least twenty seconds, then rinsing and drying them. If soap and water are unavailable, a suitable hand sanitizer containing at least 60% alcohol should be used. [2]

These are specific health guidelines, and we do not claim that all their details are found verbatim in an ancient religious text. A distinction should also be made between purity as a legal ruling, physical cleanliness, and medical disinfection; the difference in meaning precludes using these terms as complete synonyms. The details of using substances in purification and worship are discussed in their respective legal sections and are not derived solely from chemical ratios.

Contracting an infection does not mean that the patient is unclean or deserving of blame. Rather, we seek ways to reduce the transmission of the pathogen and protect both the patient and those they come into contact with. Excessiveness can become burdensome if every contact necessitates frequent, compulsive washing. A distinction has been made in the section on mental health between preventative habits and obsessive-compulsive behaviors that require intervention.

3. Movement Suitable for Daily Life

Regular physical activity contributes to heart health, metabolism, muscle strength, and the ability to perform daily tasks. It may also improve sleep and mood. Whatever movement a person can manage is beneficial even before reaching major goals, as is a gradual increase rather than a sudden leap into unfamiliar exertion. Its benefit is not measured by the person's exhaustion or the amount of pain they experience. [3]

In practice, the scenario varies: one person walks, another exercises seated, and a third begins a rehabilitation program under appropriate supervision. We do not

prescribe a single exercise from a general book, but rather require that the plan be tailored to the individual's ability and condition. In cases requiring therapeutic evaluation, determination must not take the place of diagnosis. The integration of effort and recovery was detailed in Chapter 57.

It is important not to make activity a means of humiliating those who cannot perform it; a person's worth is not measured by the number of steps they take. An accessible environment is part of the possibility of movement: a seat for rest or a safe path may be more beneficial to a person than a lengthy lecture on willpower. This is a social application of the meaning of care, not a sports prescription or the result of a specific experiment.

4. The Right of the Self in the Transmitted Text

In the Treatise on Rights attributed to Imam al-Sajjad (peace be upon him), as narrated by Ibn Shu'bah al-Harrani in Tuhaf al-'Uqul: “As for your own right over yourself, it is that you fulfill it in obedience to God, so you give your tongue its due, your hearing its due, your sight its due, your hand its due, your foot its due, your stomach its due, and your private parts their due, and you seek God's help in this.” We reproduce the text while retaining the previously stated limits of our investigation of its chains of transmission. [4]

The scope of this statement is ethical and devotional: How do you use your faculties? We do not read it as a list of medical tests or a modern training program. However, invoking the rights of the limbs broadens the view of the body from a mere instrument for fulfilling desires to a sphere of responsibility. Healthcare is an application we consider within this responsibility, without attributing the details of contemporary application to the wording of the treatise.

5. Fasting is an act of worship, not a single protocol for all bodies.

God Almighty says: “O you who have believed, decreed upon you is fasting as it was decreed upon those before you that you may become righteous.” [Al-Baqarah: 183]

He said: “For a limited number of days. So whoever among you is ill or on a journey, then an equal number of days [must be made up]. And upon those who are able [to fast, but with hardship] is a ransom: feeding a poor person. And whoever volunteers extra - it is better for him. But to fast is best for you, if you only knew.” [Al-Baqarah: 184]

Mentioning piety specifies an intended aspect of worship, and mentioning illness and travel prevents interpreting the obligation in isolation from the individual's circumstances. The verse alone is insufficient to establish the details of making up the missed fasts and the ransom for every scenario; these are understood in conjunction with other evidence and legal explanations. Likewise, we do not automatically equate the prescribed fast with any dietary system called "intermittent fasting," nor do we consider the study of one system as proof of every claim made about the other.

An example of a specific legal statement is found in Sayyid Ali al-Sistani's Minhaj al-Salihin, question 1029: A sick person's fast is not valid if it causes them significant

harm, such as worsening their illness, prolonging their recovery, or intensifying their pain. This includes fear based on reasonable grounds. However, an illness that does not harm the person by fasting does not exempt them from the obligation of fasting on this basis. This is a transmission of the meaning of his fatwa, not an independent fatwa from the book's author. [5]

Question 1032 mentions the impact of a doctor's statement in creating a reasonable presumption of harm or fear of it. This does not mean that the patient should engage in debate with their doctor or experience harm to be certain of it. Rather, they need to accurately state their medical condition and then seek the ruling from the appropriate authority. The circumstances of weakness, hardship, pregnancy, breastfeeding, and others vary, so we do not lump them all together under an absolute exemption or an absolute obligation. [5]

In diabetes, for example, the risks of fasting vary depending on the type of diabetes, blood sugar control, medications, and complications. Advance planning may be necessary for monitoring, timing of treatment, and managing blood sugar fluctuations. Patients should not stop or change their medication dosage on their own to accommodate a fasting schedule; rather, they should discuss a safe plan with their healthcare team and follow immediate guidance if their condition worsens. [6]

6. Prevention Without a Promise of Infallibility

A balanced approach combines religious meaning with health tools without conflating them: it encourages moderation but doesn't impose specific figures on religious texts; it emphasizes hygiene but doesn't stigmatize illness; it preserves religious practice but doesn't make harm a measure of piety. This is complemented by the preventive and care measures already discussed, from vaccination and appropriate testing to seeking help when needed.

The simplest practical question is not: How can I guarantee I'll never get sick? Rather, it's: What feasible step can I take to make myself and those around me safer? When this question extends to the home and marital relationship, care becomes reciprocal; one not only cares for their own body but also learns how to avoid neglecting or coercing their partner's body and feelings.

Chapter Sources and Documentation Notes

The Holy Quran: Al-A'raf 31; Al-Baqarah 183–184. These verses are not intended as a dietary plan or a substitute for detailed legal and medical rulings.

[1] WHO, Healthy Diet, updated January 26, 2026; a concise summary supplementing Chapter 54, without prescribing individual dietary amounts.

[2] CDC, About Handwashing; general times and methods for handwashing and using sanitizer when needed.

[3] CDC, Benefits of Physical Activity; the benefits of movement and gradual progression. Population statistics and unresolved claims of causation from infection studies were not adopted.

[4] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, p. 256, Treatise on Rights, The Right of the Self. Textual reference, not an independent authentication of all chains through which the treatise was transmitted.

[5] Official website of the office of Sayyid al-Sistani, Minhaj al-Salihin, vol. 1, chapter on the conditions for the validity and obligation of fasting, questions 1029 and 1032; accessed October 16, 2026. The meaning was conveyed while leaving the details and individual cases to consultation with the religious authority.

[6] Diabetes UK, Diabetes and Ramadan; Fasting Risk Assessment and Medical Planning. The page’s generalizations on religious rulings were not adopted, nor were uniform instructions for reducing insulin or changing its type.

Chapter 92: Marital Life and Reproductive Health

A person doesn't enter marriage with just their physical attributes; they enter with their history, fears, expectations, and way of understanding intimacy. Therefore, a couple may need simple knowledge they haven't had access to, a postponed conversation, or treatment for a problem they thought too shameful to mention. The modesty that protects the relationship shouldn't become a barrier preventing questions about health or leaving one of them alone with their pain.

1. Tranquillity Means More than Sharing a Roof

God Almighty says: {And of His signs is that He created for you from yourselves mates that you may find tranquility in them; and He placed between you affection and mercy. Indeed in that are signs for a people who give thought.} [Ar-Rum: 21]

In this context, finding tranquillity does not mean silencing the other, and affection is not a constant demand for proof of love. We can consider the presence of mercy when desire, ability, or health changes: does care remain, or was the connection conditional on a physical state from which the body cannot deviate? The verse does not negate life's difficulties, but it provides us with a standard by which to inquire about the direction of the relationship.

In al-Kafi, it is narrated from Imam al-Sadiq (peace be upon him): “Among the characteristics of the prophets (peace be upon them) is love for women.” Al-Majlisi judged the narration to be “hasan (good) or muwaththaq (reliable).” We do not understand this in our context as an invitation to objectification or exploitation, but rather we invoke it to reject the notion that religiosity is hostility towards women or contempt for the principle of marital intimacy. [1]

2. Intimacy, Privacy and Responsibility

God Almighty said: “It has been made permissible for you the night preceding fasting to have sexual relations with your wives. They are clothing for you, and you are clothing for them. God knows that you used to deceive yourselves, so He has accepted your repentance and pardoned you. So now have relations with them and seek that which God has ordained for you. And eat and drink until the white thread of dawn becomes distinct to you from the black thread of night. Then complete the fast until nightfall. And do not have sexual relations with them while you are in seclusion in the mosques. These are the limits set by God, so do not approach them. Thus does God make clear His verses to the people that they may become righteous.” [Al-Baqarah: 187]

This verse pertains to the rulings concerning the night of fasting and seclusion in the mosque. Within it is a reciprocal image: each is a garment for the other. We find comfort in this image in the meaning of closeness and concealment, without deriving from it alone all the rights of marriage. Part of upholding this meaning is ensuring that the details of the relationship do not become a source of ridicule among friends, and that revealing secrets is not used as a weapon in disputes.

And Allah Almighty said: “O you who have believed, it is not lawful for you to inherit women against their will, nor should you make difficulties for them in order to take [back] part of what you gave them unless they commit a clear immorality. And live with them in kindness. For if you dislike them - perhaps you dislike a thing in which Allah has placed much good.” [An-Nisa: 19]

We do not extract from this verse anything that would turn it into a justification for forcing a victim to remain in danger. Living together in kindness is not achieved by silencing one spouse. Addressing conflict, harm, and separation remains within the appropriate legal and religious frameworks. This chapter deals with what is necessary for health and ethical care, not all family law.

3. Health is Broader than the Absence of Illness

The World Health Organization describes sexual health as encompassing physical, psychological, emotional, and social aspects, and does not reduce it to the absence of dysfunction. It emphasizes respect, safety, and freedom from coercion and violence. We use this framework to understand aspects of care, not as a source for detailed religious rulings. [2]

In a secure marital relationship, one partner can say: I am afraid, or I am in pain, or I need time, without this turning into an accusation or punishment. Expressing a need does not equate to rejecting the partner entirely. Furthermore, discussions about mutual rights should not be used to justify physical harm, humiliation, or threats. If violence or danger is present, the priority should be safety and seeking reliable, professional help, not forcing a confrontation that could increase the risk. [2]

Meaningful dialogue does not involve comparing the body to idealized images or the experiences of others. Expectations may differ, and even words may need clarification. Practical suggestions include discussing disagreements calmly and describing feelings rather than judging the person's worth. These are communication suggestions, not a cure for every disorder or every abusive relationship.

4. Pain and Dysfunction Deserve Evaluation

Pain during intimacy is not something to be endured to prove love. Possible causes include inflammation, dryness, or other problems. One example is vaginismus, where the muscles contract involuntarily when penetration is attempted, even after previous painless experiences. This does not prove that the woman is deliberately refusing, nor is it treated by forcing her to endure the pain; rather, it requires evaluation and appropriate treatment. [3]

A man may experience difficulty achieving or maintaining an erection. This can be related to vascular, neurological, or hormonal causes, or to certain medications and

psychological factors; it may also be a sign of another health problem. Therefore, we should not reduce it to weakness of character or a lack of affection, nor conclude infertility from it alone. A medical evaluation will determine what needs to be investigated and treated. [4]

Seeking help here is about preserving the relationship, not admitting its failure. One partner may consult a specialist alone or with the other, depending on their need and desire, while maintaining privacy. Unknown medications or products should not be used simply because of advertising promising immediate results; as explained in the chapter on traditional medicine, an attractive or natural name does not guarantee safety.

5. Procreation is not the only measure of a relationship

We discussed fertilization, pregnancy, and delayed conception in previous chapters. What we add here is the aspect of shared responsibility: delayed pregnancy should not become an accusatory interrogation of the wife, nor should the husband be treated as if the possibility of infertility is a disgrace. The couple can discuss together the appropriate tests and their limitations, without anyone promising them a guaranteed result.

The desire for a child is respectable, but a person who longs for parenthood should not be reduced to the function of procreation. Furthermore, having children does not justify neglecting the relationship or relegating every other need to a luxury. We have discussed postpartum changes and reproductive aging in their respective sections; the goal should be for awareness of these changes to translate into compassion and support, not excuses for neglect.

6. Prevention Does Not Mean Accusation

Sexually transmitted infections can be asymptomatic, and some of their causes can also be transmitted through other routes, including from mother to child or through unsafe blood. Therefore, a test result alone is insufficient to determine when the infection occurred or to pass moral judgment on the relationship. The important thing is to understand the result medically, provide care, and prevent reinfection. [5]

Tests are chosen according to the case and risk factors, and evaluation or treatment of the partner may be necessary. Vaccines exist for some pathogens, and methods exist to reduce transmission but do not eliminate all risks. This book does not offer a standardized testing program or medication for every reader; rather, it rejects the idea that shame or premature accusations should prevent diagnosis and treatment. [5]

7. From Relationship to Reproductive Decision

When a couple considers pregnancy, postponing it, or using assisted reproductive technology, questions of health, ability, responsibility, and religious rulings intertwine. None of these questions can replace the others. Therefore, in the next chapter, we move to the decision-making process, clarifying what medical information can answer and what requires a specific consultation, without reducing

the prospective child or their parents to mere numbers on a list of possibilities.

Chapter Sources and Documentation Notes

The Holy Quran: Ar-Rum 21; Al-Baqarah 187; An-Nisa 19. The verses were reproduced in full, and the context of the rulings on fasting and seclusion was clarified in the verse on clothing.

[1] Al-Kulayni, Al-Kafi, vol. 5, p. 320, chapter on the love of women, hadith 1; text of the narration.

Grading of hadith [1]: Al-Majlisi, Mir’at al-‘Uqul, vol. 20, p. 5: “Hasan (good) or muwaththaq (reliable).” Checked against the original; the incomplete volume reference displayed on Thaqalayn was not used.

[2] WHO, Sexual health; a health framework based on safety, respect, and multiple aspects of health. Not a jurisprudential reference.

[3] NHS, Vaginismus; the nature of involuntary contractions, assessment, and the presence of other causes of pain. No personalized exercise program is provided in this chapter.

[4] NIDDK, Symptoms & Causes of Erectile Dysfunction; Multiple causes and the possibility of the symptom being linked to another health condition.

[5] WHO, Sexually transmitted infections, updated 10 September 2025; Asymptomatic infections, modes of transmission, care, and prevention. The single-dose regimens mentioned on the page were not generalized, nor was any claim adopted that protective measures prevent all forms of transmission.

Chapter 93: Pregnancy, the Fetus and Reproductive Decisions

Some reproductive decisions begin with quiet hope, others with intense anxiety: Is the timing right? What if a hereditary disease is passed on? What does the test result mean? Where does the medical question end and the religious legal question begin? Care is not provided when these questions are reduced to a quick answer or when the family is left caught between a commercial advertisement and a judgment taken out of context. We need accurate knowledge, space for reflection, and honesty about what we know and what we don't know.

1. The gift does not discriminate between daughter and son.

God Almighty says: “To God belongs the dominion of the heavens and the earth; He creates what He wills. He bestows daughters upon whom He wills, and He bestows sons upon whom He wills.” [Ash-Shura: 49]

“Or He bestows both males and females, and He renders barren whom He wills. Indeed, He is All-Knowing, All-Powerful.” [Ash-Shura: 50]

This discourse places daughters and sons within the context of a gift, mentioning the difference in circumstances without making the inability to conceive a judgment on a person's worth. The desire for a particular gender should not lead to disdain for an existing child or blame for the mother. Furthermore, invoking the gift of children does not contradict seeking the causes of delayed pregnancy and its treatment; we

have already addressed the difference between reliance on God and neglecting the means to achieve it.

God Almighty says: {And do not kill your children for fear of poverty. We provide for them and for you. Indeed, their killing is ever a great sin.} [Al-Isra: 31]. The prohibition against killing children is a clear principle regarding the sanctity of their lives, but it does not equate preventing pregnancy before conception with killing a newborn, nor does it alone suffice for the detailed rulings on pregnancy and abortion. We shouldn't lump different topics together under one word.

2. Preparing for Pregnancy Is Part of Care

Preconception care may include reviewing illnesses, medications, vaccinations, and nutrition; discussing folic acid and other supplements as needed; and seeking help to quit smoking and other harmful substances. Prescribed medications should not be stopped simply because pregnancy is being considered; discontinuing necessary treatment can be more dangerous, and a doctor will weigh up appropriate alternatives. This review is especially important if you have a chronic illness or are taking medication that could affect the pregnancy. [1]

Preparing for pregnancy is not an exam that guarantees a child free from all diseases upon passing. Pregnancy may occur before planning, so the door to care remains open. A woman should not be subjected to a list of accusations about what she ate or felt before she knew she was pregnant; establishing causation requires knowledge, not fear or blame from the family.

3. Birth Control: The Question of the Method and the Question of the Ruling

Contraceptive methods vary in their method of use, duration of effect, effectiveness, and suitability to the individual's health condition; some are temporary, and others are permanent. Choosing a method requires a medical explanation that considers illnesses, medications, and the desire for future pregnancy, not the assumption that what suits one woman will suit all women. Furthermore, preventing pregnancy and preventing infection are different functions, and not every method provides both. [2]

In a jurisprudential example attributed to its author, Sayyid al-Sistani permits a woman to use contraceptive drugs if they do not cause her significant harm, while respecting religious rights. He elaborates on methods whose application requires prohibited looking or touching, and on permanent procedures. These are differences in the method and its prerequisites; there is neither an absolute prohibition of birth control nor an absolute permissibility of every procedure. [3]

The same source mentions a precautionary ruling when it is proven that a particular method destroys the egg after fertilization. The presence of this condition in the fatwa does not, in itself, prove the mechanism of action of every type of IUD. The medical diagnosis of a method is one thing, and judging the matter after its confirmation is another. The product name and its documented mechanism should be presented to the medical specialist and religious authority when necessary, instead of relying solely on a general name. [3]

4. What do genetic tests tell us?

For example, a cell-free DNA screening test during pregnancy analyzes a blood sample from the mother to estimate the probability of certain chromosomal abnormalities. However, it is a screening test, not a definitive diagnostic judgment. A high-probability result requires discussion of appropriate confirmatory tests, and a low-probability result does not rule out all diseases. Diagnostic tests may include taking a sample of amniotic fluid or chorionic villus sampling, and each procedure has considerations and risks that the specialist will explain. [4]

Before the test, it is helpful for the family to ask: What exactly does it test for? What does it not test for? How do we understand an inconclusive result? What options will change because of it? The test is not just a piece of paper to add to a file; It may open the door to follow-up, preparation, and care, and it may present the family with a sensitive decision. Informed knowledge does not assume that every outcome necessitates the same choice.

The discovery of a genetic difference should not be interpreted as a judgment that life is not worth living. Expectations must be explained fairly, acknowledging the varying degrees of severity, the limits of prediction, and the possibilities for care, without making unrealistic promises or portraying the person with a disability as a mere burden. Religious legal rulings and personal decisions cannot be reduced to a percentage displayed on a screen.

5. Assisted Reproductive Technologies Involve Distinct Questions

Assisted fertilization was explained in Chapter 22. What is needed here is a precise description of the procedure before seeking a judgment on it: the source of the egg and sperm, the location of the pregnancy, whether the husband is alive at the time of insemination, any exposure of the body or touching required by the procedure, and the fate of the preserved material. Simply saying "test-tube baby" is insufficient, as if the name encompasses all these facts.

In Sayyid al-Sistani’s Minhaj al-Salihin, it is permissible to inseminate a woman with her husband’s sperm as long as he is alive, with separate details regarding the procedure’s preliminaries. It is not permissible to inseminate her with sperm from someone other than her husband. Regarding the transfer of a fertilized egg to another uterus, the issue of attributing the child to the woman whose egg is used or the woman carrying the pregnancy is raised, and the need to observe caution in matters of motherhood and filiation is emphasized. The discussion of these issues does not constitute a comprehensive ruling applicable to all forms of donation or surrogacy. [5]

The legal consideration of the procedure does not permit insulting the child born through it. Rather, the source distinguishes between the ruling on the act and the rulings concerning the child's lineage, and does not equate every prohibited procedure with adultery in terms of the effects on lineage. The details of motherhood, inheritance, and prohibited degrees of kinship require a specific fatwa, not the use of hurtful nicknames for the child. [5]

6. Abortion: A general title is insufficient

In the fatwas of Sayyid al-Sistani, the mere existence of a congenital defect or the expectation of a short lifespan for the fetus is insufficient to justify abortion, with exceptions mentioned concerning significant harm to the mother or severe hardship before ensoulment, and prohibition after ensoulment even in cases of harm and hardship, as a matter of obligatory precaution. This is a summary of a fatwa from a specific religious authority with its conditions, and is not a ruling that we claim is agreed upon by all jurists or an answer for every emergency situation. [6]

It is also not permissible to equate the treatment of a fetus whose death has been confirmed with the termination of the life of a living fetus; The source distinguishes between the facts, and the details of the procedure and its effects still require clarification. We do not calculate expiation, blood money, or liability for any person based on this summary. [6]

In urgent cases, this chapter should not delay the assessment of the emergency or the necessary care. The actual danger, the available time, and the alternatives must be presented to the medical team, and urgent coordination with the relevant religious authority is necessary when required. The decision should not be based on an old letter discussing another case, nor on a diagnosis conveyed by someone unqualified in the matter.

The entry of the soul is not simply another name for the appearance of the heartbeat or implantation of the pregnancy. Its texts and the differences in their meanings were discussed in Chapter Thirty-Four. Likewise, calculating gestational age differs from the time since fertilization. We do not convert a commonly used number in days into a medically and legally identical limit without clarifying the principle of calculation and the intent of the fatwa.

7. When the decision is beyond the family's capacity alone

The family may need a specialist, genetic counseling, psychological support, and a religious ruling, not because their responsibility is weak, but because the questions are numerous. They have the right to request clarification or another medical opinion when time allows. It is best to document the facts, possibilities, and questions so that each specialist knows what is required of them, rather than one answering outside their area of expertise.

This approach does not yield a single result for everyone, but it preserves the integrity of the path: we do not sell hope with a technical promise, nor do we sow guilt with a hasty diagnosis, nor do we speak in the name of the Ahl al-Bayt (peace be upon them) without proof. The care of the mother, child, and family remains an ongoing responsibility after the decision is made, not a reward conditional on them choosing what onlookers want.

Sources of the chapter and documentation notes

The Holy Quran: Ash-Shura 49–50; Al-Isra 31. The prohibition against killing children is separated from the detailed discussion on contraception and abortion.

[1] NHS, Trying to get pregnant; planning and medical review, and not self-discontinuing prescribed medication. Standardized referral times for delayed pregnancy or personalized dosages were not adopted.

[2] WHO, Family planning/contraception methods, 3 July 2025; variety and suitability of methods. The statement that methods do not affect fertility was not generalized to permanent sterilization procedures.

[3] Office of Sayyid al-Sistani, Selected Issues, Rulings on Birth Control, Issues 70–72; the meaning was conveyed with its conditions; this is not an independent medical account of how an IUD works.

[4] MedlinePlus, Prenatal Cell-Free DNA Screening; the difference between screening, diagnosis, consultation, and confirmatory tests. The result was not assumed to rule out all disorders.

[5] Office of Sayyid al-Sistani, Minhaj al-Salihin, Vol. 1, Rulings on Artificial Insemination, Issues 65–69; The rulings on the procedure, the lineage, and the preliminaries are distinct topics.

[6] Office of Sayyid al-Sistani, Rulings on Abortion, particularly Questions 2 and 15; the summary does not replace the specific ruling. The jurisprudential sources were reviewed on October 16, 2026.

Chapter 94: Organ Donation and Transplantation, Dissection and Medical Research

Hope may come to a patient from another person's body: a kidney donated by a living donor, or tissue taken after death according to regulations. It may also come from knowledge gained by physicians through studying bodies or testing a new treatment. However, the path to saving a life here involves the rights of another human being; therefore, the nobility of the goal alone is not sufficient to judge every means as noble.

The question is not: Do we love saving lives? Rather: How do we try to save lives without making the donor a mere commodity, the deceased’s body available for unrestricted use, or the patient in need an opportunity for an experiment they do not understand?

The Value of Saving Life and the Limits of Inference

God Almighty says: “Because of that, We decreed upon the Children of Israel that whoever kills a soul unless for a soul or for corruption [done] in the land – it is as if he had killed all of mankind. And whoever saves one – it is as if he had saved all of mankind. And Our messengers had certainly come to them with clear proofs. Then indeed many of them, after that, throughout the land, are transgressors.” [Al-Ma'idah: 32]

This verse follows the story of Adam's two sons and states what was decreed for the Children of Israel. It opens a vast horizon for understanding the sanctity of life and the value of preserving it, but it is not, on its own, a detailed ruling on every form of organ donation. Between the principle and its application lie questions of harm, consent, proof of death, and the rights of all parties, which cannot be dismissed with an emotional statement.

A living donor is not a patient to be ignored.

The UK's National Health Service (NHS) organ donation agency explains that many people can live healthy lives with one kidney, although risks remain that require individual discussion. Some donors may experience problems such as persistent fatigue or pain, and the likelihood of high blood pressure may increase. The risks of pregnancy after donation also warrant separate discussion. This information is for making an informed decision, not a personal guarantee that the procedure is safe for everyone who wishes to donate. [1]

From an ethical standpoint, imagine a brother who hears at every visit that he is the only one who can save his brother, and then is asked in front of the family if he agrees. The word “yes” here needs a space where his fear is also heard. Love should not become a public test of courage, nor should the donor’s hesitation be interpreted as an accusation of selfishness. This is an example of the difference between asking for a donation and infringing upon the donor’s freedom.

The World Health Organization’s principles for organ transplantation emphasize the free and informed consent of the donor, their follow-up and care, and the independence of the determination of death from the immediate interests of the transplant procedure. It also calls for the allocation of organs according to fair clinical and ethical criteria, not based on the patient’s financial ability. The recipient and the donor are partners in responsibility, not a life of value and a body to be disregarded. [2]

Donation after death: Two questions, not one

The medical determination of a person’s condition should be separated from the religious legal ruling on organ removal. We will discuss the difference between coma and death according to neurological criteria and circulatory cessation in a separate chapter. However, it is not permissible to use the word "deceased" on donation forms without knowing its criteria and then assume that all religious and legal positions conform to it.

According to the rulings of Sayyid Ali al-Sistani mentioned in the source, it is permissible to take an organ from a living person if it does not cause significant harm, with the consent of the donor if they are legally competent to give permission. He does not permit this removal from a person lacking the capacity to consent because of young age or mental incapacity in the aforementioned scenario. It is permissible to take an organ from a deceased Muslim if saving the life of a Muslim depends on it, with liability for blood money (diya) resting on the person who removes it, as a matter of obligatory precaution. However, a mere need that is not life-saving does not, according to him, constitute a similar justification. He clarifies that brain death with continued heart and lung function, even with the aid of machines, does not constitute the death intended in these rulings. This is a presentation of the fatwa of a specific religious authority, not a claim of consensus among all jurists. [3]

Therefore, the actual decision requires presenting the facts accurately to the medical team and to the religious authority to which the individual refers, while taking into

account the country's regulations. The phrase “the family has consented” alone does not answer all these questions, nor does signing a will to donate an organ automatically nullify every religious legal restriction.

Is the body a commodity?

The World Health Organization’s principles prohibit paying for organs, distinguishing between purchase and reimbursement of reasonable, proven expenses and income loss associated with donation. The intention is to protect those in need from exploitation and the trafficking of bodies. [2] In contrast, Sayyid al-Sistani permits receiving money in the form of permissible living donation, which he mentions. [3] It is incorrect to present these two positions as a single statement; the international ethical document and the legal ruling are two different references, and the application of local law remains another matter.

Protecting the poor is not reduced to the question: Did he sign? The ethical vision that this book defends rejects the notion that subsistence needs should be used to silence fear, or that the donor should be left without anyone to inquire about him after surgery. A person’s worth should be evident both before and after signing.

Dissection: Knowledge That Respects the Body’s Inviolability

Sayyid al-Sistani's rulings generally prohibit the dissection of a Muslim's body for educational purposes. Exceptions are mentioned, including situations where saving the life of a Muslim, or someone accorded the same status in this ruling, depends on it, even in the future, or where a significant benefit is achieved that equals or outweighs the initial harm of the dissection. In the case of acquiring medical specialization, as explained in question three, permissibility is limited to the extent of necessity. Question six states that blood money (diya) is obligatory even in cases of permissibility. The mere desire to determine the cause of death or to uncover a crime is insufficient to permit dissection. This is a summary attributed to its author; it does not constitute a general permission for dissection, nor does it imply that the bodies of non-Muslims are without sanctity or restrictions. [4]

In the classroom, the body being studied remains the body of a human being who once lived among us. Education can combine precision and respect, rather than transforming the image of the body or its parts into an object of boasting or spectacle. This is where the ethical formation of a physician begins, not only after graduation.

Medical research is not a personal promise of a cure.

The Declaration of Helsinki, as amended in 2024, stipulates that the importance of new knowledge does not supersede the rights and interests of the participant. It requires a justifiable scientific design, review by an independent ethics committee, a balancing and monitoring of benefits and risks, and free, informed consent that can be withdrawn without penalty. Participation by those unable to consent requires special safeguards, and personally identifiable information and samples require protection and controls for their use. These are professional research principles, not a substitute for specific laws or religious rulings. [5]

Some practical questions posed by the Office for Human Research Protections within the U.S. Department of Health and Human Services include: Why is the study being conducted? What experimental procedure is involved? What are the alternatives if I do not participate? What are the expected risks and costs? Who will protect my interests if my doctor is the researcher? How will my samples and information be used? These are questions for understanding, not embarrassing objections that the patient should apologize for. [6]

Participants should not interpret their participation in a study as a guarantee of personal benefit. While one may wish to serve others through research, such generosity does not justify concealing the unknown aspects of the intervention. Acknowledging uncertainty is part of scientific integrity.

Chapter Summary

Humans are not organ storage facilities, bodies are not historyless objects, and researchers do not own those who consent to participation. Science and charity can converge in donation, transplantation, and research, provided dignity is present in the details: in questioning, consent, harm assessment, fairness, and follow-up. Saving a life should increase our responsibility to other human beings, not diminish it.

Chapter Sources and Limitations of Documentation

[1] NHS Blood and Transplant, Living with One Kidney; general information on risks and not an assessment of a specific donor's condition.

[2] WHO Principles for Cell, Tissue, and Organ Transplantation, adopted in 2010, text published by the Transplantation Society; particularly Principles 2, 3, 5, and 9.

[3] Official website of Sayyid al-Sistani, Contemporary Issues, Transplantation, Questions 58–62; refer to the full text in the application.

[4] Official website of Sayyid al-Sistani, Rulings on Dissection, particularly Questions 1–4 and 6; this is a restricted transmission, not an independent fatwa.

[5] World Medical Association, Declaration of Helsinki as revised in October 2024, Principles of Medical Research on Human Participants.

[6] Office for Human Research Protections, U.S. Department of Health and Human Services, Questions Before Volunteering for a Research Study.

Chapter 95: Caring for the Sick, Older People and People with Disabilities

Perhaps the hardest thing a person can experience is needing help with something they used to do on their own. The pain isn't all in the inability to do it; some of it lies in the way the help is offered: a rushed hand, or being spoken of as if they weren't present, or the feeling that their need has become a burden they must apologize for every morning.

But illness, old age, and disability are not names for the same condition, nor do they necessarily mean complete dependence on others. An elderly person may be a caregiver for others, a young person may need extensive support, and a person with

a disability may become independent when the barriers in their environment are removed. Therefore, good care begins with understanding the individual, not by placing them within a pre-defined category.

Kindness in the details of the day

God Almighty says: “And your Lord has decreed that you worship none but Him, and that you be kind to your parents. If one or both of them reach old age with you, do not say to them a word of disrespect, nor repel them, but speak to them a noble word.” [Al-Isra: 23] He says: “And lower to them the wing of humility out of mercy and say, ‘My Lord, have mercy upon them as they brought me up [when I was] small.’” [Al-Isra: 24]

These two verses do not merely mention kindness, but address even one’s tone of voice and signs of irritation. One application of this meaning is to protect the dignity of one's parents when they need assistance, and not to remind them of the price of every service. This does not mean that those who care for others do not tire or need support; rather, their need for rest does not justify humiliating others.

Responsibility does not end with kinship; God Almighty says: “Worship God and associate nothing with Him, and be kind to parents, relatives, orphans, the needy, the near neighbor, the distant neighbor, the companion at your side, the wayfarer, and those whom your right hands possess. Indeed, God does not like those who are arrogant and boastful.” [An-Nisa: 36]. This verse expands the scope of kindness and links it to resisting arrogance; a crucial connection when the giver's hand appears to be higher than the recipient's in the public eye.

Plan with the person, not above them.

UK health service guidelines explain that a good plan identifies what matters to the person, what they can do independently, what equipment and assistance are needed, when it will be provided, and who to contact for questions. This helps families divide responsibilities and understand needs. The funding requirements and procedures of services provided by that source are specific to their local system and are not assumed to be available or applicable in every country. [1]

A family can start with three simple questions: What are you able to do and want to continue doing? What do you want help with? What bothers you about our current approach? The answer might be waking up at a time they prefer, having their privacy respected when changing clothes, or the doctor speaking with them before speaking with their companions.

These questions should not be interpreted as a promise to fulfill every wish, regardless of the risks. There are health needs and realistic limitations that should be discussed honestly. However, there is a significant difference between explaining why help is needed and taking away someone's decision-making power simply because movement has slowed down.

When Speaking Is Difficult

Communication guidelines advise minimizing distractions, paying attention to tone,

pace, and gestures, and giving the person a chance to respond. After a stroke, for example, it may be difficult to formulate or understand words; therefore, one should not pretend to understand what one does not, or always speak for the person. Augmentative and alternative communication (AAC) methods, from images to technological tools, can be helpful, with support from professionals as needed. [2]

Daily practices include directing questions to the person in need first, not raising one's voice automatically simply because of a disability, and not addressing an adult in childlike language. The inability to produce a sentence quickly is not a license to assume a lack of desire or personality. When we cannot ascertain their choice immediately, finding the best way to understand them should remain part of the care provided.

Those who care need care.

The guidelines for respite care explain that another person or a suitable service can temporarily take over the care, allowing the caregiver time for themselves and avoiding burnout. Support might be hours at home, daycare, or short stays, depending on need and resources. These are options to be planned with the individual and family; there is no one-size-fits-all approach, and availability and funding vary. [3]

In the family this book advocates, the entire responsibility doesn't fall on the one who usually says yes: the closest daughter, the spouse, or the son living at home. A friendly visit doesn't necessarily equate to a sleepless night of care or a day of appointments. The division of responsibility can be clear: who handles transportation, who brings supplies, who manages rest time, and who asks the caregiver what they need.

Asking for help is not a sign of a lack of love. Seeking appropriate professional help may be more effective in preserving safety and dignity than a family's insistence on doing what they cannot. Kindness is not judged solely by the location, but by what happens to the person there, and the extent of their participation, safety, and care.

Neglect is not a form of patience.

The World Health Organization defines elder abuse as occurring in a relationship where trust is expected, involving harmful acts or the withholding of appropriate care. This includes physical, psychological, and sexual abuse, financial exploitation, abandonment, neglect, and humiliation. It has serious health, psychological, and social consequences, and is not simply a visible bruise. The WHO also emphasizes the importance of supporting caregivers and a coordinated response among stakeholders, although evidence of the effectiveness of many interventions remains limited. [4]

Therefore, the phrase "this is a family matter" should not be used to silence someone describing abuse. When there is an immediate danger, urgent local assistance should be sought. Suspicion of neglect or exploitation requires the involvement of a specialized health or social authority, depending on what is available in the country. Kinship does not justify seizing someone's money, nor does the inability to complain

make the harm less real.

Public Responsibility in the Heritage of the Ahl al-Bayt

In the covenant of Imam Ali (peace be upon him) to Malik al-Ashtar, after mentioning the needy, he states: “Allocate a portion of your treasury for them,” and then: “Attend to the affairs of those among them who cannot reach you, those whom people look down upon and whom people despise.” [5] We present the text with its ethical and social implications, without claiming to have fully investigated the chains of transmission of the covenant here.

This shifts the question from a fleeting act of charity to an organized responsibility: How does support reach those who cannot claim it? And who can discern the needs that go unseen in the council? The family alone cannot bear every illness, disability, and poverty, and the existence of an institution does not absolve relatives and neighbors of their duty of compassion. Responsibilities are shared when no one uses the presence of another as an excuse for absence.

Summary of This Part

This part began with the body as a trust and a source of dignity, and concluded that dignity requires repeated action: permission before touching, listening before deciding, rest for caregivers, and protection for those who find it difficult to defend themselves. A person's worth is not measured by what they accomplish with their hands, nor by the effort they spare others.

In the next part, we approach the end of life. This transition does not mean that illness or disability means that death is near; it is a shift in the order of the book's journey. The fundamental principle remains: when the body's capacity changes, the rights of its owner are not forfeited.

Chapter Sources and Limitations of Documentation

[1] NHS, Care and Support Plans; the principles of planning and the person’s participation were used, not the local funding rules.

[2] NHS, Caring for People with Communication Difficulties; adapt the means to the type of difficulty and do not infer mental capacity from speech alone.

[3] NHS, Rest periods and alternative care for carers; general examples with varying service systems.

[4] World Health Organization, Elder Abuse, 15 June 2024; definition, implications, and limitations of prevention evidence.

[5] Nahj al-Balaghah, The Covenant of Malik al-Ashtar, Letter 53, Commentary by Muhammad Abduh, Vol. 3, pp. 100–101; the two quotations are from p. 101, without assessing the chain of transmission here.

Part 11: The End of Life, Dying and Death

We have followed the human being through creation, growth, strength, and illness, and we are now approaching the point beyond which we cannot extend our earthly life. We will first read what medicine can describe about bodily weakness, dying, and the confirmation of death, and then what the texts tell us about death and the taking of the soul. We will not make medical equipment a witness to all the unseen, nor will we make talk of the unseen a substitute for diagnosing the condition and caring for the patient.

This section may evoke fear or bring back memories of a lost loved one. Its aim is not to monitor the living for signs of their impending death, but rather to understand what can be understood, to correct confusion, and to affirm the human right to care until the end of life.

Chapter 96: When the Body Weakens

Change may begin with a shortening of distance: a journey one once traveled without a second thought, now stopping midway to rest. It may begin with an appointment requiring an escort, or an activity one abandons because their energy is no longer sufficient. These observations alone are not proof of terminal illness, but they remind us that the body's strength is not a fixed asset.

God Almighty says: “God is He Who created you from weakness, then made you strong after weakness, then made you weak and old after strength. He creates what He wills, and He is the All-Knowing, the All-Powerful.” [Ar-Rum: 54]. This verse does not provide a medical prescription for each individual, but rather places human strength within the bounds of creation and transformation. It is a mistake to interpret it as permission to ignore signs of weakness without examination under the pretext that one is simply aging.

Advanced Illness Is Not a Countdown to Death

In medical usage, describing an illness as advanced is not sufficient to determine the day of death. The terms “chronic illness,” “incurable illness,” and “death throes” are not synonymous. Some people live with a serious illness for a long time, requiring treatment and support, while others experience a more rapid decline. Knowing the diagnosis is important, but it doesn't tell the whole story.

Heart failure is an example of the need for precise terminology: it means the heart isn't pumping enough to meet the body's needs, not that it has stopped working. Symptoms can change from day to day, and treatment helps some patients achieve stability for years. Management varies depending on the type, severity, cause, and co-existing conditions. Therefore, we shouldn't turn a frightening term in a report into a death knell. [1]

When Reserves Decline

The British Geriatrics Society defines frailty as a clinical condition in which

functional reserves are reduced and vulnerability to stressors increases. It is more common with age, but not an inevitable consequence of it. It may overlap with multiple diseases and alter mobility, cognition, and the need for assistance, without being synonymous with every disability or every stage of aging. This necessitates comprehensive care for the individual, rather than monitoring a single organ in isolation from the rest of their needs. [2]

To illustrate the concept of a reserve, the situation can be likened to a house with few spare parts: a small malfunction that could easily be remedied now disrupts the entire household. This is an analogy for understanding, not a diagnostic model; we cannot measure a person’s frailty by the frequency of their fatigue or simply by observing their thinness.

The association emphasizes the possibility of prevention and early intervention, and that some cases of frailty can improve with appropriate interventions such as movement, nutrition, and support. Frailty should not be presented as an unchangeable fate that does not merit treatment, nor should a single exercise plan be prescribed for all those described as having this condition. [2]

Fatigue is not laziness

The National Cancer Institute explains that cancer-related fatigue can occur with minimal exertion and is not entirely resolved by sleep and rest. It may be caused by the disease or its treatment, anemia, infection, pain, sleep disturbances, and other factors. Therefore, the team asks about its impact on daily life and investigates possible causes, rather than simply telling the patient to "try to be stronger." Addressing some of these factors and adjusting activity to the individual's energy levels may help, without promising to eliminate all fatigue. [3]

A short visit can take a toll on a patient that the visitor doesn't see. A smile at the start of the visit doesn't necessarily mean they are capable of receiving more people. It is respectful to ask when a visit is convenient, to allow the patient the freedom to end the visit, and not to measure their concern for their family by how much they can say when exhausted.

What new symptoms should we not ignore?

Not every new symptom should be interpreted as simply a continuation of the existing illness. Sudden confusion in consciousness or thinking requires immediate medical attention and should not be diagnosed at home. It may be serious or stem from a treatable condition. [4] Similarly, severe difficulty breathing or unresponsiveness warrants an appropriate emergency response, not waiting because the patient is known to have a heart condition. [1]

In planned care for advanced illness, the team agrees on how to request help and who to contact at night or on holidays. These are not minor administrative details; in a moment of fear, it is difficult for the family to start searching from scratch. Having a documented plan does not mean the family is left to decide on the diagnosis alone.

Changing treatment goals does not mean abandoning care

When discussing options in terminal illness, the National Cancer Institute raises questions about what the new treatment is intended for, its potential benefits and burdens, and what matters to the patient at this stage. It also explains that supportive care continues even when cancer-targeted treatment is no longer continued. The patient can indicate how much information they want to know and who they want to involve in the conversation. These are questions for team decision-making, not judgments that all further treatment is beneficial or useless. [5]

Methodologically, three statements should be distinguished: we cannot cure the disease; this specific intervention is unlikely to be helpful; and there is nothing that can be done. The first or second may be true in a particular case, but the third eliminates the possibilities of relief, support, and listening. We will discuss palliative care in the next chapter.

This discussion should not lead to an individual religious legal ruling to discontinue treatment or life support. The nature of the intervention, its expected outcome, the individual's capacity, the ruling of the authority, and the system in place are all elements that must be considered, not replaced by a slogan about "dying with dignity," the meaning of which is subject to differing interpretations.

Life is not defined by results.

When energy is depleted, priorities may shift: praying peacefully, talking with a child, resolving a conflict, or sitting by a window. We should not impose a perfect list of what a patient must accomplish before death. He has the right to grieve and remain silent, and he has the right to desire ordinary, everyday conversation that doesn't revolve around tests.

Talking about death can be compassionate if it begins with a request: Do you want to talk about what you fear? Perhaps his first request will be not to be left alone, not to have every possibility explained to him. The presence of family doesn't change every medical outcome, but it can make the time of weakness less lonely.

Chapter Summary

Physical weakness calls for a more nuanced question, not a hasty judgment: What is the cause? What is treatable? What matters to this person now? We don't preserve his dignity by ignoring the truth, nor by telling him his story is over as long as he has breath, needs, and a right to care.

Chapter Sources and Limitations of Documentation

[1] NHS, Heart Failure; Meaning of the Condition, Variability of Symptoms and Stability, and Indications for Urgent Assistance; No Individual Diagnosis Here.

[2] British Geriatrics Society, Key Messages on Frailty; definition, multiple needs and possible intervention, without generalizing UK statistics to other populations.

[3] National Cancer Institute, Cancer-related fatigue; causes, assessment and activity adaptation, no general prescription of medication or exercise.

[4] NHS, Sudden confusion; urgent assessment needed, use local emergency services as appropriate.

[5] National Cancer Institute, Care options when cancer treatment may not be an option; discuss goals, alternatives and continued support.

Chapter 97: Palliative Care

When some people hear the word “palliative,” they think the doctor has closed the door on treatment, and all that remains is waiting. But the question this care addresses is different: How can a person live as comfortably and meaningfully as possible while facing a serious illness? The goal is not to hide the illness, but rather to prevent it from consuming every aspect of his life.

Care that begins with need

The World Health Organization defines palliative care as an approach to improving the lives of patients and their families in the face of life-threatening illness, through the early detection and assessment of suffering and the treatment of pain and other physical, psychological, social, and spiritual problems. It includes adults and children and is not limited to cancer or the final weeks of life. It also calls for a multidisciplinary team, with practical support for the family and caregivers. [1]

The National Cancer Institute states that it may be provided with or without curative treatment. An intervention directed at the tumor itself may be used to relieve a symptom, such as radiation to reduce pain caused by the tumor. Therefore, palliative care is not the name of a weak drug, nor is it the mechanical opposite of every active treatment; rather, it describes the goal of care and its approach to the whole person. [2]

The practical question is not: Has the patient reached their final day? But rather: Are they experiencing symptoms or needs that warrant assistance now? Waiting until suffering intensifies before we acknowledge a patient's need for care turns the label into a barrier rather than a gateway.

What can the team address?

The needs discussed by the palliative care team include pain, fatigue, nausea, shortness of breath, and insomnia, as well as anxiety, fear, and spiritual and social needs. The team helps communicate care goals and supports families facing new responsibilities. This doesn't mean every problem will disappear, or that every patient needs every specialist; priorities are determined based on the individual's condition and what they find most distressing. [2]

Pain may be evident in the report, but the person's greatest concern is that their children will be left without support. Medication may be available, but access to the clinic is impossible. If we only ask about the severity of the pain, we may improve one aspect while leaving a significant part of their suffering unaddressed.

Pain Relief is an Ongoing Responsibility

The National Cancer Institute guidelines state that pain management begins with assessing the pain, reviewing the plan's effectiveness, and evaluating its side effects. Pain relievers from various classes, including opioids, may be used for moderate to severe cancer pain. The dosage, timing, and when to contact the team must be known. Possible side effects include constipation, drowsiness, and nausea. New symptoms or uncontrolled pain require review, not an arbitrary increase of the dose by the family. Prescribed treatment should not be stopped abruptly without consultation. [3]

It is important that the name of the medication does not become a moral judgment of the patient: using a prescribed pain reliever does not mean they have given up, nor does needing a different dose prove addiction. At the same time, we are not saying that strong medications are risk-free. The responsible approach is to weigh the benefits and risks and monitor, not to spread fear or offer unconditional reassurance.

The World Health Organization emphasizes the importance of ensuring access to essential medicines needed to alleviate suffering and that unnecessary restrictions should not deprive patients of these medicines. [1] This is also a matter of justice: it is not compassionate to know that pain can be alleviated and then leave a patient unable to access qualified care.

Is there evidence of the benefit of early intervention?

In a randomized trial published in 2010 by Temel et al., involving 151 patients with metastatic non-small cell lung cancer, the addition of early palliative care to standard oncology treatment was compared to standard treatment alone. The first group showed better quality of life and fewer depressive symptoms at assessment, with other outcomes including improved survival. This is a trial in a specific group and not proof that every palliative service will extend every patient's life. But it is an important example that early palliative care can be part of effective treatment, not a declaration of abandonment. [4]

We present this finding within the context of the reviewed study abstract, without generalizing it to all diseases or turning it into a promise for any particular individual. The primary value of care here does not need to guarantee an increase in the number of days; alleviating suffering and improving quality of life is an end in itself.

Where is this care provided?

The UK's National Health Service (NHS) explains that end-of-life care may take place at home, in a hospital, or in a specialist care facility, depending on needs and preferences. A doctor, nurse, social worker, and others may be involved, with a specialist palliative care team available when needed. The duration of end-of-life care is not a fixed number of days; it can extend for months or longer. Local service arrangements and funding rights vary between countries. [5]

Therefore, home is not always the best or most feasible option for every situation, and institutional care is not a sign of abandonment by the family. It is important to

know what can be provided in the chosen setting: support when symptoms change, access to communication, the person's comfort, and the caregiver's capabilities. The desire to remain close to family is respected, but it needs realistic support.

Spiritual support without pressure

In the fifteenth supplication of Al-Sahifa al-Sajjadiyya, attributed to Imam Zayn al-Abidin (peace be upon him), recited during illness or affliction: “O God, to You belongs all praise for the continued well-being of my body, and to You belongs all praise for the illness You have brought upon me.” [6] We read it here in its devotional sense, without claiming to have investigated all chains through which the Sahifa was transmitted in this chapter.

Supplication opens the believer's connection with God in both health and sickness, but it is not an obligation for the companion to extract words of contentment from the afflicted person. A person may need someone to listen to their fear before reciting a text, and may request the Quran, supplication, or the presence of someone they trust. Spiritual support respects their wishes and capabilities and does not make the pain a public test of the strength of their faith.

There is no contradiction between supplication and seeking pain relief. Furthermore, the family's weeping does not prove their objection to God; consolation does not begin by correcting people's feelings when they are at their most vulnerable.

Palliative care is not a vague term for every decision.

The purpose of this chapter is to describe care that alleviates suffering and supports life. This description does not imply the permissibility of deliberately ending a patient's life, nor does it consider every refusal of a particular intervention to be of the same nature. Decisions regarding resuscitation, life support, and the assessment of the likely benefit of interventions have medical circumstances, religious rulings, and legal requirements that require separate discussion. Keeping these boundaries clear protects the patient from confusion and prevents the family from making a major decision based on a single word.

Chapter Summary

Palliative care does not only ask: How much longer? It also asks: How can we make what a person experiences less painful and closer to what matters to them? This question encompasses a broad medical and humanitarian endeavor that does not cease even as the possibility of recovery diminishes. When medicine fails to restore the body to its former strength, many duties remain.

Chapter Sources and Limitations of Documentation

[1] World Health Organization, Palliative Care, August 5, 2020; defining the approach, its scope, and the importance of access to care and medications, without using outdated statistics as current estimates.

[2] National Cancer Institute, Palliative Care in Cancer; its relationship to treatment and physical, psychological, spiritual, and family needs.

[3] National Cancer Institute, Pain and Cancer; assessment, follow-up, treatment categories, and effects, without individual dosages or medication recommendations.

[4] Temel et al., NEJM, 2010, 363: 733–742, DOI: 10.1056/NEJMoa1000678; The abstract published in the Weill Cornell Medical College Register was reviewed.

[5] NHS, What End-of-Life Care Includes and When It Begins; Description of Service, not Transmission of Funding or Local Law Provisions.

[6] The Complete Sahifa al-Sajjadiyya, Supplication 15, p. 80 in the referenced edition; Religious citation without a chain of transmission ruling here.

Chapter 98: Dying from a Medical Perspective

Family members may sit by the bed counting breaths, interpreting every movement as a message to be deciphered. In these hours, quiet explanation is part of the care: What might happen? What should be communicated to the team? What can no one predict with certainty?

This chapter describes changes that may be seen in a person whose medical team has assessed that they are nearing death. It is not a checklist for diagnosing dying at home, nor a reason to delay emergency medical services in the event of an unexpected collapse. The similarity of a single sign to what we have described does not prove that the person is dying, nor does it justify stopping their treatment.

Medical assessment is subject to review.

End-of-life care guidelines emphasize the need to assess unexpected deterioration, investigate reversible causes, and consult a specialist if there is any doubt. The probable outcome should be explained in clear, compassionate language, and the care plan should be documented and reviewed as the patient's condition changes. Recognizing that death is imminent is not a moment to dismiss the diagnosis, but rather an ongoing responsibility to assess what is happening and what can be done. [1]

This means that the phrase "there may be little time left" is a clinical assessment, not knowledge of the unseen. The situation may change, and even an expert team may find it difficult to determine the timeframe. It is only honest to tell the family what we know, what we believe to be the probable outcome, and what we cannot be certain of, rather than giving them a specific time to anxiously await.

Consciousness, Energy, and Communication

Possible changes include increased drowsiness and decreased energy, longer periods of sleep, and fluctuations in consciousness and responsiveness. [2] Reduced speech should not be interpreted as a rejection of the family, nor should the patient be pressured to respond to reassure the visitor that they can still be heard. Speaking calmly, telling the patient who is present, and respecting privacy remain compassionate practices, without any scientific guarantee that the patient understands every word.

It may be helpful for the family to inform the team about any changes from the norm:

Has a painful movement appeared? Is the disturbance new? Was the person more communicative a few hours ago? A precise description is more helpful than assuming that every movement signifies pain or every stillness signifies relief.

Breathing: Changes in pattern do not reveal the unseen.

Breathing may become irregular, alternating between shallow and deeper, faster breaths, with pauses followed by resumption of breathing. One such cyclical pattern is called Cheyne–Stokes breathing. These changes, which can be observed in the final stage, are not, on their own, proof of death or a measure of what the person is feeling. [2]

The Marie Curie Care Foundation explains that the rattling sound of secretions may be caused by a buildup of saliva or mucus in the throat and chest when it becomes difficult to expel. The sound may be more disturbing to those around the patient than to the patient themselves, and is unlikely to be painful in itself. However, labored breathing or signs of discomfort should be reported to the team; this reassurance should not be used to ignore suffering. The professional may suggest a positioning adjustment or appropriate treatment, without the family attempting to move a vulnerable person in a way they have not been trained to do. [3]

It is wrong to equate the sound with torture, or silence with salvation in the afterlife. Physiological changes are not evidence of a person's standing with God, nor does the difficulty in describing their experience justify filling the void with judgments about their faith or their ultimate fate.

Circulation and Kidneys

The National Cancer Institute states that some dying individuals may experience decreased and darker urine, a drop in blood pressure or irregular heartbeat, and cold or discolored extremities. These signs are not present in everyone and are not sufficient to determine the time of death. [4] These are observations understood within the context of illness, examination, and follow-up, not a test performed by a visitor by looking at the feet or touching the hands.

When the family notices a new change, asking the medical team what it means in this particular case is more helpful than comparing the body to circulating images and videos. Illness, treatment, environment, and skin tone all influence what is perceived; external appearance alone is not a reliable indicator.

Food and Fluids: Compassion Needs Assessment

In the final days or hours, the desire for food and drink may decrease, and swallowing may become difficult. The person should not be forced to swallow, as this may cause discomfort or choking. Decisions regarding fluids and assisted nutrition require a discussion of the goals of care and the benefits and risks of intervention; there is no one-size-fits-all rule. Oral and lip care remains part of the comfort, following the safest approach recommended by the team. [4]

This does not mean withholding water from someone who is able and willing to drink, nor does it mean that a diagnosis of dying is a blanket permission to stop feeding or fluids. The family may be fearful because they associate food with love and life; therefore, the reasoning behind each decision should be explained to them, and any specific legal questions should be referred to their religious authority after the medical facts have been presented, rather than leaving them to bear the burden

of an ambiguous decision alone.

The care guidelines call for an individualized plan that includes eating, drinking, symptom management, and psychological and spiritual support, involving the person to the extent they wish and are able, and attending to the needs of their family. [1] The plan here is not a document to shut down the conversation, but rather a way to organize and review it.

Confusion and Delirium

Confusion, agitation, or unusual sensory experiences may occur, and medications, changes in body chemistry, infection, and pain may contribute to these. The team looks for treatable causes and works to alleviate the discomfort. [2] The person is not to be blamed for a word spoken while confused, nor is a conscious intention assumed behind every action that is unlike their usual behavior.

We will later present texts related to visions of the dying. In the medical field, it is not appropriate to establish a specific supernatural presence based solely on a clinical description, nor to definitively deny all religious significance to an experience whose true nature we have not examined. What can be done now is to protect the person, understand the situation as much as possible, and refrain from frightening them or their family.

Family Presence at the Bed

The dying person does not need an audience observing their responses. A small number of people and a quieter environment may be more appropriate, according to their wishes and the caregivers' judgment. A kind word or a quiet prayer can be more effective than a long conversation. Repeating words or moving the body to elicit a response in front of others should not be forced.

The family can take turns resting and asking about their concerns. It is unfair for them to blame themselves for leaving the room for a few minutes and then the death occurring; presence is not a way to control when death happens. What the family can offer is care and love to the best of their ability, not the ability to be present every moment.

Chapter Summary

Dying is a stage in which bodily functions may gradually change, but the details and duration vary. The goal is to prevent the recognition of its signs from becoming a state of panicked surveillance or a judgment about someone’s fate in the afterlife. There remains care to be provided, symptoms to be assessed, and a family needing an explanation; then comes another, independent question: when and how is death medically established?

Chapter Sources and Limitations of Documentation

[1] Cheshire EPaige Guidelines, NHS, The Last Days of Life; Assessment, Communication, Individual Plan and Revision.

[2] NHS, Changes in the Last Hours and Days; Consciousness, Breathing and Agitation; Signs

alone are not used for diagnosis.

[3] Marie Curie Foundation, Audible Chest Secretions at the End of Life, January 2025 Update; The Difference Between Sound and Discomfort and Requesting Team Evaluation.

[4] National Cancer Institute, The Last Days of Life, Patient Version; Physical Changes, Food, and Fluids, in the Context of Patients Who Are Dying, Not All Patients.

Chapter 99: What Is Death from a Medical Perspective?

The question may seem simple as long as we are thinking of a body that is neither moving nor breathing. But it becomes more nuanced when machines can maintain some functions, or when the heart stops and resuscitation is successful. Therefore, medicine needs more than just an impression: a definition that clarifies what is meant by death, and criteria that confirm its occurrence in a particular case.

What the physician decides here has significant implications for the family, care, preparation, and post-mortem care. Therefore, we do not present the definitions as abstract philosophical terms, nor as instructions that the reader can apply to a patient on their own.

The Definition Is Not the Test

In the UK Code of Diagnosis and Confirmation of Death, updated in 2025, death is defined as the permanent loss of the capacity for consciousness coupled with the permanent loss of the capacity to breathe, resulting from the permanent cessation of brainstem function. The Code presents physical, circulatory, and neurological criteria, from which the most appropriate is selected according to the circumstances. This is a named UK reference formulation, not a legal definition that we impose on all countries. [1]

The Canadian Guidelines of 2023 formulate a definition based on the permanent cessation of brain functions, characterized by the absence of consciousness and brainstem reflexes, including the ability to breathe independently. This may result from the interruption of blood flow to the brain following circulatory arrest, or from a devastating brain injury. [2] It is important to read the details of each reference rather than assuming that the difference in terminology between "brain" and "brainstem" has no bearing on the verification criteria.

The definition answers the question: What condition do we call death? The criteria answer the question: How do we prove that this person has reached that state? The absence of a response for a moment does not, by itself, fulfill a definition that requires a permanent loss of specific abilities. Likewise, the term "severe injury" is not sufficient to replace the required examination.

What does the word "permanent" mean?

The Canadian Guidelines explain permanence as a state where function is lost, will not return spontaneously, and will not be restored through intervention. They also distinguish between the occurrence of death, its determination according to the criteria, and its documentation and declaration. [2] This formulation does not mean

that the family has the right to describe a temporary cessation as permanent, or that an ill-considered decision to do nothing turns a living person into a dead person.

Therefore, one should be wary of the common phrase "died and then came back to life" when it refers simply to cardiac arrest followed by the resumption of circulation. We will discuss cardiac arrest and resuscitation in the next chapter. The point here is that we shouldn't use a single word for two different meanings and then draw a medical or mystical conclusion from this confusion.

Do all cells die at the same moment?

The British Code shows that organs, tissues, and cells don't all cease functioning and decompose at the same rate, and that confirming death doesn't require the complete absence of cellular activity. There's a difference between the persistence of partial biological activity and a person remaining alive according to the aforementioned criteria. [1]

Molecular research provides an example of this complexity: a paper by Ferreira and colleagues, published in 2018, studied gene expression in postmortem human tissues as part of the GTEx project and found changes that varied depending on the tissue and the time after death. These are findings about RNA and gene expression regulation in the samples, not proof of consciousness in the body or the return of the deceased to life. The abstract of the published research was reviewed in the Broad Institute’s research record. [3]

If we read a sensational headline about “genes that wake up after death,” we must ask what was actually measured. An increase in a molecular signal is not a person waking up, nor does it provide a narrative of their experience after death. Each level of research has its own questions and limitations.

Establishing death is not the same as determining its cause.

A specialist may establish that death occurred, but the cause may still require further review of the record or additional examination. The U.S. Centers for Disease Control and Prevention’s guidelines for death certificates state that recording the cause should describe the illness or injury, the sequence of events leading to death, and the contributing factors. Simply recording a final event such as cardiac or respiratory arrest is not sufficient as a causal explanation. These are documentation guidelines within a specific system, which we use to distinguish between the two questions, not to define a legal procedure for each country. [4]

The phrase “cardiac arrest” tells us what happened at the end of the process, but it does not necessarily tell us why it happened. Knowing the cause can be important for the family, for prevention, and for investigation when circumstances warrant it. The desire for a quick answer should not turn into speculation that is treated as fact.

A Monitor Does Not Allow a Layperson to Declare Death

This book does not provide a numerical threshold, waiting period, or test that would allow an unqualified person to declare death. The British Code emphasizes that applying the criteria requires a person of appropriate competence, and that doubt

necessitates acting according to established guidelines, not confirming death based on impressions. [1] What we present here is for general understanding and does not replace the protocol of the institution and the competent authority.

The family has the right to request a clear explanation: Which criteria were used? Who conducted the assessment? Is the discussion still about predicting the outcome, or about confirming death? Their question does not necessarily imply a rejection of medicine; they may be trying to understand a distinction they haven't heard of before, especially if they observe movement of a device or warmth of the skin.

Limits of Medical Definition

When medicine describes the cessation of functions, it employs tools of observation, examination, and inference. However, the reality of the soul and the afterlife cannot be directly measured by these tools. The precision of the medical criterion does not justify transforming it into a laboratory experiment that proves or disproves all the details of the intermediate state (Barzakh).

In a book written within the Imami tradition, the distinction between medical criteria and certain jurisprudential rulings related to the status of the deceased should also not be obscured. A criterion may be adopted in medical practice, while a jurist may debate its sufficiency for establishing a specific legal ruling. In the following chapter, we will present a named example, separating diagnosis from legal opinion and avoiding claims of a consensus that has not been reached.

This separation of fields is not an invitation to conflict between physicians and jurists, but rather a call for a precise question: What fact has been established? What ruling is to be applied to it? And what remains a point of contention? Misinterpretation of terminology can exacerbate the family's grief.

Chapter Summary

Medically, death is not merely the cessation of movement, nor the complete absence of all living matter in the body. Establishing death is a rigorous process with its own definition, criteria, and responsibilities, and some of its formulations and applications vary among different authorities. Clarifying these boundaries helps us understand resuscitation and death according to neurological criteria, without confusing them with coma or the religious discourse on the taking of the soul.

Sources and Limitations of Documentation

[1] Academy of Medical Royal Colleges, Code of Diagnosis and Confirmation of Death, 2025 Update, particularly sections 1–3; British definition and professional framework, not a protocol for self-application.

[2] Canadian Clinical Guidance for the Definition and Identification of Death, 2023, Canadian Journal of Anesthesia, DOI: 10.1007/s12630-023-02431-4; definition, meaning of permanence, and distinction between occurrence, identification, and documentation.

[3] Ferreira et al., Nature Communications, 2018, Effect of death and cold ischemia on gene transcription in human tissues, DOI: 10.1038/s41467-017-02772-x; use of abstract not full data.

[4] CDC, Physician's Guide to Medical Certification of Death, Revised 2023; Cause of Death and

Chapter 100: Cardiac Arrest, Brain Death and Coma

These terms are sometimes used together in family conversations, even though they do not describe the same condition. Confusion can lead to misplaced hope or despair, or a decision whose basis is not understood. Therefore, we need a clear distinction between the cessation of a recoverable function, a disturbance of consciousness, and the fulfillment of a medical criterion for death.

Cardiac Arrest: An Emergency Requiring Action

Cardiac arrest means the heart stops pumping blood effectively to the brain and other organs. It may present with sudden collapse, unresponsiveness, absence of normal breathing, or ineffective gasps. The National Heart, Lung, and Blood Institute guidelines emphasize that calling emergency services, performing CPR, and using an automated external defibrillator (AED) when available can save lives. [1]

In the event of an unexpected collapse of an unresponsive person who is not breathing normally, local emergency services should be called immediately, and appropriate resuscitation should be initiated, following the emergency dispatcher's instructions and those of the available device. The witness should not wait to read a chapter on death, nor should gasps be considered normal breathing that justifies delay. This is a general statement of urgent response; it is no substitute for training or an established, specific treatment plan.

Therefore, cardiac arrest followed by successful restoration of circulation differs from a confirmed death. Furthermore, successful resuscitation stories should not be interpreted as a promise that the attempt will always succeed or that all cases are the same; a medical emergency requires swift action, while assessing the outcome requires understanding the condition.

Coma: The Person Is Alive

The U.S. National Library of Medicine describes a coma as a profound state of unconsciousness; In a coma, the person is alive but unresponsive to their environment. It can result from illness or brain injury, and the outcome varies depending on the cause, severity, and location of the damage. [2] Therefore, the term "coma" is not synonymous with death, nor is it sufficient on its own to determine the likelihood of recovery.

Relatives need to know the exact terminology used in the report, not just the common phrase "doesn't feel anything." The person may have difficulty producing a response or limited communication; therefore, a visitor cannot determine the level of consciousness based on a single personal experience.

Other conditions not to be confused

In unresponsive wakefulness syndrome, also known as vegetative state, there may be cycles of wakefulness, sleep, and eye opening without clear behavioral evidence of

self-awareness or awareness of surroundings. In the minimally conscious state, there is limited but verifiable behavioural evidence of some awareness, although it is not consistently apparent on every occasion. Diagnosis requires repeated evaluation by experienced professionals. [3]

Locked-in syndrome differs: the person may remain conscious with severe paralysis that impairs speech and movement, and some may communicate with eye or eyelid movements. [3] It is incorrect to equate silence with unconsciousness, or to consider open eyes sufficient evidence of full consciousness. We discussed the limits of inference from behavior alone in the chapter on consciousness.

The term “vegetative” is a historical term for a clinical condition, not a description of human value, nor a justification for treating a person as an object. Their right to care remains, regardless of their ability to respond.

Death by Neurological Criteria

The American Academy of Neurology, in its 2023 guidance statement, clarifies that brain death, or neurological death, differs from coma and vegetative state. It pertains to the permanent cessation of brain function following a devastating injury, with the fulfillment of criteria and tests including the absence of responsiveness, brainstem function, and the ability to breathe independently. It is not a matter of decreased activity or poor prognosis, but rather a condition diagnosed through a structured process performed by qualified professionals. The absence of recovery is part of the meaning of a correct diagnosis, not merely a statistical probability of a poor outcome. [4]

This diagnosis is not made simply because the patient is on a ventilator or because the brain scan appears severely damaged. This information is part of the assessment, not another name for death.

Conditions to Prevent Confusion

In the MD Anderson Cancer Center protocol, updated in 2025, requirements include verifying the cause of the condition, ruling out the effects of depressants and muscle relaxant residues, and excluding severe disturbances that may confound the examination, while maintaining appropriate temperature and circulation conditions. The specialist performs a neurological examination and a respiratory test under safe conditions, and additional tests may be requested when the assessment cannot be completed or is inconclusive. This is a specific institutional example, not a protocol applicable to all ages and conditions; the same document states that this protocol should not be used to treat pregnant women. [5]

The family should not disconnect a ventilator, cause pain, or attempt to perform a respiratory test on the patient independently. Their right is to inquire about the procedures, their outcomes, and limitations, and to seek clarification or expert review through the appropriate medical channels, not to perform a re-examination on their own.

What does a ventilator do?

A mechanical ventilator helps to bring air into and out of the lungs, and the team adjusts the level of support as needed. It may be via a mask or tube and is used for people with respiratory failure from various causes. The support can be gradually reduced as breathing improves. [6] Therefore, its presence does not confirm death, and chest movement with its assistance does not mean that breathing is independent.

In practice, the team should explain what the ventilator replaces or supports, the state of the brain and circulation, what has been confirmed, and what is still being evaluated. Simply saying "machines are keeping him alive" is incomplete and does not answer these questions.

No resuscitation does not mean no care.

The Resuscitation Council UK explains that the Do Not Attempt CPR recommendation (DNACPR) applies to resuscitation when the heart has stopped; it does not mean canceling appropriate treatments or personal care. A broader plan may exist that discusses other interventions separately. [7] We mention this to explain the term in its professional context, not to issue a religious legal ruling permitting the signing of every form or extending its legal validity to another country.

It is also necessary to distinguish between not initiating an intervention, discontinuing an ongoing intervention, determining the futility of a specific intervention, and intentionally causing death. Differences in terminology should not lead us to disregard the facts, nor should the similarity of the stated objective allow us to apply a single, unqualified ruling to all these scenarios.

The Position of Imami Jurisprudence on These Questions

In the fatwa published on Sayyid Ali al-Sistani's website, brain death with continued heartbeat, in the scenario in question, does not constitute the status of death to which religious rulings attach. The answer links this to the established understanding of death. In the third question on the same page, which combines euthanasia, disconnecting life support from a brain-dead patient, and signing a Do Not Resuscitate (DNR) form and withholding resuscitation on that basis, the answer is prohibition in all cases. [8]

This refers to a named religious authority and the text of a published question, and is not a claim of consensus among all jurists, nor does it replace the need to present detailed facts when the case differs. Furthermore, we do not transform a jurisprudential answer into a medical description for all types of donation or for all organ functions; the distinction between these two areas was previously established in the chapter on donation.

The practical way to understand the dispute is for the physician to clarify what has been established by the criteria and what the intervention achieves, and for the person seeking the ruling to accurately present these facts to the authority issuing the fatwa, while adhering to the established procedures and the patient's rights. A

grieving family should not be expected to resolve a difference of definitions with a hasty and ambiguous decision.

Chapter Summary

Cardiac arrest is an emergency condition after which circulation may be restored. Coma and disturbances of consciousness are conditions in living individuals, and death according to neurological criteria is a different diagnosis with specific requirements. The application of religious rulings and decisions regarding life support is not determined by the name of the device or the description of the condition. Clarity of language here is not a luxury; it is a protection for the individual and their family.

Chapter Sources and Limitations of Documentation

[1] NHLBI, Cardiac Arrest; Definition, Signs, and Immediate Response, without transferring the US emergency number or generalizing survival statistics.

[2] MedlinePlus, Coma; Definition, Effect of Cause, and Severity, without adopting the characterization of some chronic disorders of consciousness as coma for years.

[3] Royal College of Physicians, Guidelines for Prolonged Disorders of Consciousness, 2020, pp. 23–25 and 41–42; definitions and repeated assessment, not local legal provisions.

[4] American Academy of Neurology, New Consensus Guidance Statement on Brain Death, October 11, 2023; general overview, not full procedure of the guide.

[5] MD Anderson, Neurological Criteria for Determining Death, Eighth Edition, approved November 18, 2025, especially page 1 and Annexes C and D; An institutional example: no prescription for examination.

[6] NHLBI, What is a ventilator?; its support function and the possibility of reducing it upon readiness, without inferring consciousness from its presence.

[7] Resuscitation Council UK, Resuscitation Recommendations, DNACPR, and ReSPECT; the scope of the recommendation not to attempt resuscitation, without issuing a religious ruling on it.

[8] The official website of Sayyid al-Sistani, Fatwas on Brain Death, Questions 1 and 3; the ruling is presented according to the published question, without generalizing to all religious authorities.

Chapter 101: Death and the Taking of Souls in the Qur'an

Medicine can describe the cessation of bodily functions, but it alone does not answer the human question: Where does my story end? When we open the Quran, we do not find death merely a biological event, but rather within a discourse about creation, trial, return, and recompense. Therefore, we should read this discourse within its context, without transforming it into a clinical report or replacing it with a clinical report.

The Truth That Encompasses Everyone

God Almighty says: “Every soul will taste death, and you will only be given your full reward on the Day of Resurrection. So whoever is removed from the Fire and

admitted to Paradise has certainly attained success. And the life of this world is nothing but the enjoyment of delusion.” [Al Imran: 185]

The verse does not end with death; it moves from it to the full reward and the standard of success. This very structure prevents us from reducing its vision to physical annihilation, just as it prevents us from making the length of one's life in this world the sole criterion for human success.

And Allah Almighty says, addressing His Prophet, peace and blessings be upon him and his family: {And We did not grant immortality to any human being before you. So if you die, will they be immortal?} [Al-Anbiya: 34]. The death of the Prophet does not mean the end of his message, nor does gloating over his death make it a victory for those who will also die. This teaches us not to confuse one's standing with Allah with the exception of the body from the natural laws of this life.

The Creation of Death and Life

Allah Almighty says: {He Who created death and life to test you [as to] which of you is best in deed - and He is the Exalted in Might, the Forgiving.} [Al-Mulk: 2]. The text connects life and death to trials, making the question one of good deeds, not merely the number of years lived. This does not necessitate deriving from the phrase "creation of death" an independent physical mechanism of death; theological inquiry into the meaning of creation and non-existence is distinct from the examination of physical organs.

One of the fruits of this reading is that knowing the end does not mean neglecting the present. As long as we are in the time of action, truthfulness, reform, restoring rights, and caring for others are not side tasks to be postponed until after our plans are complete; they are integral to the very essence of the journey.

Escape and the Limits of Control

God Almighty says: “Say, ‘Indeed, the death from which you flee – indeed, it will meet you. Then you will be returned to the Knower of the unseen and the witnessed, and He will inform you of what you used to do.’” [Al-Jumu’ah: 8]. This verse does not make taking precautions for one’s health a reprehensible form of escape; rather, it establishes that denying the end or psychologically fleeing from it does not negate the inevitable encounter and return.

A person may love life and fear death without that fear becoming a judgment on their faith. What we learn here is to make fear a motivator for improving what is possible, not for hating each day because it brings us closer to the end, nor for chasing after human promises of bodily immortality.

The appointed time and what we cannot comprehend

God Almighty says: {And God will never delay a soul when its appointed time has come. And God is All-Aware of what you do.} [Al-Munafiqun: 11]. We have discussed the texts related to predestination, erasure, and confirmation in the chapter on lifespan and appointed time. The important point here is that we should not claim to know the timing of death simply because of a miscalculation of illness, and then use

that as an excuse to neglect our necessary care.

And Allah Almighty said: {Indeed, Allah [alone] has knowledge of the Hour and sends down the rain and knows what is in the wombs. And no soul knows what it will earn tomorrow, and no soul knows in what land it will die. Indeed, Allah is Knowing and Acquainted.} [Luqman: 34]

We present the verse in its entirety, although the focus here is on its conclusion concerning human death. We do not equate the all-encompassing divine knowledge with a human estimation of the probabilistic course of an illness or danger. A doctor may estimate that death is imminent, but a medical estimate does not constitute a comprehensive knowledge of everything that will occur; similarly, the verse does not prohibit research and prediction based on evidence.

Death and taking one's soul are not always synonymous.

God Almighty says: “God takes the souls at the time of their death, and those that do not die [He takes] during their sleep. Then He withholds those for whom He has decreed death and releases the others until a specified term. Indeed in that are signs for a people who give thought.” [Az-Zumar: 42]

The distinction is clear in the text itself: there is taking one's soul at the time of death, and there is taking one's soul during sleep for those who have not died. It is not correct to replace the word “tawaffa” with “death” in every instance without considering the context.

Al-Tabataba’i, in Al-Mizan, quotes Majma’ al-Bayan as saying that “tawaffa” means taking something in full. He then interprets “souls” here as the spirits attached to the bodies. He infers from the verse the distinction between the soul and the body, and from the difference between holding back and releasing, the difference between “tawaffa” in death and in sleep. This is a named interpretive reading, not the result of a device that measures the departure of the soul. [1]

We have previously explained sleep in terms of its stages and neurological functions. The juxtaposition of sleep and death in the Quranic expression does not necessitate that they are the same medical condition, nor that the sleeper experiences brain death every night and then reverses. Combining one aspect of meaning does not equate to identical attributes in all aspects.

The Agony of Death

God Almighty says: “And the agony of death will come in truth. That is what you were trying to avoid.” [Qaf: 19]. This expression confronts us with a reality that people often try to avoid; it does not provide the family with a scale to measure the dying person’s standing before God based on the speed of their breathing or the intensity of their distress.

We do not consider “anguish” to be a name that corresponds to a single medical syndrome, nor do we claim that every clinical description of delirium fully explains it. Medical causes for some changes in consciousness have already been discussed, and we will address what has been mentioned in the texts about the scenes of the dying

person. Keeping these two realms distinct protects the patient from judgments for which we lack evidence.

The scene that leaves the observer helpless

God Almighty said: “Then why not, when it reaches the throat” [Al-Waqi’ah: 83], “while you are at that time looking on” [Al-Waqi’ah: 84], “And We are nearer to him than you, but you do not see” [Al-Waqi’ah: 85], “Then why not, if you are not to be recompensed” [Al-Waqi’ah: 86], “return it, if you should be truthful” [Al-Waqi’ah: 87].

In this scene, the eyes of the living and the limits of their capacity are present. Divine proximity here is not a distance we measure between the bed and the ceiling, nor does the observer's inability to see mean that everything unseen is nonexistent. However, we do not fill this unseen realm with imagined details about the form of the soul or its path within the body's organs.

The challenge of restoring it does not mean that the success of medical resuscitation contradicts the verses; speaking of restoring life after death is not the same as treating a reversible cessation. We must first understand the meaning of the situation before drawing a comparison between the language of the Quran and hospital terminology.

What do these verses establish?

They establish that earthly life is not eternal, that death is within God's dominion, that the human being returns to God and is accountable, and that the soul has a reality that cannot be reduced to observation of the body. However, these verses alone do not provide us with details of all the conditions after death. Those details are sought from the entirety of the texts, with verification of transmission and meaning.

This is a map of the chapter's themes, not a claim to compile all verses on death. Other verses will address the taking of the soul, the intermediate realm (Barzakh), resurrection, and judgment, and the relevant verses will be compiled in the Qur'anic index. This approach avoids isolating a verse from its context within the surah and its connection to the rest of the Qur’an.

Chapter Summary

The Quran places death within a broader horizon than the cessation of bodily functions: the horizon of the taking of souls, return to God, and recompense. This horizon does not negate the role of medicine, nor does it grant the observer exclusive knowledge of the unseen. We learn from these verses to prepare ourselves, to act, and to maintain our humility before what we do not comprehend.

Sources of the Chapter and Limits of Documentation

[1] Al-Tabataba'i, Al-Mizan, Commentary on Az-Zumar: 42, within verses 38–52; the meaning of tawaffi (taking in full), the interpretation of the soul, and the distinction between death and sleep, with the conclusion attributed to its author.

The Holy Quran: Al Imran 185; Al-Anbiya 34; Al-Mulk 2; Al-Jumu'ah 8; Al-Munafiqun 11; Luqman 34; the verses are cited in their complete form according to their positions as indicated in the text.

The Holy Quran: Az-Zumar 42 and Qaf 19; "tawaffa" in death, sleep, and the agony of death.

The Holy Quran: Al-Waqi'ah 83–87; the five verses in their entirety, each verse enclosed in separate brackets.

Chapter 102: The Taking of the Spirit, the Angel of Death and His Helpers

At the bedside of the dying person, the family sees a body whose functions change, but they do not necessarily see everything the texts describe about it. When we move on to the taking of the soul, we turn to the unseen knowledge we receive from revelation and reliable transmission, not from facial features or recordings.

One of the first questions here is that the Quran attributes the taking of souls to God, to the Angel of Death, and to the angels. Do these attributions contradict each other? Or do they describe a single action from different perspectives?

The Angel of Death in the Quranic Text

God Almighty says: “Say, ‘The Angel of Death who has been entrusted with you will take you, then to your Lord you will be returned.’” [As-Sajdah: 11]. The text refers to him as the “Angel of Death,” describes his role as being entrusted, and concludes with the return to the Lord. It does not present him as an independent power that rivals God’s dominion, nor does it place the end of humankind outside of divine decree.

As for the name “Azrael,” which is commonly used, it is not a name mentioned in the Quran. When researching his names, attributes, and the details of his work, one should refer to and verify the sources of the hadiths, rather than attributing everything commonly heard in sermons to the Quranic text.

Messengers Who Do Not Neglect

God Almighty says: “And He is the Irresistible, above His servants, and He sends guardians over you until, when death comes to one of you, Our messengers take him, and they do not neglect.” [Al-An’am: 61]. Here, the act of taking is attributed to the messengers in the plural, while negating any negligence on their part.

The verse in Surah Az-Zumar: 42, which attributes the taking of souls to God, has already been mentioned. Al-Tabataba’i, in his work Al-Mizan, reconciles these instances based on the principle of primary and secondary authority: God is the true taker of souls, and the angels and the Angel of Death are commanded instruments acting by His command. This is an interpretive approach that explains the multiplicity of attributions without implying a plurality of deities or the independence of intermediaries from God. [1]

For the sake of simplification, an action may be attributed to both the one who commanded it and the one who carried it out, and the difference in attribution is not a contradiction. However, the human example does not explain the true nature of

God's actions or the nature of angels, nor does it imply that divine providence is an administrative system in which the Creator needs someone to fill a gap; this is a metaphor for the expression, not for the divine essence.

What is mentioned in the narration of the helpers

Al-Saduq, in his book *Man La Yahduruhu al-Faqih*, included a question put to Imam al-Sadiq (peace be upon him) concerning the differing attributions of the taking of souls and the simultaneous death of people in distant regions. The response is: “Indeed, God, Blessed and Exalted is He, has appointed angels as helpers for the Angel of Death to seize souls.” The answer then explains the attribution of the helpers’ actions to the Angel of Death and to God. [2]

The report in this instance is presented as “and al-Sadiq was asked,” without a continuous chain of transmission. Therefore, we do not describe it here as having a sound chain of transmission, nor do we consider its presence in a well-known book as an independent verification of all its narrators and chains of transmission. It serves as narrative evidence for the aforementioned method of combining the two, while the fundamental attributions of the taking of souls remains established by the verses themselves.

This precision helps us distinguish between two things: affirming what is stated in the Quran, and elaborating on the manner of death based on a specific report. Not every detail is of the same degree as the verse itself, and being cautious about the chain of transmission of a report does not necessitate denying everything related to its subject.

Proximity and Distance in the Narrations of the Unseen

In the same book, there is another narration attributed to Imam al-Sadiq (peace be upon him), in which the Angel of Death is asked about taking souls in the East and the West at the same time. He replies, “I call upon them, and they answer me.” The image of the world appears as a bowl in a person’s hands and a coin in their palm. [3] Al-Saduq included it here with the phrase “And al-Sadiq said,” without a continuous chain of transmission in the relevant passage. Therefore, we do not claim its authenticity based solely on this wording.

When we present this image in its context, we are not transforming it into a map of the Angel of Death’s size or speed of movement. It presents an approximation of the vast power granted to him in the narration, not a law of distance and time that we can incorporate into an equation. The fact that we do not know the exact manner is not a deficiency that should be remedied by imagining details not established in the text.

Glad Tidings at Death

God Almighty says: “Those whom the angels take in death while they are pure and good, saying, ‘Peace be upon you; enter Paradise for what you used to do’” [An-Nahl: 32]. This verse connects the scene of death with peace, reward, and good deeds. Therefore, the image of the Angel of Death should not be reduced to one of terror

alone, as if encountering him could not possibly bring good tidings.

This is preceded in the surah by another image: “Those whom the angels take in death while they are wronging themselves, they offer submission, saying, ‘We did not do any evil.’ Yes indeed, God knows what you used to do.” [An-Nahl: 28]. The issue is not the physical appearance at the end, but rather the reality of one’s deeds, which no human claim can conceal.

And Allah Almighty said: {If only you could see when the angels take the souls of those who disbelieved, striking their faces and their backs, [saying], “Taste the punishment of the burning Fire!”} [Al-Anfal: 50]. This is a Quranic account of an unseen scene; it does not authorize us to attribute every pain experienced by a dying person to this description.

Therefore, we should not recite these verses over someone in pain to judge that they are among those destined for punishment, nor should we take the peacefulness of another's death as conclusive proof of their fate. We may take heed, pray, and hope for mercy, but judging the inner thoughts and destinies is not within the purview of those who witness them.

The taking of the soul is not a process that can be depicted with a medical instrument.

These verses do not specify the weight or color of the soul, nor do they describe it as a substance emanating from an organ that can be photographed. If the texts use the language of taking (qabd and tawaffi), they must be understood within their context without negating their metaphysical meaning or adding physical properties to them of our own.

There is no contradiction between a doctor describing the physical cause of death and attributing death to God and His angels in belief. One question concerns the observed process in the body, and the other concerns the management of death and its meaning in religious texts. Faith does not need to deny what has been medically proven, and medical observation alone does not provide us with a complete account of the unseen world.

The proper way to speak about the Angel of Death

It is only proper to avoid raising children to believe that the Angel of Death is a monster lying in wait for them whenever they make a mistake, and to refrain from using fabricated images to frighten the sick. The Quran presents angels within the framework of divine mandate, offering the believer a path of peace and hope alongside a path of responsibility.

The most beneficial question for humankind is not how to extract a sensory image from every common detail, but rather how to rectify what can be rectified before the time for action ends. This does not negate the importance of examining narrations; it prevents such examination from becoming mere curiosity divorced from its ethical purpose.

Chapter Summary

The Quran affirms the taking of souls by God's permission, the appointment of the Angel of Death, and the work of angelic messengers. Narrations explain how these attributions can be reconciled, despite the varying strengths of their chains of transmission. As for the form, manner, and details that have not been established, we remain within their limits. We believe in the unseen truths revealed by the text, and we do not allow our imagination to become an obligatory supplement to it.

Chapter Sources and Limits of Documentation

[1] Al-Tabataba'i, Al-Mizan, Tafsir Az-Zumar: 42; Reconciling the attribution of taking souls to God, the Angel of Death, and the messengers based on their primary and secondary roles.

[2] Al-Saduq, Man La Yahduruhu al-Faqih, vol. 1, pp. 136–137, hadith 368; it is presented as a question put to the Imam without a continuous chain of transmission in the relevant section, and its authenticity has not been established here.

The continuation of hadith 368 is on the following page; the difference in some pronouns is explained in the notes to the edition, and no independent conclusion has been drawn from it.

[3] Al-Saduq, Man La Yahduruhu al-Faqih, vol. 1, p. 134, hadith 354; the hadith about the proximity of the East and the West, the bowl, and the dirham, without authenticating its chain of transmission here.

The Holy Qur'an: As-Sajdah 11; Al-An'am 61; An-Nahl 28 and 32; Al-Anfal 50. I have included all five verses, with a reference to Az-Zumar 42, which was included in full in the previous chapter.

Chapter 103: Accounts of What the Dying Person Witnesses

The dying person may fall silent, leading those around them to believe that the whole story has ended. However, religious texts speak of revelations that cannot be measured by lip movements, and of glad tidings or fears that we cannot necessarily see in facial expressions. Here, our need for verification increases: not every commonly circulated description is accurate, and not everything unseen is nonexistent.

In this chapter, we will examine examples of Imami narrations concerning the visions at the time of death, indicating their reliability according to the source we consulted. We do not claim to have explored all their chains of transmission or to issue an independent scholarly judgment on each narration; that would be a broader undertaking than simply presenting these examples in The Story of the Human Being.

The Quranic glad tidings are inseparable from righteousness.

God Almighty says: “Indeed, those who say, ‘Our Lord is God,’ and then remain steadfast—the angels will descend upon them, [saying], ‘Do not fear and do not grieve, but receive good tidings of Paradise, which you were promised.’” [Fussilat:

30]. The text links the glad tidings to faith and righteousness, and does not present them as a promise that anyone can grant to whomever they wish, separate from the reality of a person.

And He, the Exalted, says: “O tranquil soul” [Al-Fajr: 27], “Return to your Lord, well-pleased and pleasing [to Him]” [Al-Fajr: 28], “Then enter among My servants” [Al-Fajr: 29], “And enter My Paradise” [Al-Fajr: 30]. These are the words of the Qur’an. However, specifying the referent of “soul” or interpreting “well-pleased” and “servants” in a particular narration should remain distinct from the text of the verses themselves.

Citing these verses in the context of the dying does not mean that every detail of the time of the address and the manner of the angels’ descent is established solely by their wording. We must distinguish between the original glad tidings, the interpretation of when and to whom they apply, and the narrative details describing a specific scene. This distinction preserves the text's integrity and does not diminish the believer's hope.

The Hadith of Sudayr: A well-known scene requiring clarification of its authenticity.

Al-Kulayni, in the chapter "That the Believer is Not Forced to Have His Soul Taken," narrates a hadith from Sudayr al-Sayrafi, on the authority of Imam al-Sadiq (peace be upon him). It begins with a question about the taking of the believer's soul, then describes the Angel of Death's reassurance to him, the appearance of the Messenger of God, the Commander of the Faithful, Fatima, al-Hasan, al-Husayn, and the Imams from their progeny (peace be upon them), and the glad tidings of his being with them. Al-Majlisi judged the second hadith in this chapter to be "weak according to the majority opinion" [1].

The chain of narrators in the aforementioned chain includes Sahl ibn Ziyad, then Muhammad ibn Sulayman, on the authority of his father, on the authority of Sudayr. We mention the chain here to identify the hadith, not to make an arbitrary judgment based on the names of its narrators. The transmitted ruling is al-Majlisi's ruling on this chain of transmission; therefore, we should not replace it with the phrase "authentic hadith" simply because the scene is common in sermons or comforting.

The weakness of the chain of transmission does not mean that its content has been proven false, just as the agreement of some of its meanings with the Quranic hope does not mean that all its details have been proven. It can be presented as a narration with its degree of authenticity, and its meaning can be considered within its limits, without transforming it into a definitive description of every dying person.

It is also important to note that the explanatory phrases inserted between the verses of Surah al-Fajr in this report are not additional words from the Surah. If we quote the verse in its entirety, we retain it as it appears in the Quran, and if we present the interpretation of the narration, we attribute it explicitly to it.

Another example: The report of Sa'id ibn Yasar

In the chapter "What the Believer and the Disbeliever Witness," there is the report of

Sa'id ibn Yasar, who was present at the death of one of Sabur's sons. The narrator reports that he extended his hand and addressed Ali (peace be upon him), then informed Imam al-Sadiq of what he had heard. The Imam replied, "By God, he saw him! By God, he saw him! By God, he saw him!" Al-Majlisi describes the third hadith in this chapter as “muwaththaq (reliable)” [2].

This is a different type of hadith in terms of its authenticity than the previously mentioned report of Sudayr. In the terminology of Imami hadith classification, the term muwaththaq (reliable) is not automatically synonymous with sahih (sound), even though many scholars, according to their principles, consider reliable hadiths as evidence. Therefore, we retain the terminology used by the critic and neither raise nor lower its level in the name of simplification.

The narration involves the Imam's confirmation of a specific observation; it is not an experience that anyone present at a sick person's bedside can replicate. Therefore, it is incorrect to infer from it that every disjointed word uttered by a dying person is an address to the unseen world, nor that everyone who does not utter such words is deprived of glad tidings.

The Narration, the Explanation, and an Attempt to Conceive the Manifestation

When explaining the narration of Sudayr, al-Majlisi presents possibilities regarding the manner of manifestation and presence, and regarding the understanding of their presence by various individuals. He then states, continuing his explanation: “General belief in such matters is more prudent and preferable, and God knows best.” [1] This statement serves as a reminder of the limits of understanding, not an invitation to treat every possible explanation as a text issued by the Imam.

We must therefore distinguish three levels: the wording of the narration, the degree of its transmission, and the interpretation proposed by the commentator. The assertion of imaginal bodies in explaining the manner of witnessing, for example, is a discussion of understanding the narration, and no addition may be inserted into its text without clarification. A separate chapter on the term and its limitations will be dedicated to the section on the intermediate realm (Barzakh).

This chapter cannot resolve all the theological differences concerning the reality of presence and vision. Its purpose is to present a specific proof as it has reached us, and to prevent us from moving from belief in the unseen to a detailed description that we assert with certainty without sufficient textual evidence.

Not everything in this chapter is of the same degree.

In the same first chapter, there is a report about two winds, one called al-Munsiya (the one that induces forgetting) and the other al-Muskhiyya (the one that makes parting easier). Al-Majlisi described the first hadith as “majhul (unknown)” [3]. In the chapter on witnessing, he described the first hadith as “weak according to the majority,” as well as the fourth hadith, which mentions the presence of the Prophet, Ali, Gabriel, and the Angel of Death [4]. The existence of multiple reports on a single topic does not exempt us from identifying each chain of transmission when citing it

in detail.

This sample does not necessitate judging the entire chapter as weak, as we have seen a reliable report within it. Furthermore, it is not correct to collect different reports and then declare each shared or separate detail to be widely transmitted without independent research into the chains of transmission and the texts. A large number of titles in a comprehensive book is not, in itself, a study of widespread transmission.

How should we sit near the dying person?

The practical approach we need is not to interrogate the dying person: Did you see something? Who did you see? Why didn't you smile? We pray for mercy for them, we ask for their well-being, we consider their comfort and the medical team’s instructions, and we don't burden their faltering words with the responsibility of reassuring everyone around them.

As mentioned in the chapter on changes in the last days of life, disturbances in consciousness may have medical causes that require attention. These should not be ignored simply because someone has decided that every disturbance is a vision of the unseen. Conversely, this medical explanation is insufficient to issue a philosophical judgment that negates everything the texts say about the unseen; every issue has its own question and evidence.

As for facial color, ease or difficulty of breathing, the presence or absence of tears, these are not indicators by which we can assign people to Paradise or Hell. A person who can no longer speak does not lose their right to be treated with kindness and care, and a person whose death is prolonged does not become the subject of religious condemnation because of their illness.

Chapter Summary

Narrations of witnessing open the door to hope of meeting the Prophet and his family, peace be upon them, but they place the researcher before the responsibility of accurate transmission: fame should not obscure the chain of narrators, nor should attempts to explain the manner of the event be transformed into new revelation. We believe in what is proven by its evidence, we explain what we narrate according to its degree of certainty, and we leave what we do not know to God's knowledge.

This prepares us for the following question: What do we do with the modern testimonies of people who survived cardiac arrest and then described very vivid experiences? This is a different subject matter from the narration, deserving of attention and examination, and it is not appropriate to conflate it with the narration before distinguishing the subject of each.

Chapter Sources and References

[1] Al-Kulayni, Al-Kafi, Book of Funerals, Chapter: That a believer is not forced to have his soul taken, Hadith 2, as reproduced by Al-Majlisi in Mir'at al-'Uqul, Vol. 13, pp. 285–286. The chain of narrators according to Al-Majlisi: Weak according to the majority opinion; The possibilities for how this is represented are derived from the explanation, not from the text of the hadith.

[2] Al-Kafi, Book of Funerals, Chapter on What the Believer and the Disbeliever Witness, Hadith 3; Mir'at al-'Uqul, Vol. 13, pp. 289–290. Al-Majlisi’s grading: Muwaththaq (reliable); the text of the hadith of Sa'id ibn Yasar is completed on the following page.

[3] Al-Kafi, the preceding chapter on the believer not being forced to have his spirit taken, Hadith 1; Mir'at al-'Uqul, Vol. 13, pp. 284–285. Al-Majlisi’s grading: Majhul (unknown).

[4] Mir'at al-'Uqul, Vol. 13, pp. 286 and 290, explanation of hadiths 1 and 4 from the chapter on witnessing; both are considered “weak according to the prevalent assessment” in al-Majlisi’s grading. This presentation does not include a comprehensive investigation of all the chains of transmission for this chapter.

Chapter 104: Near-Death Experiences

A person regains consciousness after resuscitation and says they saw a light, felt outside their body, or experienced a flashback to their life. In their own view, their story is not a fleeting dream; they may feel it is among the clearest they have ever lived. How can we listen to them fairly, without taking their testimony as proof of more than it can bear, and without ridiculing an experience that has changed their view of themselves?

These experiences are commonly called "near-death experiences." The name alone does not define their mechanism, nor does it prove that the person experienced a final death and then returned. It is a label for a group of studied testimonies and phenomena, requiring consideration of each individual's case, the time of the supposed experience, and the method used to gather information about it.

Surviving Cardiac Arrest Is Not a Return from Definitively Confirmed Death

It has been shown in previous medical chapters that cardiac arrest may be followed by successful resuscitation, and that it does not always equate to death as definitively established by its criteria. Therefore, describing a study participant as having survived cardiac arrest does not allow us to say that they have returned after the irreversible death addressed by the legal definitions of death.

This precision does not diminish the seriousness of what they experienced; rather, it protects the subject of the research. The scientific question here concerns what might happen to cognition and memory during a severe crisis, and during or around resuscitation. The fate of a person after definitive death is a separate question, and the two should not be substituted for each other in the argument.

From Individual Accounts to Systematic Study

In a Dutch prospective study published in 2001, researchers followed 344 patients who survived cardiac arrest in ten hospitals. Sixty-two of them, or about 18%, reported an experience classified as a near-death experience (NDE), with 41 experiencing a deeper level of the experience according to the study's scale. The follow-up also investigated changes in their lives afterward [1].

The descriptions covered in the paper include the sensation of leaving the body, light, and reviewing life events. However, it also cautioned against the influence of

definition, sample, and memory on the results. Therefore, we do not extrapolate the percentage of this group to the general population, nor do we treat accounts relayed years later the same as interviews conducted close to resuscitation. Even prospective studies do not eliminate all selection and recall issues [1].

What did the AWARE II study say?

In the multicenter study published in 2023, the follow-up included 567 cases of in-hospital cardiac arrest; 53 individuals survived, and 28 completed the interviews. Eleven of these individuals reported memories or perceptions suggestive of conscious activity, and the transcendental experience that researchers termed a “recalled experience of death” was present in the accounts of six participants. The numbers 11 and 6 are not independent groups that can be automatically summed [2].

No one recognized the target visual image in the test, and only one participant recognized the auditory stimulus. Researchers also observed patterns of brain electrical activity during resuscitation, in some recordings up to 35–60 minutes after its onset. This is a finding during ongoing resuscitation efforts, not a report that a brain deemed permanently dead returned to consciousness after an hour [2].

The published conclusion is probabilistic: perception may occur during cardiac arrest, and the appearance of electrical activity may reflect a resumption of brain network activity. This alone does not establish when a particular person’s remembered image arose, nor allow its content to be inferred from the EEG. Interviews were limited to 28 survivors [2]; the NYU report indicated that EEG monitoring included 85 of 567 cases [5]. Therefore, we separate the interview data from the recording data and do not assume a simultaneous recording for every personal account.

Electrical Activity in the Dying Brain

Another study in 2023 analyzed recordings of four patients in a coma at the end of their lives, both before and after the withdrawal of respiratory support, according to the clinical decisions made in their cases. Two of them showed an increase in gamma wave activity and some indicators of connectivity between brain regions. The researchers concluded that this increase in activity may occur in some patients during the dying process [3].

The two patients who showed the increase had a history of seizures. The researchers did not find any apparent epileptic activity in the recordings during the final hours, but they did not completely rule out deep foci that the electrodes could not detect, nor a pathological explanation for the activity unrelated to consciousness [3]. The patients did not survive to describe their experiences. Therefore, we do not know from the recordings whether they saw their relatives or reflected on their lives; neural activity does not constitute evidence of the content of an experience, nor does "gamma" become a scientific name for the soul or evidence of its absence.

Can some features of the experience be modeled?

In a small study published in 2018, the experiences of 13 healthy volunteers after

being given DMT were compared to their experiences with a placebo. Similarities appeared on a scale measuring near-death experiences. The order of the sessions was fixed, and blinding was single-blind. The researchers noted the potential for the effects of order and expectation, as well as the limitations of the sample [4].

This result suggests that some similar features can be generated under controlled pharmacological conditions. It does not prove that every experience of cardiac arrest is caused by this substance, or that the dying brain releases it in a specific quantity. Similarity in description is not proof that all causes are the same. This is a research demonstration, not a recommendation to use hallucinogens to test the unseen or treat fear [4].

Four questions that should not be combined

First: Does the person describe their experience truthfully? Second: When did this experience take shape in relation to cardiac arrest, resuscitation, and recovery of consciousness? Third: What is its likely mechanism? Fourth: Does it substantiate a claim of existence independent of the body? We may have a good answer to the first question, but the second or third may remain unresolved, and certainty does not automatically extend to the fourth.

Testimony describing an external, verifiable event requires independent comparison: Was the information specific before verification? Could it have been heard? Was the account recorded before the witness heard what others said? These are logical questions to improve the test, not accusations of lying against the witness.

Similarly, the inability to recall an experience does not prove the absence of any perception, because the act of remembering itself is part of what needs to be examined. Conversely, the power of subjective memory alone is insufficient to pinpoint the exact moment of its occurrence. Therefore, we do not treat human narrative as a timekeeping device, nor do we dismiss it simply because it is not one.

The Place of Faith and the Place of Inquiry

In the methodology of this book, we base our understanding of the intermediate realm (Barzakh) and resurrection on the Quran and established transmitted knowledge. We do not base our belief on a single experience that may be subject to reinterpretation. A believer may find in some testimonies a reminder of destiny, but emotional remembrance is not the same as proof that establishes the details of doctrine.

Conversely, it is impermissible to declare that a partial neurological explanation has resolved the entire question of the soul. Investigating the causes of a specific experience does not automatically settle the general philosophical and theological question. Between haste in affirmation and haste in denial lies ample room for serious inquiry that acknowledges both what is known and what is unknown.

Whoever recounts a frightening or perplexing experience needs to be listened to, not subjected to propagandistic interrogation. Its significance in their life can be respected, and professional support can be sought if they continue to suffer, without imposing a religious or materialistic interpretation upon them, and without making

them a binding witness to all our beliefs.

Conclusion of Part Eleven

At the end of life, medical questions and questions of meaning meet, but this does not erase the differences between their methods. We have examined the weakening of bodily functions, care, the confirmation of death, accounts of the taking of souls, narrations of what the dying witness, and research into recalled experiences. Throughout, the human being remains a person with dignity, not a case defined solely by a machine or a story to which we may add unsubstantiated details.

The next part will turn to the body left behind by the deceased: What changes in it after death? How do we preserve its sanctity, prepare it for burial, and support the remaining family members through the experience of loss?

Chapter Sources and References

[1] Van Lommel et al., The Lancet, 2001;358:2039–2045, DOI:10.1016/S0140-6736(01)07100-8. The abstract, methodology, and generalization limits sections were reviewed from the study text; percentages pertain to the sample and its definition.

[2] Parnia et al., AWAreness during REsuscitation—II, Resuscitation, 2023;191:109903. Figures and results are from the original indexed abstract; our presentation does not represent a review of all individual data.

[3] Xu et al., PNAS, 2023, 120:e2216268120. The patient descriptions, discussion of results interpretation, and methodology were reviewed in the original text; not all data in the appendix were reviewed.

[4] Timmermann et al., DMT Models the Near-Death Experience, Frontiers in Psychology, 2018;9:1424. The study methods, results, and limitations were reviewed; phenomenological similarity does not prove a single explanation.

[5] NYU Langone, Study Team Report “Patients Recall Death Experiences After Cardiac Arrest,” September 14, 2023; including the number of cases monitored by the EEG.

Part 12: The Body after Death and Burial

After the departure of its owner, the body remains a trust: we carry it gently, preserve its dignity, restore its name if it is unknown, and lay it to rest in the earth without depriving its family of their right to grieve. Understanding what happens to it is not an exploration of horror, but rather a means of comprehending nature and serving dignity and justice.

This part follows changes in the body, decomposition, and the variations in environments. It then moves on to preparation, burial, and rights, as well as accounts of the preservation of some bodies, and concludes with the loss experienced by the living. At each stage, we separate medical observation from religious legal rulings and claims of the unseen.

Chapter 105: The First Hours after Death

The hand that was moving does not instantly turn to dust. The body's form remains familiar, but its temperature, color, and the elasticity of its tissues change. Family members may be alarmed by an unexpected difference, or they may interpret it based on what they've heard in oral traditions. Understanding begins with a simple fact: a person's death does not mean that all chemical changes in all their tissues are completed immediately.

This chapter follows the confirmation of death by specialists. It is not a list by which the reader can declare an unresponsive person dead, nor a reason to delay calling for an ambulance in a sudden collapse. Postmortem signs are a matter of science and care, not a substitute for assessing an emergency situation.

The Body and Tissues: Two Different Levels

A medical example of this distinction is the possibility of donating certain tissues after death, subject to specialist conditions. Chelsea and Westminster Health mentions heart valves, eye tissue, bone, and skin. This does not mean that every tissue is suitable in every case, nor does the presence of usable tissue make a person alive [1].

We have addressed the legal aspects of donation in a separate chapter. Here, we use this example to understand the difference between the end of a person's life and the biological state of a part of their body, not to issue a new legal ruling or circumvent necessary approvals. An ethical question may remain even when the process becomes technically feasible.

Temperature: A Variable That Doesn't Work as a Fixed Clock

Body cooling is affected by ambient temperature, air movement, body size, and clothing. The body's condition before death may also influence temperature. Therefore, neither a touch of the hand nor a general rule like "one degree per hour" is sufficient to determine the time of death. Training materials published by the US Centers for Disease Control and Prevention emphasize that cooling is variable and

that temperature should be read in conjunction with other data [2].

In a study of 19 adult bodies placed in refrigeration, researchers monitored temperature for several hours afterward and found significant limitations to using it to estimate the time since death after refrigeration. Clothing and its moisture content were influential variables. An equation derived from such a sample cannot be converted into a universal timekeeping device valid for every location and body [3].

If the specialist says the estimate is approximate, he has not failed in his work; he may be accurately describing what the evidence allows. Artificial certainty in these matters can harm the investigation and the deceased's family, while mentioning a margin of error preserves the limits of knowledge.

Discoloration and Blood Accumulation

When circulation ceases, blood accumulates due to gravity in the lower parts of the body, resulting in postmortem discoloration. Its appearance is affected by the body's position and may be difficult to perceive with darker skin pigmentation, anemia, or blood loss. Lighting also affects its visibility. Its distribution may change if the position is altered before it stabilizes; therefore, the specialist relates it to the context of the examination, not the photograph alone [2].

This explains why a difference in facial color or a visible spot in a photograph should not be interpreted as a message about the deceased's reward or punishment. We have moved here to a physical and anatomical question about blood distribution, not a means of divination.

Why do muscles stiffen?

In a living muscle, the proteins actin and myosin function in a cycle that requires the energy molecule ATP, not only to produce movement but also to break the bonds between the two proteins. When the ability to continue this cycle is exhausted after death, relaxation does not occur in the same natural way. This principle helps to understand rigor mortis, rather than the idea that the body resists being held by a conscious will [4].

The onset and severity of rigor mortis vary depending on the muscle and the circumstances; it may appear in smaller muscles before larger ones, and it does not necessarily have to be a chemical process that literally creeps from head to toe. Furthermore, it may be less pronounced in infants due to their lower muscle mass. For these reasons, it is not used solely to determine the time of death [2].

From a humane perspective, we do not need to test the strength of rigor mortis in front of the family or to turn the body into an object of curiosity. The person preparing the body must adhere to the requirements of professional and religious requirements for care, explaining to the family what they need in a calm manner, without intimidation or grandstanding.

The Eye and Cornea

A 2022 research paper studied changes in 46 corneas from 23 deceased people

during the first seventeen hours after death. A difference was observed between the open and closed eyes: dryness was more pronounced with exposure, while swelling was observed in the corneal tissue of closed eyes. The results indicate that the position of the eyelid and the environment influence the appearance of the eye; therefore, the change cannot be reduced to the passage of time alone [5].

Opening the eye after death is not evidence of the deceased's fear, nor is closing it independent evidence of their peace in the afterlife. We may wish the deceased well, but hope does not require attributing meaning to a physical sign for which no proof exists.

What can we conclude?

If the temperature, color, and rigor mortis differ between two bodies, this alone does not prove a difference in the time of death, as the surrounding conditions may differ. Similarly, the absence of a sign expected by a non-expert is not sufficient to conclude that the death documentation is incorrect. Every conclusion requires the totality of evidence and context, not a single sign gleaned by an observer from a scene.

The time of death recorded in an incident witnessed by the medical team also differs from the estimated time when a body is found after an unknown period. The former relates to what could be documented at the time of the event, while the latter is a subsequent inference about a period of time. Confusing the two leads the reader to demand from the body's remains the accuracy of a record that never existed.

Knowledge that Protects Dignity

The bereaved may ask: Why has the deceased changed? The question is understandable because they knew a living face and now find a painful alteration in the image they loved. They should not be answered with disdain or with an improvised mystical explanation. Nature can be gently explained, while acknowledging that the explanation will not completely alleviate their grief.

Dignity is not contingent upon physical features remaining unchanged. A body that has changed color or whose muscles have stiffened is still a human body with a name and rights, no less sacred than a body whose appearance remains familiar. This meaning will remain with us even as we reach decomposition and what happens to tissues and bones.

Chapter Sources and References

[1] Chelsea and Westminster Hospital NHS Foundation Trust, After the death of your loved one, section on tissue donation. The local legal procedures cited on that page were not generalized.

[2] CDC, Sudden, Unexplained Infant Death Investigation, Chapter 6, pp. 156–158 in the book's pagination. The descriptive principles were used; the timelines were not treated as definitive rules. The original manual concerns the investigation of infant deaths.

[3] Algor mortis: an erroneous measurement following postmortem refrigeration, 2011, PMID:21644987. Results from the original abstract; small sample in a controlled cooling environment.

[4] OpenStax, Biology 2e, Section 38.4, The Actin-Myosin Cycle and the Role of ATP Binding in

Their Separation; for further reading, see the chapter on muscle in this book.

[5] The Influence of Eyelid Position and Environmental Conditions on Corneal Changes in Early Postmortem Interval: A Prospective, Multicentric OCT Study, 2022, PMID:36140570; reviewed original abstract, without generalizing individual time predictions.

Chapter 106: Decomposition and the Fate of Tissues and Bones

In life, the body maintained its boundaries: skin that separated, a circulatory system that delivered, an immune system that monitored, and cells that repaired what was damaged. After death, this organization does not remain as it was. The materials from which the human being was composed begin another journey in the environment, while the question of his fate, in the Quranic perspective, remains greater than the fate of his materials.

We need to describe decomposition without exaggeration or trivialization. Knowledge does not require shocking images, and remains do not lose their sanctity when they become the subject of examination. The aim is to understand what happens and to prevent confusion between natural change and divine punishment, or between scientific assessment and absolute certainty.

Autolysis and Putrefaction

Autolysis refers to the breakdown of cellular components by their own enzymes, while putrefaction is linked to the action of microorganisms within tissues. The two processes overlap, and the body should not be conceived of as a sterile chamber awaiting the arrival of all microbes from outside. In the microbiome section, we have identified organisms that were present in the living human being, and whose relationship with their environment changes after death [1].

Research describes early changes in tissue color, gas formation, and bloating, followed by progressive loss of soft tissue and eventually dry or skeletal remains. Some areas may be in a more advanced stage than others. These are descriptions of a continuous and varying progression; no doors open on the same day for all bodies [1].

When insects and decomposers gain access, they may contribute to tissue removal, while burial, isolation, or desiccation alter the course of the process. An exploratory study of two bodies revealed changes in bacterial communities between the onset and end of the bloat stage, with differences among sites on the body and between the two bodies. The small sample size is part of the meaning of the result, not a detail to be disregarded [1].

From Tissues to the Surrounding Environment

Decomposition does not occur in isolation. In a study of the decomposition environment at the University of Tennessee, soil samples from different research sites were compared with samples from elsewhere. Differences in moisture, acidity, organic matter, and changes in the bacterial community beneath decomposing

bodies were observed. The environment receives the body's trace, not merely its static backdrop [2].

However, the presence of a chemical or microbial trace in the soil does not, by itself, translate into a person's name or cause of death. It is important here not to shift the term "fingerprint" from its specific scientific meaning to a promise that the earth will reveal all the details of the incident simply by taking a sample.

Why Do Bones Last Longer?

Bone is not a purely mineral stone; it is a composite structure that combines proteins, primarily collagen, with a mineral component. Research on bone alteration after burial shows that its components can be subject to chemical decomposition and microbial action, and that the loss of mineral protection can make the organic component more susceptible to decay. Therefore, it is incorrect to conceive of the skeleton as a final, unaltered state [3].

A geochemical study of archaeological remains from a Spanish site has linked preservation status to soil type and bone type. Skeletons in acidic soil were more severely damaged than those in slightly alkaline environments, and the response of some bones varied. This finding, specific to certain materials and locations, supports the importance of the environment and does not provide a universal lifespan for all bones [4].

Thus, some remains may survive for a long time in one location and deteriorate more quickly in another. The veracity of a historical event cannot be measured by the popular expectation that all bones should disappear after a certain number of years. Similarly, an old fragment of remains alone is insufficient to construct a complete story about its owner without examining identity and context.

Can we determine the time of death from the degree of decomposition?

The correct question is not: What day of the year does this body represent? Rather: What period of time does this body correspond to under these conditions? Estimation requires knowledge of the environment and exposure history, comparison of independent markers, and selection of models appropriate to the case. The logic of estimation here is probabilistic, unlike reading a clock stopped at the moment of the event.

Projects supported by the National Institute of Justice are exploring the use of microbial community succession to estimate the time since death. The Institute’s 2021 presentation explained that the diversity of environments and the complexity of these communities necessitate testing the validity of databases for different cases; what is studied in the open does not automatically transfer to a building or water. The presentation described a research path, not a foolproof tool ready for every case [5].

The phrase “microbial clock” may sound appealing, but it is a metaphor for a modelable relationship between time and change, not a clock contained within each body waiting to be read. Every model needs to have its limitations and scope defined,

and this responsibility doesn't end when the analysis is computerized.

Why Study Multiple Environments?

Texas State University explains that its research facility studies decomposition and the postmortem period in diverse climatic and topographical conditions, and that the need for data relevant to Texas and the western regions was one of the reasons for its establishment. This is an example of how science cannot simply apply a single map to all locations [6].

Research here relates to the ethics of dealing with donors and their families, as well as the regulations governing each institution. The mere existence of a facility or the potential for knowledge acquisition does not make every research method permissible, under religious or civil law; we discussed the origin of this distinction in the chapter on dissection, research, and donation. Documenting knowledge does not negate the rights of the individual from whose body we have learned.

From the Earth and to It

God Almighty says: “From it We created you, and into it We will return you, and from it We will bring you forth once again.” [Ta-Ha: 55]. This verse encompasses the beginning, the return, and the resurrection within a single framework. It does not present a chemical timetable for tissue decomposition, nor does it make the preservation of the physical form a prerequisite for God’s power to resurrect.

If flesh and bone decompose and the matter separates, scientific observation addresses this transformation. The possibility and reality of resurrection, however, are examined through their respective Qur'anic and rational proofs, which will be discussed later. We do not demand that the science of decomposition prove the afterlife, nor do we consider its description of the disappearance of the physical form as an automatic refutation of belief in it.

Hence, we must reject the use of natural decomposition to defame the deceased. If tissue changes were sufficient evidence of a bad end, natural law would become a religious court in the hands of whoever observes the body; and there is neither science nor justice in such a conclusion.

Chapter Summary

Decomposition is an intertwined biological, chemical, and environmental process, and bones themselves are subject to multiple changes. What is useful for investigation is gathering evidence within its proper context, not a terrifying image or a predetermined date without context. Matter retains its laws, the deceased its sanctity, and the unseen has its appropriate path of reasoning.

In the following chapter, we will examine the role of location in preservation: What effect do humidity, dryness, water, or cold have on these processes? And how can we differentiate between natural preservation and human interventions, without treating preservation alone as a judgment on the deceased?

Chapter Sources and References

[1] Hyde et al., The Living Dead: Bacterial Community Structure of a Cadaver at the Onset and End of the Bloat Stage of Decomposition, PLOS ONE, 2013;8:e77733. The introduction and abstract were reviewed; exploratory study on two bodies.

[2] Franklin E. Damann, Biomarkers of Human Decomposition Ecology and the Relationship to Postmortem Interval, 2012 Report, NCJ241440; the abstract of the report was reviewed published by the NIJ.

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[4] Chemical compositional changes in archaeological human bones due to diagenesis: Type of bone vs soil environment, abstract of the study registered in the EPA's HERO database; thirty skeletons from the A Lanzada site.

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[6] Texas State University, Forensic Anthropology Research Facility; description of the institution's research objectives in decomposition and varying conditions.

Chapter 107: The Body in Different Environments

Water does not receive a body in the same way as dry sand, nor is a refrigerator the same as a sun-exposed field. A long period of time may pass, and tissues may remain intact in one place while rapidly deteriorating in another. If we disregard the environment, we may perceive these differences as an inexplicable mystery, perhaps hastily assigning them a religious or historical meaning before investigating.

The intention is not to describe methods by which non-experts handle corpses, but rather to understand why the researcher or the deceased's family might perceive or hear different things. All practical measures related to the body remain the responsibility of qualified authorities, within the framework of applicable religious rulings and procedures.

Dryness May Preserve Some Tissues

The University of Sydney Museum explains how the hot, dry sand in some ancient Egyptian tombs helped the body lose fluids and slow decomposition, resulting in natural mummies without the sophisticated artificial treatments we know today. Distinction is important: soft tissues may be preserved due to environmental conditions, not because every preserved body was subjected to the same human procedure [1].

The term “preserved” does not imply that the body remained identical to its state when it was alive; dehydration itself alters the tissues. Similarly, ambient temperature alone is insufficient to predict the outcome; rather, we consider the combination of temperature, humidity, exposure, and other conditions, as well as what is confirmed by examination in a specific case.

Dry tissues may be found alongside areas of greater decomposition, so a general

term should not be interpreted as a claim that the entire body underwent the same changes. It is always helpful for the reader to ask: What part was preserved? And in what sense did the researcher use the term “preserved”?

Water is not a single environment.

Specialized research on remains recovered from water describes the effects of temperature, current, obstacles, and organisms present. Decomposition may be slower in cold water, but it does not follow a single pattern for all seas and rivers. Some changes may accelerate after the body is removed, and the marks left by aquatic organisms or the body rubbing against obstacles may be confused with injuries requiring professional interpretation [2].

Therefore, it cannot be concluded that every body found in water died by drowning, or that the location where it was found is necessarily the location of death. The same source emphasizes examining the connection between the two locations. The investigation looks at the context and the evidence, and is not replaced by the impression left by the scene [2].

Adipocere: A Transformation That Preserves Some Form

One of the transformations that can occur to fat is the formation of a waxy substance called adipocere, sometimes called corpse wax, formed through postmortem saponification. A study published in 1993 examined human fat samples under controlled conditions and found that temperature, covering, and the surrounding environment all influenced the formation of this substance. Its formation was slower in some cold conditions than in warm conditions [3].

The lesson here is not to establish a timeframe after which wax will necessarily appear in every grave. The experiment was conducted on samples under specific conditions; it is not equivalent to an entire grave with all its variations. Furthermore, the waxy substance is a result of a change in the fat, not proof that no decomposition occurred. Preservation of some physical characteristics may occur alongside significant chemical changes.

Cold and Ice

The South Tyrolean Archaeological Museum explains that the preservation of Ötzi's mummy in the museum relies on a cold chamber that constantly controls and monitors temperature and humidity to simulate ice-like conditions suitable for its preservation. This is a tangible example of how tissue preservation can be linked to the preservation environment, and that preserving ancient remains after their discovery requires specialized work [4].

It is incorrect to jump from the existence of a preserved mummy to the possibility of medically reviving its owner. Preserving matter or some structure is one thing, and restoring a human being with their functions and memory is another. Furthermore, displaying remains in a museum does not mean that all ethical questions regarding their handling have been resolved.

Temporary Refrigeration and Identification

The joint manual on managing dead bodies after disasters recommend temporary refrigerated storage when the usual capacity to complete procedures is disrupted. The goal is to preserve remains and provide a better chance of identification, linking each body and its information to a unique code to prevent confusion. This is the management of a human trust, not merely the preservation of organic matter [5].

Refrigeration does not replace the documentation of information, just as documentation does not replace respect for beliefs and dignity. In disasters, preserving a name may become more difficult than preserving the body itself. Therefore, the necessary delay in burial for verification should not be interpreted as automatic negligence, nor should haste be used as a justification for the loss of identity and rights.

Artificial Preservation Is Not a Single Technique

A researcher in medical Egyptology at the University of Manchester confirms that examinations of mummies have changed the perception of a single, fixed method of Egyptian mummification; materials and techniques varied according to location, resources, and period. Furthermore, the texts of ancient historians do not replace the examination of the bodies themselves, and it is incorrect to assume the removal of the same organ in every case [6].

From this, we can derive a broader principle for interpretation: the name of the practice does not absolve us from questioning the method and the evidence. Discussions of a natural mummy, a body treated with preservatives, or a refrigerated body describe different conditions, not identical degrees of tissue preservation.

A Linguistic and Jurisprudential Distinction: Two Meanings of Tahnit

The reader may hear the term tahnit al-mayyit in Imami jurisprudence and assume it refers to the method of preserving mummies. However, in this jurisprudential context, it refers to the application of camphor to the seven points of prostration, as explained in Sayyid Sistani’s Minhaj al-Salihin. This is distinct from the lengthy artificial treatment used to preserve the body; the details of this preparation will be discussed in the following chapter [7].

Sharing a term does not make the two processes identical in meaning or ruling. The religious obligation of applying hanut (camphor), according to the Marja’, cannot be used to justify any chemical or surgical intervention called embalming in modern usage. Each issue requires its own specific subject and ruling.

Preservation Alone Does Not Establish a Miraculous Divine Honour

If a body remains preserved, a practical question arises: What remains, under what circumstances, and how is this preservation documented? A different religious question arises: Is there evidence of a special divine honour (karama) in this case? A natural description alone does not answer this second question, nor does it preclude the possibility of such a divine honour in principle, but it does prevent turning astonishment into proof.

Similarly, the decomposition of a righteous person's body does not give us the right to disparage that person. The place of burial and the conditions to which it was subjected are not the scales by which we judge people's standing before God. We will dedicate a chapter to the accounts of the preservation of some bodies, reviewing the text, the narrative, and the limits of what can be definitively stated.

Chapter Summary

The paths taken by a body vary according to water, drought, cold, soil, and human handling. Every explanation requires appropriate evidence, and every preservation remains relative to what has been examined. Human dignity, however, does not await the outcome of such examination; it is present in the manner of its handling, naming, preparation, and burial.

Chapter Sources and References

[1] University of Sydney, Egyptian Mummification, Natural Mummification Section; Museum Explanation of the Role of Dry Sand in Some Burials.

[2] Decomposition Changes in Bodies Recovered from Water, Academic Forensic Pathology, 2016, PMID:31239870; original abstract and environmental limitations reviewed.

[3] Mellen et al., Experimental observations on adipocere formation, Journal of Forensic Sciences, 1993;38:91–93. Results of an experiment on fatty tissue; no fixed time for each body.

[4] South Tyrol Museum of Archaeology, Ötzi the Iceman to Receive a New Cooling System; the institution describes its preservation and monitoring system.

[5] ICRC/WHO/PAHO/IFRC, Management of Dead Bodies after Disasters, 2nd ed., Chapter 7 on Temporary Storage, with a section on Identification. This chapter is not a field implementation manual.

[6] University of Manchester, Five Discoveries That Changed Our Understanding of How the Ancient Egyptians Created Mummies; the university researcher presents the differences in techniques and the importance of examination.

[7] Sayyid al-Sistani, Minhaj al-Salihin, vol. 1, corrected 1445 AH, Chapter 4: Tahnit (the Application of Camphor); the jurisprudential definition is not equivalent to the preservation of mummies.

Chapter 108: Preparing and Bidding Farewell to the Deceased

In the hour of loss, the family needs someone to share the grief and the work. There is a body that must be preserved, rulings that must be observed, and people overwhelmed by the news who cannot bear disputes over every detail. Preparation, in its religious sense, is not simply removing the deceased from our sight quickly, but rather fulfilling their rights as we bid them farewell.

God Almighty says: {Then He caused him to die and provided him a grave} [Abasa: 21]. The details of ritual washing, application of camphor, shrouding, prayer, and burial are derived from the legal rulings based on their evidence. Here, we will present a concise outline according to Minhaj al-Salihin by Sayyid Ali al-Husayni al-Sistani, corrected edition 1445 AH, as reviewed on his office's website on October

16, 2026; not that all details are agreed upon by all jurists.

This chapter is not a practical guide that replaces the need for a qualified washer or for seeking clarification in special cases. What is termed a necessary precaution is not merely recommended, nor does a recommended practice become obligatory simply because the family is accustomed to it.

Responsibility and Guardianship

The source stipulates that the guardian is obligated to undertake the preparation of the deceased, either directly or by delegating it to someone else. It also addresses the issue of the obligation being waived due to the actions of another, and the order of guardianship and wills. If no guardian is available or refuses to undertake the preparation, the responsibility shifts to other persons subject to the religious obligation, as detailed above. The deceased should not be left without care due to a family dispute [1].

The practical application of this principle is that the family should know who will handle the coordination, who will document the paperwork, and who will liaise with the religious and professional authorities. Not every relative needs to be the decision-maker, but each can make a contribution without turning the funeral into an arena for asserting their status.

Washing

The basic principle is three washings in order: first with water mixed with sidr (lote-tree) leaves, then with camphor water, and finally with pure water, with the prescribed intention and method. The person performing the washing must be of the same gender, with exceptions including spouses, and further details regarding children, mahram relatives, and the absence of someone of the same gender. If water is unavailable or there is a fear of the flesh scattering during washing, then dry ablution (tayammum) is performed, subject to its conditions; the alternative should not be improvised without first assessing the situation [1].

This is an act of worship related to the deceased, not a sterilization process whose success is determined by the degree of pleasant fragrance. Maintaining modesty, gentleness, and privacy is part of fulfilling this trust; therefore, there is no place for photographing what the family dislikes or circulating what is visible of the deceased's body under the pretext of education or curiosity.

Those in a state of ihram for Hajj or Umrah, and those considered martyrs in the specific legal sense, have special rulings; therefore, washing is not waived for anyone commonly described as a martyr. Nor can the ruling regarding the remaining parts of the body or those infected be deduced from the general rule alone; rather, the specific details of the case must be examined [1].

Hanut: Applying Camphor

Hanut is the application of camphor to the seven points of prostration: the forehead, the palms of the hands, the knees, and the big toes. This is done after ritual washing or its prescribed substitute, and before or during shrouding. The camphor must meet

the conditions specified by the relevant authority regarding permissibility, characteristics, and purity, according to the detailed ruling. It has already been mentioned that this is distinct from the embalming of mummies [2].

Adhering to the legal meaning protects the practice from additions that make custom a condition. The goal is not to transform the body into an ornate display, but rather to fulfill the obligation within its limits, without believing that excessive use of materials or outward appearances automatically increases respect for the deceased.

The Shroud

The shroud, as stated in the source, consists of three garments: a loincloth, a shirt, and a full-body wrapping sheet, with limits and precautions regarding the amount of covering, and rulings in cases of impossibility. It is forbidden to shroud with stolen goods. The treatise details ritual purity, fabric types, and cases of necessity. The criterion is not the high price, but rather the fulfillment of the conditions and the preservation of rights [3].

The source mentions the desirability of two fresh palm fronds with the deceased, detailing their placement and alternatives when palm fronds are unavailable. Mentioning them here clarifies the difference between what is obligatory and what is recommended; thus, it cannot be said that the funeral preparations are invalid simply because they are missing [4].

No matter how much the children loved their father, disputed money or the rights of a minor do not become permissible simply because the expenditure occurred at a funeral. The discussion of funeral expenses and the estate will follow in the next chapter, because honoring the deceased is inseparable from the rights of those he left behind.

The Funeral Prayer

Minhaj al-Salihin prescribes the funeral prayer for a deceased Muslim, with details regarding children. It consists of five takbirs (saying "Allahu Akbar"), interspersed with supplications according to the prescribed manner. The prescribed formula includes the two testimonies of faith (shahada), prayers upon the Prophet and his family, supplications for the believers, and then for the deceased. There is no recitation of the Quran or the salutation of peace (taslim) in this prayer. It is performed before burial and after the necessary preparations have been made, with the body present, the worshipper facing the qibla, and all other conditions being met [5].

This summary should not be confused with teaching a daily prayer with bowing and prostration. Furthermore, people's participation in a funeral is not a testimony that the deceased was infallible; supplication for forgiveness is based on hope for mercy, not on a claim of knowledge of the Day of Judgment.

The source clarifies that the basic principle of the prayer applies to both righteous and sinful Muslims, and to the rulings concerning guardianship and congregational prayer. It also states that if a woman is the guardian, she may perform the prayer herself or authorize another to do so. Therefore, the rulings of the legal manual are

not replaced by a social impression of a person's eligibility to supplicate or to perform what is permissible in it [5].

Funeral Procession

The source mentions the desirability of accompanying a believer to the funeral procession, and among its etiquettes are humility, contemplation, supplication, and abstaining from frivolity. We quote this as a ruling and etiquette in the book of jurisprudence; and we do not claim in this place to have verified the chains of transmission of all the narrations of reward that it mentions [6].

The meaning of the funeral procession becomes apparent when those present accompany the family without burdening them: they assist those who need help, maintain the tranquility of the situation, and do not turn the hardship of grief into a competition of appearances. The number of those attending the funeral is not a measure that reveals a person's standing with his Lord.

Burial and Instruction

The basic principle is to bury the deceased in the earth in a manner that preserves him, placing him on his right side facing the qibla, with the rulings regarding incapacity and doubt. Among the mentioned etiquettes are instructing the deceased in the two testimonies of faith and acknowledging the Imams (peace be upon them), the guardian’s reciting the talqin after the people have departed, and writing the name on the grave. We separate these etiquettes from the obligatory burial itself, and we do not consider the omission of this instruction alone as grounds for ruling the burial invalid [7].

We do not derive from the recommendation of instruction a detailed explanation of everything the deceased hears or how they perceive it; that is a narrational discussion that will be addressed in the part on the intermediate realm (Barzakh). Here, we describe a religious act and its jurisprudential basis, without adding an empirical description not supported by observation.

Washing the deceased and washing after touching them

The first is a preparation for the deceased, and the second is a ruling pertaining to one who touches their body in a specific situation. In the fatwa of Sayyid al-Sistani, washing after touching the deceased is obligatory after the body has cooled and before the completion of the ritual washing, with details and exceptions; merely attending the funeral or looking at the deceased does not necessitate it. The rulings on ritual purity do not align with the description of the risk of medical infection [8].

In the case of a contagious disease or severe injury, medical and religious specialists collaborate to determine what is possible and required. A doctor does not issue a ruling on religious matters based solely on their expertise, nor does a non-specialist decide that preventative measures are unnecessary simply out of good intentions.

Chapter Summary

Preparing the deceased is an act that combines worship, mercy, and organization. We

fulfill the obligatory act, preserve the recommended act in its proper place, and refer exceptions to the appropriate authorities. We then bid farewell to the body, but not to the responsibility: debts, trusts, wills, the sanctity of the grave, and family rights that do not end with the departure of the mourners may remain.

Chapter Sources and References

[1] Sayyid al-Sistani, Minhaj al-Salihin, vol. 1, Chapter on Washing the Deceased, issues 260–283; a selective presentation that does not encompass all forms of guardianship and exceptions.

[2] The same source, chapter on tahnit (application of camphor), issues 298–300; the points of prostration as identified for the ritual of hanut.

[3] The same source, chapter on shrouding, issues 284–297; details of expenses and financial obligations are in the following chapter of this book.

[4] The same source, chapter on the two fresh palm stalks, issues 301–302.

[5] The same source, chapter on the funeral prayer, issues 303–316; one must refer to the text regarding the method and conditions when performing the act.

[6] The same source, chapter on funeral processions; the transmission of the ruling does not include independent verification of each narration mentioned therein.

[7] The same source, chapter on burial, particularly issue 321 on etiquette. Each case of necessity and its details have its own specific topic.

[8] The same source, the section on ritual washing after touching the deceased, issues 331–336 and the preceding issues concerning the fundamental ruling.

Chapter 109: The Inviolability, Rights and Grave of the Deceased

Human rights do not end when a person's voice falls silent. Their body remains a trust, and they may still have money held for them or owed to them by others, or have outstanding obligations to others. They may even leave behind a child who doesn't know how to protect their inheritance. A proper farewell is not measured by a single eulogy, but by what we do after the mourners have departed.

This chapter presents ethical principles and documented jurisprudential examples, not a specific fatwa regarding a dispute over an inheritance or grave. The following jurisprudential details are from the fatwas of Sayyid al-Sistani, reviewed on his office's website as of October 16, 2026. Civil procedures and the establishment of rights vary depending on the country and the specific circumstances and require specialized expertise.

The Sanctity of the Body in Narrations

It is narrated from Imam al-Sadiq (peace be upon him): “The sanctity of the dead is like the sanctity of the living,” in a hadith included in al-Kafi among the rulings on violating the sanctity of the dead. Its chain of narration includes Muhammad ibn Sinan, on the authority of someone who informed him. Al-Majlisi judged the third hadith to be “weak according to the majority opinion.” On the same page, he described the second hadith as “ka-l-hasan (like a hasan report),” and the fourth as

“majhul (unknown)” [1].

Establishing this detail does not diminish the fundamental principle of preserving the body, which is explained by numerous legal rulings, but it prevents us from presenting the well-known statement as an authentic hadith based on this chain of narration. Nor can we derive a specific amount of blood money or a medical exception from a single statement; this requires a comprehensive body of evidence and legal research.

In practice, sanctity means that the body should not become an object of revenge, display, or curiosity. One who had a dispute with the deceased does not acquire, after death, the right to insult him, and one who is responsible for his affairs does not have the right to disclose what is unnecessary to reveal to the public. Fulfilling the truth in investigation does not equate to unnecessarily defaming him.

A Grave Is Not Open to Unrestricted Interference

According to a fatwa by Sayyid al-Sistani, it is forbidden to exhume a Muslim's grave in a way that exposes the body, with specific exceptions. These exceptions include cases of actual desecration or danger to the body, and when a competing concern is of equal or greater importance. Burial in a degrading location or on someone else's property without permission is also prohibited. These rules do not grant every individual the right to determine exceptions and act unilaterally [2].

Cemetery maintenance requires consideration of endowments and rights, and avoiding obstruction of burials, not measuring care by the height of the building. Fatwas permit the placement of markers or organizational structures within their specified conditions, while prohibiting anything that entails desecration or unjustified action. They also mandate the burial of exposed bones, with the aforementioned precautions taken in wrapping them [3].

From a humanitarian perspective, preserving the name and burial place is an act of loyalty. A grave does not need to be luxurious to be respected, but it does need to preserve the memory of its occupant and not compound the family's grief by losing their burial place or having their identity confused with another.

Autopsy and Investigation: The Importance of the Purpose Alone Is Not Sufficient

Autopsy was discussed in Chapter 94. In the fatwa concerning identifying a murderer or clearing someone of an accusation, Sayyid al-Sistani does not permit autopsy solely for this purpose, citing the case where saving the life of a Muslim or someone similar in the future depends on it. Therefore, it is incorrect to attribute to him an absolute permission for every forensic autopsy [4].

In another fatwa, if permission for burial depends on the guardian's signature approving the autopsy, he mentions permissibility in the aforementioned scenario, not if it can be avoided by a delay that does not violate the sanctity. This is a specific case and does not constitute a cancellation of the general prohibition or a general permission for the deceased's guardian to dispose of the body [3].

In the event of an apparent conflict between an official requirement and a religious obligation, the responsible course of action is to seek medical, religious, and legal counsel regarding the specific case. This book does not advocate concealing evidence or obstructing an investigation, nor does it promise the family that a concise rule will suffice to resolve every discrepancy between legal systems.

Funeral expenses are not unlimited expenditure.

The source stipulates that the appropriate amount for the shroud and funeral expenses be taken from the estate, as detailed, with specific provisions for the wife's shroud. Any excess does not become an open right to everyone's money; its permissibility lies in a will within its limits, or the consent of the adult heirs regarding their shares, not in seizing a minor's share simply because the adult heirs desire additional expenses [5].

This is a matter of ethics before it is a dispute over a bill: Do we honor the father by jeopardizing his children's future? Do we honor the mother by pressuring her daughter to relinquish her share? The deceased's family can donate from their own funds, but they cannot claim that someone else's money is a donation from him.

Debts and Trusts

Al-Masa’il al-Muntakhaba stipulates the necessity of verifying that trusts and debts reach their rightful owners, and informing the heirs of assets that might otherwise be lost to them. Debts and established financial obligations are deducted from the estate according to their respective provisions, not as a voluntary donation made by the heirs if they so choose. Conversely, not every obligatory or recommended act is deducted from the estate in the same manner [6].

The prudent step before any dispute arises is to collect all relevant documents securely: funds, debts, trusts, wills, and any established details. This is an organizational suggestion, not a method for calculating shares. Furthermore, a distinction should be made between property owned by the deceased and property held in trust for others; what was in their possession was not necessarily their property.

A Will is a Trust with Limits

God Almighty says: “Then whoever alters it after hearing it, the sin is only upon those who alter it. Indeed, God is Hearing and Knowing.” [Al-Baqarah: 181]. A will is not a document that can be hidden simply because it doesn't align with the wishes of some heirs. Preserving it also means understanding the conditions of its validity, not executing every clause haphazardly.

According to Minhaj al-Salihin, a bequest of ownership or similar is not valid for more than one-third of the estate unless the heirs approve it. What some heirs approve is valid only for their share and not for the shares of others. One-third is calculated after deducting debts and established rights from the estate. Therefore, the calculation should not begin by taking one-third of the apparent assets before determining what is attached to them [7].

This rule does not mean that the deceased is entitled to a third of the estate, even if he did not bequeath it. The source clarifies the ruling regarding any excess after fulfilling the necessary obligations, and details the effect of a will versus its absence. Love is not a justification for creating a will after death and then obligating all heirs to abide by it [6].

The Rights of Women and Children

God Almighty says: “For men is a share of what the parents and close relatives leave, and for women is a share of what the parents and close relatives leave, whether it be little or much - an obligatory share.” [An-Nisa: 7] Custom should not make a woman's right a favor bestowed by her relative, nor should her silence under pressure be considered sufficient proof of genuine consent.

God Almighty says: “Indeed, those who unjustly consume the property of orphans only consume fire into their bellies, and they will be burned in a blazing Fire.” [An-Nisa: 10]. This verse places the protection of an orphan's property at the heart of responsibility, not on the margins of familial courtesy. Guardianship is a service of trust, not a new ownership of the child's property.

Chapter Summary

Among the rights of the deceased is that we protect their body and grave, execute their valid will, and return their assets and liabilities to their rightful owners. Among the rights of the living is that they not bear the burden of our supposed fulfillment of our obligations unjustly from their wealth. Mercy expands when it is combined with justice, and it narrows when a funeral becomes a cover for conflict or usurpation.

Chapter Sources and References

[1] Al-Kafi, vol. 7, Narrations on Assaulting the Deceased, hadith 3; Mir'at al-'Uqul, vol. 24, p. 164. Al-Majlisi's ruling: Weak according to the majority; and in the same place, hadith 2 is graded ka-l-hasan (like a hasan report), and hadith 4 majhul (unknown).

[2] Sayyid al-Sistani, Minhaj al-Salihin, vol. 1, Chapter on Burial, especially issues 319 and 325; the rulings of exception are restricted to their specific cases.

[3] Website of the Office of Sayyid al-Sistani, Rulings on Burying the Deceased, questions 9, 12, and 15; the text of the question and answer must be reviewed before application.

[4] The same source, Rulings on Dissection of Organs, question 2; see also Chapter 94 of this book.

[5] Sayyid al-Sistani, Minhaj al-Salihin, vol. 1, chapter on shrouding, issues 290–294; funeral expenses and the rights of heirs.

[6] Sayyid al-Sistani, Selected Issues, rulings on wills, issues 1292–1297; distinguishing between financial rights, wills, and inheritance.

[7] Sayyid al-Sistani, Minhaj al-Salihin, vol. 2, chapter on what is bequeathed, issues 1370–1371 and 1383; limits of one-third and permission.

Chapter 110: Accounts of the Preservation of Some Bodies

After learning about decomposition and the forms of natural and artificial preservation, we arrive at a question that is discussed in gatherings and transmitted in books and images: Do the bodies of some people remain unchanged? This is not, in fact, a single question; We might ask about the possibility of preserving bodily tissue, the veracity of a historical account, a special characteristic ascribed by a narration to a prophet or Imam, or the significance a believer ascribes to an event they consider authentic. A fair answer begins by distinguishing between these questions before grouping them together under the terms "miracle" or "superstition."

Bodily Preservation Alone Does Not Establish a Person’s Ultimate Fate

God Almighty said in His address to Pharaoh: "So today We will preserve your body so that you may be a sign for those who succeed you. And indeed, many among the people are heedless of Our signs." [Yunus: 92]. This verse comes after drowning overtook Pharaoh, so it is incorrect to interpret the preservation of the body mentioned therein as a salvation for its owner from accountability. Distinguishing between the preservation of a part of the body and God's favor upon a person is a crucial principle in this discussion.

Al-Tabatabai interprets the saving of Pharaoh's body as the removal of his body from the sea, distinguishing it from the saving of a human being alive, body and soul. This is an interpretation of the verse within its context, not an archaeological report identifying a specific mummy in a museum, nor a description of all the methods used to preserve bodies [1].

As for identifying a known mummy as the body of Pharaoh of Moses, this is an additional claim that requires independent evidence in history, archaeology, and the identification of individuals. It is not sufficient for it to be Egyptian, nor for it to belong to a king, nor for it to show signs that someone interprets as drowning. The verse does not name Ramses or Merneptah, and therefore we do not base the veracity of the Quran on a disputed designation that the text does not establish.

Texts from Imami Hadith Books

Al-Saduq narrated in “Man La Yahduruhu al-Faqih”: “Al-Sadiq, peace be upon him, said: ‘God Almighty has forbidden our bones to the earth, and He has forbidden worms to eat any of our flesh.’” He then cited a hadith from the Prophet, peace and blessings be upon him and his family, concerning the presentation of deeds to him, which includes the answer to those who found this unlikely after the body had decayed. It states that God has forbidden their flesh to the earth [2].

The source of this quotation is specified: Volume 1, page 191, hadiths 581 and 582, according to the indicated edition. The two hadiths appear in this section using the phrase “he said,” without a continuous chain of transmission. This book does not deem either of them authentic based solely on this page, nor does it judge them invalid simply because the chain of transmission is not mentioned here. Investigating

the chains of transmission, supporting evidence, and the methodology for dealing with al-Saduq’s mursal hadiths is a broader topic than merely finding the phrase.

Caution in attributing the report does not negate the content of the narration; rather, it places it in its proper context: a text narrated in an Imami source, which, according to its apparent meaning, indicates a specific characteristic of those addressed by the pronoun, and is not an anatomical rule applicable to all believers. It is not permissible to expand the meaning of "our bones" to include every righteous person without evidence, nor to fabricate details about the appearance, temperature, and moisture of bodies that are not mentioned in the narration.

On the same page, there is another narration from Ammar al-Sabati concerning the decay of the deceased's body and the preservation of the clay from which it was created, with some differences and discussions regarding the wording used to describe this clay [2]. We cannot deduce from this the name of a chemical molecule or a genetic code that the text does not name. Directly linking "clay" to DNA requires evidence, and the preservation of physical parts that can be examined is not a matter of proving the intended metaphysical meaning.

Sheikh al-Saduq: What does the historical source say?

Muhammad Baqir al-Khwansari, in his *Rawdat al-Jannat*, recounts the discovery of the burial site of Sheikh al-Saduq in Rayy, uncovered by rain, and the finding of his body preserved. He dates the event to approximately 1238 AH. He then relates how the news spread, reaching Fath Ali Shah, who dispatched a group to the site, and subsequently, the reconstruction of the structure [3].

Al-Khwansari states that he met some of those present at the event. This is an important point: the author recounts a historical event and acknowledges a connection to some of those present; however, he does not describe himself in this passage as the physician who examined the body, nor does he provide an analysis of the tissues, soil moisture, or any laboratory documentation. Therefore, we should not attribute to him what he did not say, nor should we dismiss his account simply because it is not a modern medical report.

We can thus confidently say: the account of the preservation of Sheikh al-Saduq's body is found in this source, and its author considered it one of his miracles. However, this testimony alone does not provide definitive medical details regarding the cause of preservation, nor does it negate all possible natural causes, nor does it transform the account into a reproducible experiment. The fact that the story is repeated in numerous later books does not automatically make them independent testimonies if they all trace back to a single source.

Between Possibility, Determination, and Explanation

The possibility of something is not equivalent to its occurrence in a specific individual. The occurrence of preservation, if proven, is not equivalent to our knowledge of its cause. Our current inability to determine the cause is not independent proof that it is miraculous. Conversely, the existence of natural forms of preservation does not necessitate that every religious claim concerning the special

status of a prophet or saint has been previously refuted; this is a confusion between a general principle and a judgment on a specific incident that requires supporting evidence.

Chapter 107 outlines some of the various mechanisms by which bodily changes are delayed. We refer to it in the scientific section rather than reiterating it here. When studying a specific event, it is necessary to describe its context, history, and any changes that may have occurred, not merely rely on the most recent image. Information may be incomplete; in such cases, suspending scientific judgment is a legitimate response, not a gap to be filled with a story.

A widely circulated image requires even greater verification: Do we know the person in it? Has the date of the photograph been established? Was the body treated? Is it an original image or manipulated material? The caption accompanying the image may be false, even if the image itself is genuine. A believer may respect righteous people without forwarding unverified information.

Faith is not tested by opening graves.

A grave is not an open laboratory for every desire to prove or disprove. The sanctity of the deceased, the rulings on exhumation, and the protection of the burial site remain in effect, and their jurisprudential guidelines were reviewed in the previous chapter. The desire to create a moving scene does not justify photographing, exposing, or circulating details of a body without authorization. Disciplined research utilizes what is permissible to access and does not begin by violating the sanctity of those it claims to honor.

Nor is a righteous person dishonored by the claim that their body has decayed, nor is a tyrant exonerated because a part of their body remains. Parental love is not contingent upon the physical appearance of their body, nor is the status of a martyr in the hearts of their family dependent on a circulating account of the grave. What we know of God's justice is far broader than reducing the processes of matter to judgments about inner thoughts.

Chapter Summary

Religious accounts have a source, meaning, and level of authenticity; historical accounts have their witnesses and methods of transmission; and scientific descriptions have their tools and limitations. We combine these forms of knowledge when they complement each other and distinguish them when their questions differ. This distinction preserves both human dignity and the truth of knowledge. The body's survival may be long or short, but the most pressing question for the living is not how to observe its decay, but rather how to bear the loss, fulfill our obligations, and preserve the love that transforms into mercy and action.

Chapter Sources and References

[1] Al-Tabataba'i, Al-Mizan fi Tafsir al-Qur'an, Tafsir Yunus: 92, within verses 75–93; used here to explain the meaning of the body's preservation, not to identify an ancient mummy.

[2] Al-Saduq, Man La Yahduruhu al-Faqih, vol. 1, p. 191, hadiths 580–582, corrected by Ali Akbar

al-Ghaffari. No independent authentication of hadiths 581 and 582 is undertaken in this chapter.

[3] Al-Khwansari, Rawdat al-Jannat fi Ahwal al-'Ulama' wa al-Sadat, vol. 6, pp. 140–141 in the reviewed electronic version; the account of Sheikh al-Saduq's burial and the limits of the author's testimony. Beginning of the account.

Continuation of Reference [3]: Al-Khwansari's statement about meeting some of those who were present at the event; distinguishing between historical transmission and medical examination.

Chapter 111: Loss, Grief and Mourning

The family returns from the cemetery, but absence returns with them. A seat remains unoccupied, a voice is awaited before it is remembered, and a small habit suddenly reveals the magnitude of the loss. For those who loved a person, a person's story doesn't end with their death; it enters their lives in another form. Therefore, the conversation about the body and the grave is incomplete without the words of those who remain: How do they grieve? And how do we console them without judging their feelings or adding to their burdens?

A grieving heart does not depart from the realm of faith.

God Almighty said concerning Jacob, peace be upon him: {And he turned away from them and said, "Oh, my sorrow over Joseph!" And his eyes turned white from grief, for he was suppressing [his sorrow].} [Yusuf: 84] He said in his story: “He said, ‘I only complain of my grief and sorrow to Allah, and I know from Allah that which you do not know’” [Yusuf: 86].

The subject of the story is the separation from Joseph, not his death; therefore, we should not alter the event to fit the chapter title. However, the convergence of prophecy, grief, and reliance on God is clear, and it protects us from reducing patience to mere dryness of the eyes. Patience does not require a person to claim that they did not love, nor to refrain from supplication and lamentation, but rather to bear their pain without making it a justification for injustice or despair.

In Al-Kafi, there is a narration from Imam al-Sadiq (peace be upon him) mentioning the Prophet’s (peace and blessings be upon him and his family) weeping at the death of his son Ibrahim, in which he said: “The eye sheds tears and the heart grieves, but we do not say anything that displeases the Lord. Indeed, we are saddened by your loss, O Ibrahim.” [1] We identify its source and chain of transmission as given; al-Majlisi, in Mir’at al-‘Uqul, graded this chain as weak according to the more prevalent assessment. This is not a judgment on every chain transmitting this meaning [1]. The meaning we are referring to here is the distinction between the mercy manifested in tears and the statement that contradicts contentment with God, not the use of the narration to rebuke the bereaved for every expression of their pain.

Grief is not a ladder with five mandatory rungs.

Loss may manifest as shock, weeping, fatigue, anger, or guilt, and these states may change and not remain continuous throughout the day. British health service guidelines clarify that the so-called stages of grief are not necessarily experienced by

everyone, nor do they occur in a fixed order [2].

Therefore, we do not test the sincerity of love by the number of tears, nor do we reproach someone for being late in reaching acceptance. They can accomplish a task and then feel pain at the mention of a name, and smile in a moment without having forgotten. Consolation begins with allowing space for this difference, not with setting a deadline for the grief to end.

Practical support includes talking to a trusted person or professional, utilizing peer support, maintaining regular meals and appropriate activity levels, and breaking down tasks into smaller steps. Harmful substances or gambling are not a remedy for loss. If adjustment becomes difficult or anxiety and depression intensify, seeking help is appropriate without waiting for a social occasion to do so [2].

When does grief require specialized care?

The American Psychiatric Association distinguishes between normal grief and prolonged grief disorder, which involves persistent longing or preoccupation with the deceased, with symptoms of significant disruption to life that exceed what is expected in the cultural and religious context. The DSM-5-TR criteria require one year since the death for adults and six months for children or adolescents, provided other criteria are met; duration alone is not a diagnosis [3].

These are specific diagnostic periods, not a mandate to leave a person to suffer until they pass. Evidence-based psychological treatments and support groups are available, and co-occurring conditions, such as depression or sleep disorders, also need to be assessed. Medication is not an automatic cure for grief. If there is an immediate threat to safety, urgent help should not be postponed [3].

Seeking help from a therapist does not remove the religious dimension from the experience. A person may be praying and may need someone to help them sleep or regain the ability to care for themselves. Not every breakdown should be interpreted as a lack of faith, nor should people's suffering be framed as a competition: whoever is more righteous must cry the least. Knowledge and compassion are complementary.

Children hear about loss in their own way.

UNICEF recommends being honest with a child, using clear language they can understand, in a safe place with time for questions. Vague statements about someone's loss or passing can confuse them; they may need to hear an explanation several times. Some children believe that a word they said or a thought they had caused the death; in these cases, they need explicit reassurance, not to be left alone with this belief [4].

Grief can be expressed in front of the child without frightening them, by maintaining their routine, maintaining care by people they trust, and involving them in remembering the deceased in a way that comforts them. Their grief may manifest in behaviors that are difficult to express verbally; therefore, they should not be punished simply for reverting to some younger-age behaviors [4].

Our educational approach is to tell him: "Your grandfather has died and will not

return to the life we are living now. We love him and pray for him." Then, his questions should be answered within the limits of what his family knows and believes, without inventing dates for meetings or burdening him with the responsibility of pleasing everyone. Religious hope does not require denying the reality of death, which a mature person can honestly explain.

The legal mourning period is not a measure of psychological grief.

In the jurisprudence of Sayyid al-Sistani, the waiting period for a non-pregnant wife upon the death of her husband is four months and ten days. For a pregnant wife, it ends at whichever is later: the completion of that period or the birth of the child. There are details regarding the calculation of the beginning, the months, and the confirmation of the death, which should be consulted. Mourning is an obligation to refrain from what is considered adornment according to custom, not to neglect cleanliness or abstain from bathing [5].

She is not obligated to remain in the same dwelling, nor is it forbidden for her to leave for a need, necessity, to fulfill a right, or to perform an act of obedience, although details regarding the undesirability of leaving for other reasons are provided. Mourning is not a condition for the validity of the waiting period (iddah), so it is not invalidated simply by its omission. These are rulings from a specific source, not a description of all jurists' opinions, nor are there uniform instructions for every case. A woman should consult her own religious authority for application [5].

A widow's grief is not measured by the expiration of the waiting period, nor does social mourning for a relative automatically transform into the rulings applicable to a wife without evidence. Protecting her rights includes respecting her need for medical treatment, work, and managing her affairs within the bounds of Islamic law, and not adding customary prohibitions and then attributing them to God.

Consolation that protects the living and the memory of the deceased

Consolation includes asking: What can I help you with today? And sometimes accepting a brief answer. Preparing food, arranging a transaction with the family's permission, or accompanying a child may be more beneficial than a lengthy speech. It is not required to interrogate the family about the final moments, share the patient's secrets and photos, or burden them with the expenses of gatherings they cannot afford.

The intention to honor does not grant the right to dispose of the property of a minor heir, as discussed in the chapter on rights. The memory can be preserved through prayer, loyalty, maintaining ties, and giving charity from funds whose owner is entitled to donate them. We will examine the benefits of good deeds for the deceased in their respective sections, so let us not confuse emotional support with the judgment of whether the reward for a specific deed reaches the deceased.

Conclusion of Part Twelve

This part traces the body from its early changes to decomposition and preservation,

then the preparation for burial, the sanctity of the grave, and the narrations concerning its continued existence. It concludes with the heart that grieves for its owner. Material knowledge has not reduced the human being to mere matter, nor has love made every piece of information about it a certainty. In the next part, we will move beyond the limits of medical observation: the soul and the life of the intermediate realm (Barzakh), relying on revelation and narrations, and distinguishing between established texts, their interpretation, and details about which we cannot be certain.

Chapter Sources and References

[1] Al-Kulayni, Al-Kafi, vol. 3, Book of Funerals, Chapter of Rare Narrations, hadith 45, pp. 262–263; several of our companions, on the authority of Sahl ibn Ziyad, on the authority of Ja'far ibn Muhammad, on the authority of Ibn al-Qaddah, on the authority of Abu Abdullah (peace be upon him). Al-Majlisi's ruling in Mir'at al-'Uqul, vol. 14, p. 267: Weak according to the most widely accepted view; and this is a ruling based on the aforementioned chain of transmission. Beginning of the text.

Continuation of Reference [1]: Al-Kafi, vol. 3, p. 263, continuation of the narration of the Prophet (peace and blessings be upon him and his family) weeping for Ibrahim.

[2] NHS, Grief after bereavement or loss, page reviewed 14 July 2026; varieties of grief, support, and seeking help.

[3] American Psychiatric Association, Prolonged Grief Disorder; Interpretation of the Diagnostic Criteria and Support Options, not a Reader Diagnosis.

[4] UNICEF, How to talk to your children about the death of a loved one, July 29, 2021; Honest communication and child support.

[5] Sayyid al-Sistani, Minhaj al-Salihin, Vol. 3, Corrected Edition 1445 AH, The Waiting Period, Questions 578–587; Website accessed October 16, 2026.

Part 13: The Spirit and Life in Barzakh

In this part, the type of question and the source of the answer change. We have examined what medicine can observe regarding the life and death of the body, and we are not asking it now to create a device for seeing the unseen. We read the verses and narrations of the Ahl al-Bayt (peace be upon them) concerning the stage between death and resurrection, and we distinguish between the established principle and its details, and between the hadith and the scholar's explanation of it. We do not replace the evidence with frightening speculation, nor do we strip the text of its meaning simply because it is not subject to laboratory instruments.

Chapter 112: What Is Barzakh?

When the door to the life we know closes, does the human story end until the Day of Resurrection, or does a stage begin that those who mourn will not see? The Quran addresses this question with a concise term: the intermediate realm (Barzakh). This brevity does not give us permission to fill every gap with our imagination; rather, it invites us to gather the relevant verses, comprehend their significance, and then interpret the narrations in light of them.

The barrier that ends on the Day of Resurrection

God Almighty says: “Until, when death comes to one of them, he says, ‘My Lord, send me back.’” [Al-Mu’minun: 99] Then He says: “‘Perhaps I may do righteous deeds in what I left behind.’ No! It is only a word he utters; and beyond them is a barrier until the Day they are resurrected.” [Al-Mu’minun: 100]

Al-Tabataba’i defines the Barzakh as the barrier between two things, and interprets it here as the realm of the grave that follows death and continues until the Day of Resurrection, based on the context and other verses and narrations [1]. In this sense, the Barzakh is not another name for the Great Resurrection; rather, the verse establishes the Day of Resurrection as the end of the aforementioned stage.

These two verses also contain a moral awakening: the request to return comes after death, related to a good deed not performed in its time. The verse does not offer humanity a program that guarantees the resumption of the experience whenever it is neglected. This means, in our present lives, that the opportunity we have to act is not something to be taken lightly under the pretext that the future will always offer another opportunity.

The Significance of Life in the Presence of God

God Almighty says: “And never think that those who have been killed in the cause of God are dead. Rather, they are alive with their Lord, receiving provision.” [Al Imran: 169] And He says: “Rejoicing in what God has bestowed upon them of His bounty, and they receive good tidings about those [to be martyred] after them who have not yet joined them - that there will be no fear concerning them, nor will they grieve.” [Al Imran: 170]

This description encompasses life, sustenance, joy, and glad tidings, while also mentioning those who have not yet joined them. The meaning is not merely that the names of the martyrs remain in the collective memory. The assertion that they are alive with their Lord does not imply that they did not die a death that entails funeral rites; rather, it highlights that the end of worldly life does not exhaust all meaning in life.

However, affirming this status for those described in the text does not permit its distribution to all those we love, nor does it equate the circumstances of all people. It offers hope and solace to the believer, without becoming a license to prejudge the fate of any particular individual without justification.

A Presentation Before the Hour

And Allah Almighty said concerning the people of Pharaoh: “The Fire, they are exposed to it morning and evening, and on the Day the Hour will be established [it will be said], ‘Admit the people of Pharaoh to the severest punishment.’” [Ghafir: 46]. The verse combines an exposure to the Fire with a mention of what will occur on the Day of Resurrection. This is one of the most prominent instances of Quranic evidence for a punishment prior to the general Resurrection, not that all the details of its punishment have already occurred and concluded.

This scene is paralleled by Allah’s statement concerning the one who called people to follow the Messengers: “It was said, ‘Enter Paradise.’ He said, ‘Oh, if only my people knew!’” [Ya-Sin: 26]. “Because my Lord has forgiven me and made me one of the honored ones” [Ya-Sin: 27]. Shaykh al-Mufid cited these verses from Ya-Sin and Ghafir in his discussion of the states of souls after death; we will return to his report and detailed explanation in the following chapter.

What we gather from these proofs is not a map of the place or a measurement of the length of the day; rather, it is proof that the Quranic discourse about man after death is broader than a description of a lifeless body awaiting decomposition. As for the nature of sustenance and perception and their connection to the soul and body, these are further questions whose answers must not run ahead of their evidence.

A Definition in a Narration and the Limits of Relying on It

In al-Kafi, it is mentioned that Umar ibn Yazid asked Imam al-Sadiq (peace be upon him) about the intermediate realm (Barzakh), and in his answer: “The grave from the time of death until the Day of Resurrection.” The hadith is presented in the context of concern for the Shi’a over the consequences of the intermediate state (Barzakh), along with the mention of intercession on the Day of Resurrection [2].

Al-Majlisi judged the third hadith in this chapter to be “majhul (unknown)” [3]. We state this clearly, so as not to equate the common usage of the phrase with the authenticity of the chain of transmission. At the same time, we do not make the establishment of the Barzakh dependent on this single chain of transmission; it is preceded by verses, and there are other chapters of hadiths, some of which will be examined later.

Nor do we interpret the beginning of the hadith as a doctrinal license to oppress

people or neglect religious duties. This hadith itself contains an expression of fear, and intercession has its own discussion, evidence, and conditions. Taking a phrase of hope out of context and then negating the verses of accountability with it is not a faithful reconciliation of the texts.

Is the Barzakh the grave?

In the rulings on burial, the grave is a known physical location. Religious expressions about life in the grave address the state of a person after death, and it is incorrect to confine all of their meaning to the dimensions of the grave. The narrated definition begins at the moment of death, not at the moment the earth is placed upon them. Therefore, if someone's burial is delayed, or if they drown, or if their body is not found, we cannot conclude that they have escaped God's dominion simply because the earthly place was not prepared for them.

This is a conclusion drawn from the general discourse on death and destiny, not a technical description of how the soul is connected to each part of the body. We cannot know, merely by examining the soil, where bliss resides or how pain afflicts those who have experienced it. Furthermore, the use of the term "grave" does not permit the invention of sounds and temperatures by which we can judge its inhabitants.

A fixed principle and details that are not all the same.

The question is not whether to believe everything people say about the intermediate realm (Barzakh) or reject it all. The correct approach is to ask about each level: What is the verse? What is the narration? What is its chain of transmission? Is the statement from the infallible one or from an interpreter? What are the possible interpretations of the wording? The origin of something may be established, but its exact nature remains unknown; a statement may be true in one instance but not applicable to all of humanity.

In his discussion of the questioning in the grave, Sheikh al-Mufid states that the descent of the two angels, according to his interpretation of the hadith, is specific to those who are purely faithful or disbelieving, and that others are not questioned about it [4]. We will postpone explaining this to the chapter on the questioning and the conditions of people, and we mention it here so that general statements do not give the impression that every person goes through the same details, including children and those who have not yet reached the age of accountability.

What does this belief change in life?

Belief in the intermediate realm (Barzakh) does not require one to be preoccupied with the graves of others to the detriment of one's own responsibilities. Rather, it directs one to what one can change: fulfilling one's obligations, correcting mistakes, spending one's wealth in a righteous manner, and showing mercy to those around one. The fear that makes a person more truthful and just is not the same as the fear exploited by a terrifying narrative to paralyze one's life or sell a false sense of security.

The intermediate realm is not a hiatus from God's knowledge, nor is it the entirety of the Hereafter, nor is it a chapter whose details we can fabricate according to our dreams. It is a stage between earthly life and resurrection. The texts open a window onto its reality, leaving what is not revealed to us to God's knowledge. The next question is: What do we say about the soul that has departed its body, and how do we prove the survival of the human being without claiming to encompass its secret?

Chapter Sources and References

[1] Al-Tabataba'i, Al-Mizan, Tafsir al-Mu'minun: 99–100; Definition of the Barzakh and identification of the stage, with its interpretation separated from the Qur'anic text.

[2] Al-Kulayni, Al-Kafi, vol. 3, p. 242, Chapter on What the Grave Speaks, Hadith 3; Definition of the Barzakh in the context of the hadith.

[3] Al-Majlisi, Mir'at al-'Uqul, vol. 14, p. 218: The third hadith is graded majhul (unknown). Its ruling is not applied to all hadiths about the Barzakh.

[4] Al-Mufid, Tasheeh I'tiqadat al-Imamiyya, p. 100, edited by Husayn Dargahi; The author’s account limits which people are questioned by the two angels; the details follow later.

Chapter 113: The Spirit after Separation from the Body

We recognize a person by their face, voice, and movements. When these signs cease, we ask: Where is the person? Medicine describes what happened to the body, and grief describes what happened in the hearts of the bereaved family. But the question about a person after death requires a different kind of knowledge. It is not enough to say that we saw the body, nor is it enough to fill the void with an imagined image and then call it the reality of the soul.

Tawaffi: The Taking of Souls in Qur’anic Language

God Almighty says: “God takes the souls at the time of their death, and those that do not die [He takes] during their sleep. Then He withholds those for whom He has decreed death and releases the others until a specified term. Indeed in that are signs for a people who give thought.” [Az-Zumar: 42]

The text attributes the taking of souls to God, mentions withholding and releasing, and distinguishes between those for whom death has been decreed and those whose lifespan is extended. It does not describe the movement of a transparent object in the room, nor does it equate sleep and death with a single medical condition. The discussion of sleep and the meaning of tawaffi has already been presented; we invoke the verse here so that what we do not see is not equated with what God has no power over.

From this perspective, we understand the intermediate life (Barzakh) as a life by God's decree, not independent of the Creator. The soul is not a part that has separated from God's essence, as explained in the meaning of the blowing of the soul. Nor does the transition after death grant it divine attributes, omniscience, or the ability to do everything the living desire.

How did al-Saduq express the concept of permanence?

In the chapter on belief concerning souls and spirits, al-Saduq stated that when souls depart from bodies, they remain, some in bliss and some in torment, until God, by His power, returns them to their bodies. He also mentions, within his explanation, that creation is for permanence and transition from one abode to another [1].

This is a transmission of the position of a scholar from the Imamiyyah school in a book of creed, not a claim that every sentence in this chapter is a sound, authenticated narration. His formulation links the return to God's power and understands death as a transition, not a fall, from the narrative. However, determining the first creation, the precedence of souls over bodies, and explaining their differences are matters with other texts and discussions, not all of which are established simply by citing this report.

Al-Mufid's Objection Cannot Be Concealed

Sheikh Al-Mufid explicitly discussed Al-Saduq's report, objecting to the absolute assertion of the souls' survival and what he saw as its resemblance to certain conceptions of reincarnation. He then determined that souls after the death of bodies are of two kinds: one that goes to reward and punishment, and another that is unaware of this until the Resurrection [2].

His text did not limit itself to the difference in the degree of bliss; on page 89, he expresses the second kind by saying: "And his soul ceases to exist when his body decays, so he feels nothing until he is resurrected." Therefore, after reading this statement, it is incorrect to attribute to him the same view regarding the survival of all souls and their continuous awareness. Conversely, he clearly establishes the existence of intermediate bliss and torment for the two categories he mentions, citing the verses from Surah Ya-Sin and Surah Ghafir that we included in the previous chapter [2].

The purpose of presenting the differing opinions is not to advocate for the denial of intermediate life, but rather to prevent reducing the entire body of knowledge to a single, unified statement. We agree on broad principles, and there are discussions regarding the nature of the soul, the extent of its existence, and its connection to the body. It is also important to distinguish between the author's own words and the footnotes of the book's editor; the printed commentary at the bottom of the page is not automatically part of the author's own writing.

What the Narrations Say about Similar Bodies

Abu Walad al-Hannat narrates that he asked Imam al-Sadiq (peace be upon him) about the narration that the souls of believers reside in the crops of green birds. The Imam denied this, concluding his answer by saying, “But they reside in bodies like their bodies.” Its chain of transmission in al-Kafi is: Ali ibn Ibrahim, from his father, from al-Hasan ibn Mahbub, from Abu Walad. Al-Majlisi graded it hasan (good) [3].

Abu Basir narrates, through another chain of transmission, an answer concerning the souls of believers that includes: “In a garden, in the form of bodies in Paradise.” Al-Majlisi graded this seventh hadith muwaththaq (reliable) [4]. Therefore, the entire

chapter is not a collection of equally weak or strong narrations, and it is incorrect to dismiss all its narrations as unreliable due to the weakness of a single narration.

We observe the simile in both expressions: “like their bodies” and “like the bodies.” However, the discussion of the composition, substance, and laws of that body is not detailed in these two expressions. The discussion of the intermediate and imaginal body will come separately, so as not to attribute to the hadith a philosophical term with all its premises simply because the commentator used it.

In the same chapter is the hadith of Yunus ibn Zabyan, which mentions a form like the form of this world and recognizing a newly arrived person by their appearance. However, al-Majlisi judged its chain of transmission, which is the sixth hadith, to be weak [4]. It can be mentioned with an explanation of its status, but it is not permissible to quote its details and then place the ruling of the first hadith, graded hasan at the end, in a way that makes the reader think that the authentication applies to both narrations.

The person's survival does not mean the transfer of all the world's attributes.

The person described in the texts as joyful, regretful, or awaiting the Hour is not a new name for another person unrelated to their life. There is a continuity of identity and responsibility in the discourse of recompense; otherwise, reward and punishment would have no meaning. But this indication alone does not resolve every philosophical inquiry into how the self continues or its connection to a physical form.

When it is said that the soul departs the body, we are not required to imagine it as a physical body traveling in the same way a car travels between two cities. The terms "departure," "transfer," and "seizure" denote literal meanings according to their contexts, and do not, on their own, grant us speed, mass, or distance. Acknowledging ignorance of the manner of departure does not transform the entire meaning into a metaphor devoid of reality.

Furthermore, what is mentioned regarding believers should not be generalized without investigation to children, the vulnerable, those upon whom the proof has not yet been established, nor to all levels of humanity. We will elaborate on these categories in their proper place, without automatically assigning the people we know to different ranks of the unseen.

Sleep and dreams are not a passport to the unseen.

The verse on the taking of souls mentions sleep, and some commentators have used the analogy of the states of the intermediate realm (Barzakh) to what a sleeper experiences to approximate the meaning of perception with bodily stillness. Al-Majlisi discusses this analogy in his commentary on the narrations concerning the souls of believers [5]. Approximation helps in understanding a question, but it does not prove that every dream is a journey through the intermediate realm or a message from the dead.

The chapter on visions distinguishes between types of dreams and the limits of their interpretation. A deceased person cannot be held liable for debts, nor can a claimant

of a will have a right to inheritance, nor can their punishment be judged solely based on a dream. Whoever sees a loved one in a sorrowful state is not permitted to frighten their family or profit from their fear. Prayer and fulfilling obligations do not require condemning the absent person through dream interpretation.

Speaking with Care about a Mystery We Do Not Fully Comprehend

God Almighty said: {And they ask you, [O Muhammad], about the soul. Say, "The soul is of the command of my Lord. And mankind has not been given of knowledge except a little."} [Al-Isra: 85]. The differing opinions on the meaning and uses of the word "soul" have already been discussed. We should not make the verse a prohibition on all thought, nor treat it as an anatomical description of the human psyche.

It reminds us, in a moment of reflection, that the question is greater than our tools. We read what is established, distinguish the scholar’s interpretation from the text, and refrain from making definitive pronouncements on what is not established. At death, a person does not become the property of storytellers’ imaginations, and the believer's peace of mind does not require knowing every detail. It suffices that what is in God's hands is not lost, and that His justice and mercy do not depend on our ability to depict the world of the spirit.

Chapter Sources and References

[1] Al-Saduq, Beliefs in the Religion of the Imamiyyah, Chapter on Belief in Souls and Spirits, p. 47, edited by Issam Abd al-Sayyid; the author's report on survival and return to bodies.

[2] Al-Mufid, Correcting the Beliefs of the Imamiyyah, pp. 87–90; especially p. 89 in the distinction between the two categories. It is necessary to distinguish the main text from the editor's footnotes.

[3] Al-Kafi, vol. 3, another chapter on the souls of believers, hadith 1, p. 244; and the ruling of Mir'at al-'Uqul, vol. 14, p. 221: Hasan (good). Original text.

[4] Al-Kafi, the same chapter, hadiths 6 and 7, p. 245; the ruling of al-Majlisi in Mir'at al-'Uqul, vol. 14, pp. 225–226: The sixth is weak and the seventh muwaththaq (reliable).

[5] Al-Majlisi, Mir'at al-'Uqul, vol. 14, pp. 221–226; gradings of the chains of transmission and an explanation of the imaginal body and approximation through sleep, with the explanation separated from the text.

Chapter 114: Questioning and Trial in the Grave

The listener might imagine the questioning in the grave as a verbal exam whose answers need only be memorized, or as a terrifying scene whose details are identical for every person. But reviewing the texts presents a more accurate picture: a basis for accountability, diverse accounts in their sources and details, and texts that limit the scope of the inquiry. We don't simply memorize the common narrative and then search for supporting evidence; rather, we begin with the reading itself.

Steadfastness Before and During the Question

God Almighty says: “God strengthens those who believe with the firm word in this worldly life and in the Hereafter. And God leads astray the wrongdoers. And God

does what He wills.” [Ibrahim: 27]. This verse follows the parable of the good word and the evil word, thus combining faith and steadfastness, and mentioning the wrongdoers in contrast. Its wording is broader than a memorized list of questions.

Narrations in al-Kafi have applied this strengthening to the believer's answer in his grave, as in the tenth hadith of the chapter on questions. Al-Majlisi judged its chain of transmission to be weak according to the majority [1]. We will establish the point of reference for the narration, and we do not claim that every detail in this narration is explicitly stated in the verse. Neither the names of the two angels nor the measures mentioned in the narrations are included in their exact wording.

The educational lesson we derive is that knowing God is not limited to the speed of speech. What is firmly established in the heart and confirmed by deeds is different from what is said merely to conform to people. This lesson does not mean that we can judge a person's faith based on their incoherent speech during illness or their silence at the time of death; medical reasons that limit the ability to express oneself have already been explained.

Who are questioned?

On the authority of Abu Abdullah al-Sadiq, peace be upon him: “Only those who were purely faithful or purely unbelieving will be questioned in the grave.” This wording appears in the chain of narration of Muhammad ibn Muslim, which is the fourth hadith in this chapter, and al-Majlisi judged it to be authentic [2]. The first hadith has a similar meaning, mentioning that others are left without questioning, and he graded it hasan (good). He judged the third chain of narration to be muwaththaq (reliable) [3].

Therefore, it is incorrect to present the exclusivity of the questioning as merely a later possibility without any basis. Al-Majlisi and Al-Mufid understood the expression as referring to those whose faith or disbelief is pure, not that the question pertains solely to faith. Al-Majlisi clarifies that the distraction here is a metaphor for not addressing the question and related matters, not for negligence on the part of God or His angels [3].

The reader cannot simply convert these descriptions into a list of names of relatives or opponents. Determining who has been presented with the evidence, who has fallen short, and who is incapable is not something derived solely from a social title. The discussion of the vulnerable, children, and those who have not yet reached the age of accountability will follow. The methodological principle now is: we do not interpret texts in a general way that contradicts other texts.

The Two Angels and Their Names in the Tradition

Sheikh Al-Mufid states that the narrations concerning the descent of the angels and the questioning of the deceased are similar, and he mentions among their questions the Lord, the Prophet, the religion, and the Imam. He quotes the names Nākir and Nakīr, then mentions the mention of Mubashir and Bashir in relation to the believer, and presents the possibility that the names describe the action, while referring the true nature of the matter to God's knowledge [4].

This is a theological account by al-Mufid based on narrations, not a Quranic verse, nor a detailed chain of transmission for every word he cited. In al-Kafi, there are also narrations that name Munkar and Nakir. The reader should not be misled by the different wordings, assuming that every difference in wording signifies a difference in the fundamental belief in the questioning, or imagining that choosing a name grants complete knowledge of the true nature of angels.

As for the detailed descriptions mentioned in some sermons, including voices, eyes, hair, and fangs, these are mentioned in the seventh hadith of the chapter, and al-Majlisi deemed its chain of transmission to be majhul (unknown) [3]. We do not accept all these details simply because of their powerful effect on the listener, nor do we need to depict them to children as threatening scenes to teach them the meaning of responsibility.

On Belief, Action, and Guardianship

The narrations concerning the question combine the fundamental principles of monotheism, prophethood, religion, and imamate. The eleventh hadith poses a question about the nature of knowledge, and the answer mentions God's guidance and confirmation; however, al-Majlisi grades its chain mursal (with a break in transmission). The twelfth hadith, which details the scene of the two angels' entry, is deemed weak according to his ruling [5]. These classifications pertain to the aforementioned chains of transmission and do not constitute validation of every detail or negation of everything in the chapter.

The fifteenth hadith mentions a question about prayer, zakat, Hajj, fasting, and the guardianship of the Ahl al-Bayt (peace be upon them). Al-Majlisi judged it to be marfu' (a hadith with a missing link in the chain of transmission) [6]. This content can be presented along with its classification, but it is incorrect to assert that every deceased person is asked about these five things in this specific wording and order, or that this hadith alone encompasses all aspects of the questioning.

Guardianship, within the Imamite framework, is connected to guidance, proof, and obedience. Therefore, it should not be used as a pretext to deny the rights of the oppressed. Nor should the question concerning the Imam be interpreted as an insult to specific individuals or a final judgment on their fates. Combining love for the Prophet's family with adherence to their teachings is a more complete emulation of their example than merely proclaiming a name and then contradicting it with one's actions.

The questioning is not a test of language or neurological ability.

The fact that the question has been transmitted to us in Arabic does not imply that someone who speaks another language is incapable before God, nor that someone who loses speech or memory at the end of their life is incapable of answering. These are additions not supported by the text. The Quran links steadfastness to God and faith, not to a healthy throat or the results of a memory test in a hospital.

Al-Mufid infers, from the fact that the question is addressed to someone capable of understanding it, that God revives the person for questioning, according to his

account [4]. This is a discussion of divine power in the afterlife, not a claim that the deceased resumes breathing and heartbeat in a way that can be proven by ordinary examination. Therefore, we do not transfer the rulings of the unseen to the standards of medical pronouncements of death, nor do we reverse them.

Thus, the patient's illness does not become an accusation, nor is the absence of a person's body interpreted as a denial of justice. God's power is not contingent upon our seeing the grave or preserving its location. The detailed manner of the question's connection to the soul and body remains within the bounds of what the texts state, not what imagination can complete.

Instruction and Supplication Without Artificial Guarantees

Instruction was previously explained among the recommended practices of burial in the jurisprudential source we relied upon, not as a condition for the validity of the burial or a procedure that negates responsibility. It is not permissible to tell the bereaved that forgetting a specific formula condemns the deceased to punishment, or that paying someone to recite it guarantees their fate. Worship is not an insurance policy that one sells to God.

A believer can pray for steadfastness and mercy, pledge to truthfulness, and learn their faith from scholars. It is not required to replay in their mind every day a detailed account of the different narrations until they lose their peace of mind. Hope has its place, and knowing God's justice prevents religious education from becoming a means of intimidating the vulnerable.

Chapter Summary

The origin of the question has a clear place in the Imamite tradition, and specifying who it applies to is supported by reliable chains of transmission according to the hadith rulings we have cited. As for the names, descriptions, and detailed questions, each is presented with its source and degree of authenticity. The most important thing for a person to gain is not merely a text recited by the tongue, but a life in which they strive to make their words truthful, their beliefs insightful, and their actions a testament to their faith. We now move from the questioning to what the texts mention about the squeezing of the grave, and the bliss and torment.

Chapter Sources and References

[1] Al-Kafi, vol. 3, p. 238, Chapter on Questioning in the Grave: Who is Questioned and Who is Not, Hadith 10; Mir'at al-'Uqul, vol. 14, pp. 210–211, considered weak by the majority. The correct verse number is Ibrahim: 27, although it appears as 26 in some printed footnotes.

[2] Al-Kafi, vol. 3, p. 236, the same chapter, Hadith 4; Mir'at al-'Uqul, vol. 14, p. 207: authentic.

[3] Al-Majlisi, Mir’at al-‘Uqul, vol. 14, pp. 206–210; hadith 1: hasan (good); hadith 3: muwaththaq (reliable); hadith 4: sahih (sound); hadith 7: majhul (unknown); explanation of who is subject to questioning.

[4] Al-Mufid, Correction of the Beliefs of the Imamiyyah, pp. 99–100; Report on the questioning, the names of the two angels, and the meaning of resurrection for questioning.

[5] Mir'at al-'Uqul, vol. 14, pp. 211–212; Hadith 11 is mursal (a hadith with a missing link in the

chain of narrators), and Hadith 12 is da'if (weak). These rulings should not be generalized to all narrations on this topic.

[6] Mir'at al-'Uqul, vol. 14, p. 214; Hadith 15 is marfu' (a report with omitted links in its chain in this context), and it contains a question about the five matters mentioned in the text; distinguishing the text of the hadith from the commentator's interpretations.

Chapter 115: The Pressure of the Grave and the Bliss and Torment of Barzakh

If the earth contains the body of the deceased, then the narrations about the grave also speak of something that transcends the earth: the encounter of the person with the traces of their life, and what God grants them in terms of comfort or questioning. It is a mistake to make the entire Barzakh a single scene of fear, just as it is a mistake to erase its warnings in pursuit of a tranquility unsupported by the text. Reading combines glad tidings and warnings, then distinguishes between an established principle and a detail that requires further investigation.

Punishment Before the Hour

God Almighty said regarding the people of Pharaoh: “The Fire, they are exposed to it morning and evening, and on the Day the Hour will be established [it will be said], ‘Admit the people of Pharaoh to the severest punishment.’” [Ghafir: 46]. The context of the verse distinguishes between being exposed to it and being commanded to do so at the Hour. Therefore, it is among the most prominent texts used as evidence for punishment before the Day of Resurrection, as discussed in Chapter 112.

However, the verse speaks of the people of Pharaoh; thus, it does not permit us to apply it to everyone who dies, nor to transfer the punishment of a known group to an individual whose fate is unknown. Similarly, the glad tidings of the martyrs' life and sustenance do not provide us with a ready-made list of the destinies of all people. We gather the sources of promise and threat, and we preserve the limits of each source.

What do the reports of pressure prove?

In al-Kafi, on the authority of Abu Basir, on the authority of Abu Abdullah al-Sadiq (peace be upon him), regarding the deceased: “He is questioned while under pressure.” Al-Majlisi deemed this chain of transmission authentic. In his explanation, he presented several interpretations of the connection between the questioning and the pressure, including their simultaneous occurrence, but he did not transform the concise statement into a detailed timeline [1]. The report attests to an instance of the pressure of the grave but does not explain, in medical terms, how it occurs or by what force its intensity is measured.

In the terminology of hadith, pressure is not another name for tissue decomposition or the movement of soil under the influence of moisture. That is a natural description previously explained, while this is a report about a state after death. A person's suffering is not established by the breaking of their bones or the change in their color, nor is it negated by the mere preservation of their body. One who is not buried in a grave is not outside the power and justice of God; the reality of the reward is not

contingent upon the completion of the burial rites.

As for the claim that every person, without exception, experiences the same manner and duration, this is another assertion that requires proof. We have seen texts that limit questioning to those whose faith or disbelief is unmixed, and the discussions of scholars regarding the circumstances of others. Therefore, it is not permissible to disregard these distinctions when moving from questioning to bliss and torment, or to unify the various narrations with a common phrase that does not take into account their specific contexts.

When Discipline is Not the Same as a Final Judgment

Al-Saduq narrated in the eightieth session of his “Amali,” with his chain of transmission from al-Sadiq, from his forefathers, peace be upon them, from the Prophet, peace and blessings be upon him and his family: “The squeezing of the grave for the believer is an expiation for his squandering of blessings.” [2] We establish the narration from its source, and we have not yet conducted an independent biographical evaluation of it. Its implication, assuming its authenticity, distinguishes between the discipline of the believer and a judgment of eternal damnation in Hell.

In this sense, the question of man shifts from the degree of fear he feels to the blessings for which he bears responsibility: a body he used, wealth he possessed, time he wasted, and people entrusted to him. This list is not an exclusive interpretation of the narration, but rather an ethical application we propose for examining our lives. Blessings do not become a right to extravagance simply because their possessor has access to them.

The Story of Sa'd and the Limits of Using It as Evidence

In another hadith in the chapter on questions in al-Kafi, the story of Sa'd ibn Mu'adh is mentioned, linking his affliction to his harshness towards his family. However, al-Majlisi deemed this chain of transmission weak according to the prevailing opinion [3]. Therefore, we do not present this historical account with the same standing as a sahih (sound) report, nor do we treat it as proof that every deceased person subjected to the pressure of the grave was ill-tempered.

As for the obligation of good conduct and refraining from causing harm, it is not contingent upon the authenticity of a single story. When we mention a hadith in the context of reflection, we clearly state that it is a hadith of this degree of authenticity, and then we return to the established obligation we know in this world: not to harm those who are unable to defend themselves against our harm. We do not need to invent detailed punishments to take injustice towards one’s family seriously.

Likewise, it is not permissible to make illness, incontinence, or the need for someone to clean the body a sign of deserving punishment. The rulings related to purification take into account ability and excuse, as has been previously explained in the sections on illness and care. Turning the patient's need into a religious accusation combines ignorance of their condition with cruelty towards them.

Bliss is also present in the texts.

In another chapter of al-Kafi, concerning the souls of believers, there is a hadith describing them in chambers of Paradise, asking their Lord to establish the Hour, fulfill the promise, and join others with them. Al-Majlisi graded its chain hasan (good). Another hadith describes them in a garden, in the form of bodies in Paradise, and he graded it muwaththaq (reliable) [4]. This is not a language of perpetual fear, but a language of sustenance, familiarity, and anticipation of what is more perfect.

This is contrasted with reports about the souls of disbelievers and their aversion to the Day of Judgment, including a chain of transmission graded hasan (good) by al-Majlisi [5]. We establish this contrast, while keeping the meaning of disbelief, the establishment of the proof, and the oppressed within its scope, not within our impressions of people's names or countries. Reports about a group do not grant the reader the authority to delve into the unseen aspects of its members.

Fear that rectifies life, and hope that does not negate responsibility.

Raising a person solely on fear may lead them to imagine God as constantly watching their weakness, while raising them on absolute security may lead them to disregard the rights of others. Combining these texts preserves the door to repentance and mercy and prevents the trivialization of injustices. We do not grant anyone a guarantee of divine protection based on a specific custom, nor do we close the door of hope to those who repent and reform.

Therefore, the practical response before death is: returning what is rightfully due, seeking forgiveness where possible without causing harm, rectifying one's dealings, and performing acts of worship sincerely. After death: supplication, fulfilling obligations, and performing established beneficial deeds. As for circulating images of corpses or stories of alleged voices in an attempt to prove punishment, this is neither an application of the text nor a respect for human dignity.

In conclusion, the bliss and torment of the intermediate realm (Barzakh) are matters of justice and mercy, not extensions of an anatomy laboratory. Its principles and sources are established by what is authentically revealed, while the modes of existence that have not been explained remain beyond our knowledge. From here, we move to a more precise question: What is meant by the bodies and forms mentioned in the narrations about souls?

Chapter Sources and References

[1] Al-Kulayni, “Al-Kafi”, vol. 3, p. 236, Chapter on Questioning in the Grave: Who is Questioned and Who is Not, Hadith 5; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, p. 207: Authentic, with its explanation of the relationship between the question and pressure.

[2] Al-Saduq, “Al-Amali,” Session 80, Hadith 2, the chain of transmission of Ibn al-Walid from al-Saffar from Ibrahim ibn Hashim from al-Nawfali from al-Sakuni. This chapter does not independently verify its chain of transmission.

[3] Al-Kulayni, “Al-Kafi,” vol. 3, p. 236 and onwards, the same chapter, Hadith 6; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, p. 207: Weak according to the well-known opinion.

[4] Al-Kulayni, “Al-Kafi,” vol. 3, pp. 244–245, another chapter on the souls of the believers, Hadiths

4 and 7; “Mir’at al-‘Uqul,” vol. 14, pp. 225–226: Hasan (good) and muwaththaq (reliable), respectively.

[5] Al-Kulayni, “Al-Kafi,” vol. 3, p. 245, chapter on the souls of the disbelievers, hadith 1; “Mir’at al-‘Uqul,” vol. 14, p. 226: Hasan (good).

Chapter 116: The Barzakh or Imaginal Body

When it is said that the soul departs the body, a question arises: How does a person perceive things after death? How does he recognize others or experience bliss and pain? Some narrations speak of bodies and forms resembling earthly bodies, and from this arose a lengthy discussion about the intermediate body (Barzakh). The aim is not to fill this unseen realm with our own interpretations, but rather to first understand what the text states, and then what scholars have done to explain it.

Three distinct layers that should not be confused:

The first layer is the wording of the narration, such as "in bodies like their bodies" or "in the form of bodies." The second layer is the scholar's interpretation of these words as referring to an imaginal body. The third layer is a philosophical framework concerning the nature of the imaginal world and its relationship to matter and immateriality. A researcher may be convinced by the entire framework, or he may accept the narrations but remain hesitant regarding some of the interpretations. Therefore, do not consider these three layers to be a single hadith transmitted from the Imam.

The Arabic term mithali, translated here as “imaginal,” does not mean a morally perfect body, nor the most beautiful of bodies. Rather, it refers to a body or image resembling the known body, but differing in origin. Philosophers use the term within more precise definitions; therefore, it is incorrect to apply every narrative usage of the word “image” to all of these definitions without evidence.

Bodies in the Terminology of Narrations

In the hadith of Abu Walad al-Hannat, on the authority of al-Sadiq (peace be upon him), he was asked about the narration concerning the souls of believers being placed in the crops of birds. The answer came in denial, then: “But in bodies like their bodies.” Al-Majlisi judged this hadith to be hasan (good) [1]. In the hadith of Abu Basir: “In a garden, in the form of bodies in Paradise,” and he judged it to be muwaththaq (reliable) [2].

These two expressions preserve a human image in the narration and do not reduce humanity to a transformation into an animal species. However, the “like” in “their bodies” does not imply that the intermediate body is a chemical replica of every earthly cell, nor does it describe the heart, lungs, and nerves. Establishing the resemblance in the narration is not the same as determining all its aspects by the reader.

The phrase “in a form like its form in this world” appears in the hadith of Yunus ibn Zabyan, followed by recognition of a newly arrived person by their earthly appearance. Al-Majlisi deemed this chain of transmission weak [3]. Therefore, it is

appropriate to study it as part of the narrative material, but it is not appropriate to place it indiscriminately alongside the chains graded hasan (good) and muwaththaq (reliable), or to elevate their status to it simply because of the similarity in meaning.

From the narration to al-Mufid’s interpretation

In “Correcting the Beliefs of the Imamiyyah,” Sheikh al-Mufid mentions the transfer of the spirit of a person whose faith or disbelief is unmixed to a form like its previous one, linking this to reward and punishment leading to the Resurrection [4]. Al-Majlisi also quotes in this passage an answer from “al-Masa’il al-Sarawiyyah” that distinguishes between this form and the re-creation of the body at the Resurrection [5]. The discussion here is a scholar’s account based on narrations, not a new statement attributed to the infallible one.

This distinction prevents abbreviating stages: the corruption of the earthly body is not, in this understanding, the end of all perception, and the intermediate body is not the general resurrection in which all creation is gathered. What has been said about believers and pure disbelievers cannot be extended to everyone without examination, especially given what was previously stated regarding al-Mufid's position on those outside these two categories.

What did the philosophical inquiry add?

Al-Majlisi explains these traditions through the lens of imaginal bodies, and quotes Shaykh Baha'i on a world whose forms mediate between material and immaterial beings. In this conception, the form retains dimensions, senses, and perceptions, without necessarily being composed of the familiar earthly matter [5]. This is a metaphysical conception of the text's subject, not an anatomical description derived from examining a corpse.

It is important to note that the transmission itself reveals the limits of the argument; The quoted words of Shaykh al-Baha’i mention support from the apparent meanings of transmitted texts, but does not present the entire discussion of the imaginal world as the result of a complete rational proof in that context. We do not conceal this limitation, nor do we equate the strength of the commentator's conviction with the agreement of all schools on every detail.

Some commentators have approximated the idea by drawing parallels to what a person sees in dreams—images, sounds, pain, and pleasure. This approximation helps in understanding the possibility of conceiving of an experience other than the usual sensory experience, but it does not prove that the dream is the intermediate realm (Barzakh), or that everything a sleeper dreams of is a real encounter with the dead. The function of the analogy is to explain a meaning, not to prove every claim that comes close to it.

Why is this not reincarnation?

The reincarnation that Shaykh al-Baha’i discusses in this context is the return of souls to bodies in this world within a conception that denies the afterlife or replaces it with a continuous cycle of bodies. As for the interpretation of the narrations

regarding an intermediate body, its subject is an existence between death and resurrection, with belief in the resurrection [5]. The difference in subject matter and outcome precludes conflating the two expressions simply because they share a connection between the soul and the body.

However, this distinction should not be used as a license to believe every story about a person who recounts a past life. The claim that a child is the deceased so-and-so, or that the dead person has incarnated in an animal, requires its own proof; it does not arise from the accounts we have before us. Furthermore, raj‘a (the return to earthly life), which has its own chapter later, is a separate topic entirely.

No known mass, no secret frequency

The aforementioned sources do not provide a mass in grams for the soul or the intermediate body, nor a wavelength upon which a device can be calibrated. Furthermore, the term "subtlety" in philosophical discourse is not the name of a gas or physical radiation. Therefore, we do not base this research on claims related to spirit imaging devices or energy fields without independent experimental evidence.

Distinction protects both sides: we do not judge a metaphysical text by a standard designed for another phenomenon, nor do we borrow scientific terminology to mislead the reader into believing that a philosophical interpretation has become a laboratory finding. Likewise, the preservation of the body is not a condition for the continuation of a person's identity; otherwise, those who perished in flames or drowned would be less fortunate in the afterlife, a conclusion not supported by the texts.

An Identity That Does Not End with the End of Our Physical Features

What unites this research is that, in the discourse of the afterlife, a person is not a name that has been erased and replaced by another. They remain the one addressed, the one held accountable, the one who receives glad tidings or warnings, even if their origins have changed. As for how his identity is preserved at each stage, this is not derived solely from the image of the body or from the DNA composition.

We thus arrive at a more structured approach: reports have been received concerning bodies and images, which scholars have interpreted as imaginal bodies, and philosophers have explored the nature of that creation. We mention what has been authentically transmitted, attribute the interpretation to its source, and leave what the text does not clarify as an open question. Then, within these parameters, we ask: Do souls recognize and meet?

Chapter Sources and References

[1] Al-Kulayni, “Al-Kafi,” vol. 3, p. 244, another chapter on the souls of believers, hadith 1; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, p. 221: Hasan (good).

[2] Al-Kulayni, “Al-Kafi,” vol. 3, p. 245, the same chapter, hadith 7; “Mir’at al-‘Uqul,” vol. 14, p. 226: Muwaththaq (reliable).

[3] The same source, hadith 6; “Mir’at al-‘Uqul,” vol. 14, p. 225: Weak. The ruling is specific to the aforementioned chain of transmission.

[4] Al-Mufid, “Tasheeh I’tiqadat al-Imamiyya,” p. 89, discussion of souls and spirits after death; it should be read in conjunction with the details in the preceding and following pages, not in isolation.

[5] Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, pp. 221–224, his explanation and transmission from Al-Mufid and Sheikh Baha’i on the imaginal form, reincarnation, and the imaginal world. The interpretation is attributed to its authors, not to the wording of the hadiths.

Chapter 117: The Meeting and Mutual Recognition of Spirits

One of the most painful aspects of loss is imagining one’s beloved in endless isolation. Therefore, accounts of intimacy after death have a profound impact on the soul. However, our need for solace does not absolve us from the responsibility of verification. Not every scene that evokes comfort is a reliable account, and the weakness of some scenes does not negate the principle of the gathering mentioned in other texts.

Acquaintance in the Narration of Dhurays

Among the important texts is the narration of Dhurays al-Kunasi on the authority of Abu Ja'far al-Baqir (peace be upon him) in the chapter on "Paradise of this World" in al-Kafi. It describes the souls of believers experiencing bliss, meeting, and acquaintance, mentioning this in the context of their states before the Day of Resurrection. Al-Majlisi deemed this narration authentic [1]. Therefore, the principle of acquaintance here is not based on an anonymous story or a dream recounted by someone.

However, the narration itself is lengthy, containing descriptions of the west and the east, visiting the graves, and other things. It is not correct to extract a portion of it and then use it as permission to depict every movement of the souls. We will affirm what was narrated along with its degree of authenticity, leaving the interpretation of its relationship to place and time to further research, without transforming it into a map that can be visited with geographical exploration tools.

The Conversing Circles and the Valley of Peace

Al-Kulayni, in the chapter on the souls of believers, narrated the story of Habba al-Arani with the Commander of the Faithful (peace be upon him), in which he mentioned the souls of believers conversing in circles in the Valley of Peace. He then narrated another story to reassure those who feared their brother might die far from Kufa [2]. Al-Majlisi described the chain of transmission for the first as “majhul (unknown)” and for the second as "weak according to the majority." The chain of transmission for the second also includes the term rafa‘ahu, indicating omitted links in the transmission here. We affirm the existence of both stories and the rulings attributed to their source, without taking their hidden details as definitive conclusions.

The meaning conveyed by the second story itself is that the place of death does not prevent the soul from being gathered to what God has prepared for it. Therefore, it is

not correct to transform the hope for the virtue of a particular place into a threat to the deceased's family if they are unable to transport the body there. The honor of a believer is not a commodity dependent on the cost of transportation, nor does burial far away become evidence of their separation from the believers.

The mention of Wadi al-Salam in the hadith does not grant every story circulating at the cemetery the status of a hadith. A visitor's feelings or visions are not on the same evidential footing as a text transmitted with a chain of narrators, and a mediator's claim to know the names of those gathered there is not a necessary consequence of the hadith. We must reconcile respect for the sanctity of the place with a rejection of fabricating knowledge.

How do the spirits receive the newcomer?

In the other chapter, concerning the spirits of the believers, there is a hadith narrated by Abu Basir about recognizing and questioning the newcomer, leaving him to calm down after his ordeal, and then asking about some of those who were in this world. Al-Majlisi deemed its chain of transmission weak. A similar hadith, narrated by Yunus ibn Ya'qub, describes their gathering and questioning about those who have passed on and those who remain. Its chain of transmission was deemed unknown [3].

Therefore, the scene of the reception, with its detailed dialogue, is not on the same level as the sound chain of transmission mentioned at the beginning of the chapter. We may include it among the narrations, explaining its circumstances, but we cannot assure the bereaved that so-and-so inquired about them at a specific time. Nor can we definitively say that someone is deprived of mercy simply because someone saw him absent from a gathering in a dream.

These two narrations contain a phrase about those who died without reaching those souls, and it is one of their most impactful expressions. The weakness or obscurity of the path, and the limitations of the group mentioned in the narration, prevent us from using it as a tool for judging individuals. We have no record of the unseen regarding those who have reached and those who have not, nor do we know who is absent from the perception of those in another realm.

The hope of joining the loved ones

As for the narration of the supplication for the establishment of the Hour, the fulfillment of the promise, and the joining of the others, it was transmitted through a chain of narrators graded hasan (good) by al-Majlisi, as previously mentioned. Al-Majlisi explained the phrase "joining" in more than one way, including joining those who have passed on among the righteous, or joining those who remain with those who came before, or a meaning encompassing both [4]. We present this diversity to the reader instead of offering a single interpretation as if it were the exact wording of the narration.

In this hope, human relationships do not appear as a burden that one is relieved of upon death. The sense of intimacy remains, but under God's mercy and judgment, not under the constraints of our desires. We do not infer from this intimacy that every worldly relationship, however unjust or coercive it may be, will be imposed

upon its possessor in the Hereafter.

What is the difference between getting to know one another and knowing everything?

That souls get to know one another does not mean that they know all the events of this world, the secrets of intentions, or the future. Rather, the reports of the question, assuming their details are authentic, speak of a request for information, not of an inherent, all-encompassing knowledge. The knowledge with which God honors a servant remains a gift from Him, not something independent of Him.

Therefore, we do not measure the deceased's worth in God's eyes by the frequency of their appearance in their family's dreams. One may yearn for them without dreaming, or one may dream due to overwhelming preoccupation. Financial obligations and rights are not transferred from one person to another merely through a dream. If the deceased had debts or a will, the way to ascertain them is through verifiable evidence, not through emotional pressure exerted by someone claiming to have received a message.

Intimacy without Claiming Connection

Reports of encounters between spirits are not instructions for holding séances. Nothing mentioned above proves that a person can summon them at will or obtain a guaranteed answer from them. There is a vast difference between believing in a reported account of the state of the dead and believing someone who demands money to speak on behalf of a deceased person.

This restraint does not preclude supplication, visitation, and remembrance of the deceased; rather, it protects them from exploitation. A well-wisher can say, "I pray for God's mercy and the company of the righteous for you," without adding, "I know where you are sitting now and what you said." Sincere hope does not require claiming to see the unseen.

Thus, this chapter does not end with a picture of absolute isolation, nor with a list of imagined encounters. We have before us a report with a sound chain concerning meeting and mutual recognition, and other accounts varying in the details of the meeting and reception. We acknowledge this variation, keeping mercy broader than our perceptions, and then we move on to the question of the different circumstances of people and those in whom the conditions of religious obligation are not met.

Chapter Sources and References

[1] Al-Kulayni, “Al-Kafi,” vol. 3, pp. 246–247, Chapter on the Paradise of this World, Hadith 1; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, pp. 228–229: Authentic.

[2] Al-Kulayni, Al-Kafi, vol. 3, p. 243, chapter on the spirits of believers, hadiths 1–2. The first is Habba al-‘Urani’s report; the second chain includes rafa‘ahu, indicating omitted links. Al-Majlisi’s gradings were checked in Mir’at al-‘Uqul, vol. 14: the first is majhul (unknown), p. 218; the second “weak according to the prevalent assessment,” p. 220. These are his judgments on the two chains, not an independent investigation of all supporting reports.

[3] Al-Kulayni, Al-Kafi, vol. 3, p. 244, another chapter on the souls of believers, hadiths 3 and 5; Mir'at al-'Uqul, vol. 14, pp. 224–225: weak and unknown, respectively.

[4] The same source, hadith 4; Mir'at al-'Uqul, vol. 14, pp. 224–225: hasan (good), with interpretations of the joining mentioned in the preceding discussion.

Chapter 118: People's Conditions in Barzakh

People are not identical in knowledge, ability, and choice, nor do they receive the call under equal circumstances. Among them are children who did not grasp the meaning of responsibility, some who were prevented from acquiring knowledge, some who knew but resisted, and some who responded but then weakened and sinned. Therefore, justice would not be served by erasing these differences, nor would our reading of the accounts of Barzakh be sound if it treated everyone’s circumstances as identical.

The Principle that Precedes the Details

God Almighty says: “Whoever is guided is only guided for [the benefit of] himself. And whoever goes astray only goes astray to his own detriment. And no bearer of burdens will bear the burden of another. And We would not punish [a people] until We sent a messenger.” [Al-Isra: 15]. This verse encompasses the responsibility of a person for his actions, the negation of holding him accountable for the sins of others, and the connection between punishment and the sending of a messenger.

A child is not born bearing the sins of his parents, nor is familial belonging alone an act he chooses. The details of establishing proof and the actual possibility of knowledge fall under the domain of belief, but the fundamental principle prohibits, from the outset, portraying God as punishing those who did not act or were incapable of doing so, simply because they were born in a particular place.

Prophets, Martyrs, and People of Faith

The Quran explicitly states the life, sustenance, and joy of martyrs, as mentioned in Al Imran: 169–171. This is a clear and explicit honor, which cannot be reduced to merely the preservation of their name in memory. As for the details of the lives of prophets and their successors after death, there are narrations and discussions on this topic, some of which were covered in Chapter 110. We do not consider a narration about the preservation of the body as an explanation of all the states of the soul.

Narrations about believers mention the bliss, mutual recognition, and supplication for the fulfillment of the promise. We have explained the degrees of several of these narrations, and we have also explained al-Mufid’s interpretation, which limits certain conditions of Barzakh to those whose faith or disbelief is unmixed. This particularity does not mean that everyone who claims faith has attained its full rank, nor does it mean that a person's weakness in one matter excludes them from all hope.

It is a mistake to transfer the virtue of martyrdom to justify aggression or the pursuit of death for its own sake. The discussion here concerns the honor of those who are truthful in the path of God, not granting humans the authority to distribute the ranks of martyrs according to their disputes. Human life and responsibility in this world do not lose their value because we speak of the merits of the Hereafter.

Sinners are not a single category.

In the narration of Dhurays al-Kunasi, which al-Majlisi deemed authentic, there is a question about monotheists who acknowledge the prophethood of the Prophet (peace and blessings be upon him and his family) who commit sins and do not recognize the authority of the Imams. The answer distinguishes between those who perform good deeds and do not display enmity, and those who are hostile to the Imams. It states that the former await God’s decision until He calls them to account [1].

This distinction is important within the Imami text itself because it prevents reducing everyone who does not recognize the authority of the Imams to someone who is deliberately hostile. We should not equate doctrinal differences with the aforementioned enmity, nor should we claim to know the hearts of individuals or the extent to which the proof has reached them. Transmitting a narration does not entitle us to pass final judgments on our neighbors or relatives.

Conversely, the description of awaiting God’s decision does not render sin ineffective, nor does it negate the reckoning. The hadith combines the possibility of benefiting from good deeds with the understanding that the matter ultimately rests with God. Hope does not necessitate inventing absolute innocence, and the warning does not necessitate denying the distinctions mentioned in the text itself.

The Oppressed: Helplessness, Not Obstinacy

God Almighty said in the context of migration: {Except for the oppressed among men, women, and children who cannot devise a plan nor find a way} [An-Nisa: 98], then He said: {For those, it is hoped that God will pardon them, and God is ever Pardoning and Forgiving} [An-Nisa: 99].

We preserve the context of these two verses, and we do not claim that they alone detail all the rulings concerning the religiously weak. However, they clearly demonstrate the consideration of genuine helplessness and the inequality between those who find no way out and those who turn away despite having the ability. The hadith of Dhurays mentions the weak and the children in its detailed account of the intermediate state (Barzakh) [1].

Scholars may differ in their approaches to reconciling this hadith with the hadiths concerning those who are not purely faithful or disbelieving. Al-Mufid presented a clear specification regarding questioning, reward, and punishment, while other hadiths provide details for additional categories [2]. We do not disregard either aspect, nor do we claim that every detail has been agreed upon in its reconciliation.

Children and those who have not yet attained understanding

Al-Kulayni, in the chapter on children, narrated the hadith of Zurarah from al-Baqir (peace be upon him), which mentions children, those who died during the period between prophets, and categories of people who have not yet attained understanding, and their test on the Day of Resurrection. Al-Majlisi deemed the first chain of transmission to be hasan (good), and in his commentary, he presented the differences of opinion among theologians and hadith scholars on this matter [3]. The hadith is not a description of a test humans undergo in this world, nor is it an

obligation imposed on a child or a sick person.

Al-Majlisi quoted scholars of justice who rejected the unjust torture of those not accountable, and mentioned the difference of opinion regarding the nature of the fate and the test. We must distinguish between the principle of God's transcendence from injustice and the conception of the manner of the Hereafter. Accepting the principle does not necessitate knowing the details of every situation, nor does the existence of a hadith about the test preclude discussion.

The wording of the hadiths contains ancient descriptions related to the absence of reason or the inability to understand the message. We do not convey these to people today in a derogatory manner, nor do we equate hearing or speech impairment with a loss of understanding; the hadith itself qualifies some of its descriptions as implying a lack of reason. A person who cannot hear or speak may be fully capable of understanding and responsibility, and it is not permissible to strip them of these qualities because of their means of communication.

What should we say to the parents?

We do not tell parents who have lost their child that the child is being punished for their faith or for a mistake they made, nor do we exploit their grief with unverified stories. We say that God is not unjust, that a child does not bear the burdens of others, and that the texts contain hope, mercy, and a search that cannot be reduced to a terrifying image. And for what we do not know the true nature of, we do not invent a harsh answer simply because grief demands a quick one.

Likewise, we do not determine the fate of an adult based solely on the cause of their death, the difficulty of their passing, or the manner of their funeral. These are outward appearances that do not, in themselves, reveal what is in the heart or what repentance and reform have been previously undertaken. God knows best what a person knows, what they are capable of, and what they intend.

Thus, the story of the intermediate realm (Barzakh) extends to the real human being, not to a hypothetical human being in whom all opportunities are equal. It is established that God is just and merciful, that the promise and the threat are true, and that people's circumstances are not all the same. What lies beyond this is proven by its evidence, and the final judgment remains with Him from whom nothing is hidden.

Sources and References for this Chapter

[1] Al-Kulayni, “Al-Kafi,” vol. 3, pp. 246–247, chapter on the Paradise of this World, hadith 1; “Mir’at al-‘Uqul,” vol. 14, pp. 228–229: Authentic. The details concerning sinners, the vulnerable, and children are part of the same hadith.

[2] Al-Mufid, “Tasheeh I’tiqadat al-Imamiyya,” pp. 88–90 and 99–100, in the section on the categories of souls and the specificity of questioning; this chapter does not claim to resolve all aspects of reconciling it with the other hadiths.

[3] Al-Kulayni, “Al-Kafi,” vol. 3, p. 248, chapter on children, hadith 1; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, pp. 230–231: Hasan, with his presentation of differing opinions and his rejection of the unjust torture of those who are not legally responsible.

[4] The Holy Quran, Al-Isra: 15; An-Nisa: 98–99; Al ‘Imran: 169–171. The texts of the verses are the basis for distinguishing between individual responsibility and incapacity, and between earthly death and the life of martyrs.

Chapter 119: The Relationship between the Dead and the Living

Love does not cease when the breath ceases. A person visits the grave of his father or mother, offers greetings and prayers, and asks in secret: Do they know that I have come? Narrations have answered some of these questions, but they have not granted the living open access to the world of the dead. Between the connection established by the text and the connection claimed by people, there is a distance that must be preserved.

Visiting and the Comfort Found in a Visit

In al-Kafi, it is narrated from Imam al-Sadiq (peace be upon him) regarding visiting graves: “They find comfort in your presence, and when you are absent from them, they feel lonely.” Al-Majlisi deemed this chain of narration to be hasan (good), and he explained the loneliness in a way that does not necessarily imply that all the deceased will be in perpetual sorrow [1]. Therefore, the narration about the comfort found in visiting graves should not be interpreted as a threat to the families that every day of their absence brings new suffering to their loved one.

The chapter also includes narrations about Fatima al-Zahra (peace be upon her) visiting the graves of martyrs, and about the believer's recognition of those who visit his grave. However, their levels of authenticity are not uniform: Al-Majlisi deemed the aforementioned narration about the visit to be hasan (good), while the fourth chain of narration regarding the recognition of the visitor was deemed weak according to the prevailing opinion [2]. The essence of the visit does not depend on equating all chains of narration and details.

Faithfulness to the deceased is not measured solely by the number of visits. Distance, illness, or fear may prevent one from reaching the grave, but supplication, charity, and fulfilling obligations remain possible. No one should use these reports as a means to increase the bereaved person's sense of inadequacy or to extort money from them for a service whose true nature they are unaware of.

The Greeting of Peace: Those Who Follow Address Those Who Went Before

In a hadith narrated by Abdullah ibn Sinan from Imam al-Sadiq (peace be upon him), there is a form of greeting: “Peace be upon the inhabitants of these dwellings, Muslims and believers. You have preceded us, and we, God willing, will join you.” Al-Majlisi deemed this chain of narration to be hasan (good) [3]. Those who have preceded are the earlier ones; the visitor does not proclaim his superiority over those in the graves, but rather remembers that he is heading towards the same fate.

This formula combines acknowledgment of the connection, supplication, and

remembrance. It is not a condition that negates sincere supplication using other words, nor is it an assertion that the visitor will receive a tangible response. Furthermore, standing respectfully does not permit violating the sanctity of the graves or photographing the bereaved without their consent.

Does the deceased visit his family?

Hafs ibn al-Bakhtari narrated from al-Sadiq (peace be upon him) that the believer visits his family, seeing what he loves while what he dislikes is concealed from him, and that the nature of the visit varies according to one's deeds. Al-Majlisi judged this chain of transmission to be hasan (good) [4]. This establishes a report about a specific connection, but it does not prove that the deceased observes every movement in the house or knows every secret spoken by its inhabitants.

The rest of the chapter contains reports with different times, images, and other details. Al-Majlisi judged the second and third hadiths to be weak according to the prevailing opinion, the fourth to be weak, and the fifth to be weak according to the prevailing opinion [4]. Therefore, we do not present the differences in day, week, month, and year in these narrations as if they constitute a single program binding on all souls.

Some of them mention an image of a bird. This does not necessarily mean that a sparrow perched on a windowpane is the spirit of a deceased relative; moving from a report of the unseen to identifying a specific animal requires evidence beyond emotional resemblance. Similarly, the entry of a butterfly or the changing of a lamp does not indicate the presence of a deceased person, nor does the absence of such occurrences prove their absence.

How do we read the verse about not being able to make the dead hear?

God Almighty says: “And the living and the dead are not alike. Indeed, God causes to hear whom He wills, but you cannot make those in the graves hear.” [Fatir: 22] This appears in the context of contrasting the blind with the seeing, darkness with light, and then the warning.

Al-Tabataba’i interprets these contrasts as a representation of the believer and the disbeliever, and he considers those in the graves in this context to be those who turn away and do not benefit from the warning [5]. We attribute this understanding to his interpretation, and we do not remove the context to turn the verse into an anatomical report on the organs of hearing, or a detailed account of all perception after death.

At the same time, a narration concerning the deceased person's recognition of a visitor does not lead us to claim that every deceased person hears every word spoken everywhere. Establishing one instance of knowledge by God's permission is not the same as establishing an all-encompassing, inherent ability. Between absolute negation and absolute affirmation lies a space defined by evidence, not by our desire to definitively state more than what the texts have already clarified.

The Presentation of Deeds to the Prophet and the Imams

Al-Kulayni dedicated a chapter to the presentation of deeds to the Prophet (peace and blessings be upon him and his family) and the Imams (peace be upon them). Among these is the hadith of al-Washsha' on the authority of al-Rida (peace be upon him): "Deeds are presented to the Messenger of God (peace and blessings be upon him and his family), both the righteous and the wicked." Al-Majlisi deemed its chain of transmission authentic [6]. This is a reliable, well-established narration concerning the presentation of deeds, distinct from the narrations about other deceased people visiting their families.

The hadiths in this chapter include an interpretation of God's statement in Surah At-Tawbah (9:105), and mention of the presentation to the Imams. We distinguish between the wording of the Quran and the application of the narrations and the details of their timing. The established fact that the Prophet or Imam was informed by God does not lead to the claim that every deceased person possesses the same level of knowledge.

The educational benefit is that a person should feel shame for their wrongdoing, not fall into the obsessive belief that every detail of their private life is revealed to every deceased relative. The goal is to rectify actions and cultivate genuine loyalty, not to create an imagined surveillance that corrupts the lives of the living. God's ability to inform does not imply independent knowledge of the unseen for those He informs.

The bond of worship is not a commercial transaction.

A person who loves the deceased has the right to visit, greet, and pray according to what they believe to be valid evidence. No one has the right to impose upon them a statement attributed to the deceased without proof. A financial debt, an alteration of a will, or an accusation against someone cannot be established simply by claiming that the spirit said so. Rights are preserved through methods of proof, not by the power of influence on the bereaved.

Seeking intercession, visiting graves, and discussions of supplication have their own jurisprudential and theological chapters, and are not reduced to the claim of a communication session whose results can be bought and sold. Likewise, we should not make dreams a source of legislation, a cure, or a substitute for verification. A vision may offer its dreamer personal solace, but it does not obligate others to accept its claims.

The closest connection we can maintain remains: a sincere prayer, a right we restore, a good deed we complete, and a remembrance that does not slander the deceased. We are not required to break the veil to be faithful. From here begins the next chapter: What can we actually do for those who have gone before us?

Chapter Sources and References

[1] Al-Kulayni, “Al-Kafi,” vol. 3, p. 228, chapter on visiting graves, hadith 1; “Mir’at al-‘Uqul,” vol. 14, pp. 191–192: the text and its continuation, graded hasan (good), with an explanation of loneliness.

[2] “Al-Kafi,” the same chapter, hadiths 3–4; “Mir’at al-‘Uqul,” vol. 14, p. 193: Hasan (good) for the

third hadith, and Da’if (weak) according to the well-known opinion for the fourth.

[3] “Al-Kafi,” vol. 3, p. 229, chapter on visiting graves, hadith 5; “Mir’at al-‘Uqul,” vol. 14, p. 193: Hasan (good).

[4] “Al-Kafi,” vol. 3, pp. 230–231, chapter on the deceased visiting his family, hadiths 1–5; “Mir’at al-‘Uqul,” vol. 14, pp. 195–197, which includes a detailed explanation of the degrees mentioned in the text.

[5] Al-Tabataba’i, “Al-Mizan fi Tafsir al-Qur’an,” Tafsir Fatir: 19–23, within the section on verses 15–26; the parable of the believer and the disbeliever and the role of warning.

[6] Al-Kulayni, “Al-Kafi,” Kitab al-Hujjah, chapter on the presentation of deeds to the Prophet and the Imams, hadith 6; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 3, p. 6: Sahih (sound).

Chapter 120: What Benefits the Deceased after Death?

When the funeral procession ends, people return to their work, and a practical question remains in the heart of a close relative: What can I do now? Loyalty is not about stopping life at the day of loss, but about carrying good deeds that benefit both the departed and those who remain. In this regard, supplication meets action, and mercy meets the preservation of rights.

The Prayer That Reaches Generations

God Almighty says: {And those who came after them say, “Our Lord, forgive us and our brothers who preceded us in faith and put not in our hearts [any] resentment toward those who have believed. Our Lord, indeed You are Kind and Merciful.”} [Al-Hashr: 10]. Here is a prayer for those who came before, coupled with a purification of the supplicant's heart from resentment.

The prayer is not a statement that we know the fate of the one for whom we are praying, but rather a request to the Most Merciful to have mercy on him. When we pray for forgiveness for the deceased, we acknowledge their need and our own, and we do not claim for ourselves the authority to absolve them of their obligations to others. Prayer can accompany daily work without a costly commemorative occasion or a commercialized approach that suggests acceptance can be bought.

Actions Whose Benefit is Mentioned

Al-Saduq, in his book "Man La Yahduruhu al-Faqih," mentions a hadith concerning the benefit of prayer, fasting, pilgrimage, charity, acts of kindness, and supplication reaching the deceased, and the recording of the reward for both the doer and the deceased. This hadith is presented in the form of "And he, peace be upon him, said," without a detailed chain of transmission; therefore, its inclusion in the book alone does not constitute a ruling on the validity of an independent chain of transmission [1].

This hadith, along with its other chapters and the jurisprudential discussion, indicates that love can be transformed into an action. However, every act of worship has its conditions, and performing an obligatory act on behalf of another is not the same as dedicating the reward of a recommended act. General statements do not suffice without referring to the ruling on the specific act. The intention is not to

overwhelm those afflicted with programs beyond their capacity, but rather to open a door to readily available good deeds.

Performing an Act on Another's Behalf Differs from Dedicating Its Reward

In his commentary on al-Urwa al-Wuthqa, Sayyid al-Sistani distinguishes between dedicating an act or its reward to the deceased and performing the act on their behalf to discharge their obligation. Dedicating the reward alone does not fulfill the obligation; rather, performing it on their behalf is fulfilling the obligation with the intention of clearing it [2].

Based on this distinction, one who performs a voluntary prayer and then dedicates its reward does not automatically fulfill an obligatory prayer missed by the deceased. Similarly, paying someone does not, in itself, make the act valid. Regarding how many missed acts must be made up, who must make them up, the source of the expenses, and the details of hiring someone to perform them, refer to the fatwa of the religious authority; this section is not a fatwa for all cases [2].

Returning Rights Before Creating Appearances

Chapter 109 details the inviolability of the deceased, bequests, and financial rights. And here we return to its ethical conclusion: Do not let spending on a memorial be a cover for an established debt or property known to have been entrusted to the deceased. If you can return what is rightfully owed, do so properly, rather than replacing restitution with a display that pleases the public.

It is not right to ask those entitled to compensation to relinquish it under the pressure of grief or accusations of disloyalty. Forgiveness is a virtue when it is given with genuine consent, but exploiting the tragedy to silence the rightful owner is a further injustice. Likewise, not all family funds are permissible for a memorial project decided upon by the most influential member; each asset retains its sanctity and its rightful owners.

A lasting impact

God Almighty says: "Indeed, it is We who bring the dead to life and record what they have put forth and what they have left behind, and all things We have enumerated in a clear register." [Ya-Sin: 12]. The verse does not stop at the moment of the action but also mentions the effects; it opens the view to the continuity of what a person does after he is gone from this world.

Al-Saduq narrated in "Al-Khisal" and "Al-Amali" on the authority of Imam al-Sadiq, peace be upon him, six things that benefit the believer after his death: a righteous child who prays for forgiveness for him, a copy of the Quran that is read, a well, a tree planted, water that he sets in motion as charity, and a good practice that is followed after him [3]. Both narrations have the same chain of transmission from al-Saduq's father to the Imam; They are not considered independent chains of transmission, nor does their publication in two books prove the authenticity of the report.

The examples encompass education, knowledge, water, planting, and emulation. The value lies not in the grandeur of the name on the project, but in the good it actually accomplishes. A book that teaches without misleading, a water source that benefits without being neglected, and a plant that thrives and is utilized: these are examples that help in understanding the impact, and do not mean that every modern project automatically accrues a detailed reward for which there is no textual evidence.

Charity is not conditional on having a child.

The mention of a righteous child in the report does not deprive those who do not have children of ongoing good, as the report itself mentions other avenues. Those who recognize someone's virtue can pray for them and perform good deeds on their behalf; lineage is not the only way to show faithfulness. Furthermore, children should not be burdened with the responsibility of realizing everything they hope for their parents in a way that drains their lives.

Charity does not need to become a competition in publicity. One can choose a specific benefit that suits one's ability and ensure it reaches its intended recipient and that its implementation is sound. What we offer here is practical guidance in managing good deeds, not a predetermined reward or a promise to erase all sins simply by giving a sum of money.

The Effects of Good and the Effects of Harm

If the positive impact extends, then caution is also necessary regarding the harmful impact. A person may leave behind false teachings, published abuse, or an arrangement that oppresses people after them. Therefore, preparation before death begins with reviewing what we publish and what we establish, not merely with a will asking others to give charity on our behalf.

Part of loyalty after death is correcting any apparent mistake the deceased left behind fairly, not persisting in it simply because they were loved. Love does not necessitate attributing infallibility to everyone we have lost, nor reviving personal grievances generation after generation. One can preserve their virtues, rectify their mistakes, and pray for them simultaneously.

A Possible Plan of Remembrance

The family of the deceased can arrange what they know of the will and rights, then choose a prayer and a beneficial deed they are capable of performing, and faithfully preserve their memory. They are not required to fulfill every act of kindness, nor to pledge an amount exceeding their means. A small, consistent, and disciplined act is better than a large promise that creates conflict or wastes money.

Do not neglect the care of the living under the pretext of being preoccupied with the dead; there may be a child in the family who needs security, a sick person who needs companionship, or someone who bears the burden of care alone. Loyalty to the departed does not contradict compassion for them. A person's story does not end with their last act, but it also does not give them the right to burden others with more than they can bear.

Thus, we move from the helpless question, "How can I bring back the departed?" to a practical question: "What good can I do now?" Loss remains loss, hope remains hope, and love becomes a quiet responsibility, not a trade in fear.

Sources and References for the Chapter

[1] Al-Saduq, “Man La Yahduruhu al-Faqih,” Chapter on Condolences and Grief at the Time of Calamity, Visiting Graves, Lamentation, and Mourning, Hadith beginning “There reach the deceased in his grave…”, No. 56 in the electronic division of the chapter; it appears as a statement without a detailed chain of transmission in the relevant section.

[2] Sayyid al-Sistani, “Commentary on al-‘Urwa al-Wuthqa,” vol. 2, chapter on the Prayer Performed for Hire, question 1 [1813] and commentary 725, and question 20 [1832] with its commentaries. The text and commentary should be read together. Reviewed October 16, 2026.

[3] Al-Saduq, al-Khisal, chapter on six beneficial qualities for the believer after his death; and al-Amali, session 32, hadith 2. The chain of transmission in both is: al-Saduq’s father, on the authority of Sa‘d, on the authority of Muhammad ibn ‘Isa, on the authority of Muhammad ibn Shu‘ayb al-Sayrafi, on the authority of al-Haytham Abu Kahmas, on the authority of the Imam; therefore, they are not considered two independent chains of transmission, and the chain of transmission here has not been authenticated.

[4] The Holy Qur’an, al-Hashr: 10, and Ya-Sin: 12; and the internal reference to chapter 109 on rights and bequests.

Chapter 121: Time, Perception and Awaiting Resurrection

We calculate the age of the deceased by their birth and death dates, and we measure their absence by the number of days that have passed. But does this same number pass through their perception, in the same way that we perceive waiting? This is an understandable question, yet our familiarity with hours does not make them a reliable measure for every existence. The texts describe a period of remaining, a resurrection, and a feeling of the brevity of what has passed, but they do not provide a conversion chart between earthly time and the perception of the intermediate realm (Barzakh).

A day or part of a day

God Almighty said: “He said, ‘How long did you remain on earth in number of years?’” [Al-Mu’minun: 112], then: “They said, ‘We remained a day or part of a day; so ask those who keep count.’” [Al-Mu’minun: 113], then: “He said, ‘You remained but a little while - if only you knew!’” [Al-Mu’minun: 114].

In interpreting these verses, Tabatabai suggests that the question concerns the duration of remaining in the graves, explaining its insignificance by comparing it to the enduring life of the Hereafter that is revealed to them. He mentions interpretations that equate this duration with life in this world or with the combined duration of this life and the intermediate state (Barzakh), but he rejects these interpretations in his commentary [1]. We present his preferred interpretation, noting that the identification of what is meant is itself a matter of interpretation.

The verses do not specify the number of years between each death and the Resurrection, nor do they claim that all humans lived the same perceived duration. They convey an answer within a context where the perception of the past shifts. What seemed long to a person while they were alive may appear brief upon the revelation of what lies beyond; this meaning is derived from comparison, not from a numerical equation.

The Hour that the criminals estimate

And Allah Almighty said: {And on the Day the Hour is established, the criminals will swear that they did not remain except an hour. Thus they were deluded.} [Ar-Rum: 55] Then: {And those who were given knowledge and faith will say, "You remained in the decree of Allah until the Day of Resurrection, and this is the Day of Resurrection, but you did not know."} [Ar-Rum: 56].

It is essential to consider the speaker in each instance. The estimation of the criminals does not become a definitive temporal truth simply because it appears in the account of their words; it is followed by the response of those endowed with knowledge and faith. The Quran recounts statements and then corrects them, so we should not equate the recounted statement with the judgment established by the context.

Similarly, the word "hour" in describing this period does not necessarily imply sixty minutes according to modern time. The context speaks of estimating the duration and proximity of what has passed at the time of resurrection, not of a measuring device. It is a mistake to extract a modern number from every ancient temporal term without contextual evidence.

Does “resting place” imply the absence of all perception?

God Almighty said: “They will say, ‘Woe to us! Who has raised us up from our resting place?’ [It will be said], ‘This is what the Most Merciful had promised, and the messengers told the truth.’” [Ya-Sin: 52]. The word “resting place” evokes the image of rising after stillness, but it cannot be separated from the verses about the martyrs’ lives and the presentation of Pharaoh’s people to the Fire, nor from the different categories of people discussed in this part.

Therefore, we cannot establish from this word alone that every deceased person is devoid of all awareness from the moment of death until resurrection, just as we cannot establish from the accounts of the bliss of a certain group that every person experiences continuous and identical consciousness in the intermediate realm (Barzakh). What is required is to gather the texts according to their context, not to dismiss some of them with a single statement.

It has already been mentioned that al-Mufid elaborated on the categories of souls, that the narrations about the questioning specify who is questioned, and that other narrations mention various states. All of this remains present when we speak of time. The issue is not simply a question about a single hour, but rather about a mode of existence, categories of people, and perception that we have not examined with our senses.

Morning and Evening and the Attendance of Graves

The verse about Pharaoh's family mentions morning and evening, and the narration about Dhurays mentions evening, dawn, and the revisiting of the graves, as discussed in chapters 115 and 117 [2]. We preserve these terms and do not erase them, but determining their relationship to Earth's time and the differing places of sunrise and sunset requires an explanation that cannot be provided by the text alone.

We do not have from these texts a table that specifies the time of each soul's state according to longitude or the time of the city of death. If a commentator presents a way of reconciling the intermediate realm with these terms, we attribute it to him. As for the claim that we know the laws governing time in the intermediate realm, that is an addition to what we have already documented.

A Waiting Unlike Any Other Waiting

In the accounts of believers, there is a plea for the Hour to be established and the promise fulfilled, while in the accounts of disbelievers, there is a fear of what comes after. This language makes the anticipation of what is to come dependent on the individual's state, not merely on the duration [3]. One person may await the completion of the blessing, while another fears the revelation of the consequences; therefore, we should not impose upon everyone the feeling of weariness we experience in worldly anticipation.

This does not mean that we can describe every moment of that anticipation. Sustenance, familiarity, questioning, and bliss are terms that appear in their proper contexts. However, a detailed diary woven by a writer for an inhabitant of the intermediate realm (Barzakh) is literary fiction and must be distinguished from transmitted reports. This book does not fill the spaces of narrative silence with an imagined biography that the reader might mistake for religious doctrine.

Physics does not provide us with a ready-made conversion of time.

It is incorrect to use the difference in time in physical theories as proof that a specific ratio between this world and the intermediate realm has been established. Physical measurement has its subject, conditions, and evidence, while the intermediate realm in this research is unseen, and its news is received through revelation. The verbal similarity between two accounts of time does not unify their subject matter.

Similarly, the difference in a living person's perception of duration, or their inability to recall events during sleep or anesthesia, does not in itself prove the nature of the deceased's perception. An example might illustrate the difficulty of measuring someone else's experience, but it doesn't provide us with new information about the unseen. These boundaries were previously established in the chapters on consciousness, sleep, and near-death experiences.

What do we know, and what do we leave unresolved?

We know from the text that death is not the general resurrection, that there is a period of intermediary existence until the Day of Resurrection, and that the Quran

describes the revelation of the brevity of this period in the scenes of the Resurrection. We also know from the narrations we have studied that the conditions of different groups vary, with differing accounts of the details. We do not know of a general conversion into our earthly days or a uniform experience for all the dead.

This is sufficient to correct our perspective on life: what we perceive as long is not beyond the end, and what we postpone today may not have another opportunity. A person does not need to know the length of their wait after death to appreciate the value of the right they can fulfill now.

Here the part on the soul and the intermediate realm (Barzakh) is completed. We began by distinguishing between the decomposition of the body and the human destiny, and concluded with the limits of our knowledge of time. The next stage in the narrative is the return, resurrection, and final destiny, beginning with an explanation of the return (Raj'a) in Imami sources and its distinction from the general resurrection.

Sources and References for the Chapter

[1] The Holy Quran, Al-Mu'minun: 112–114; Al-Tabataba'i, "Al-Mizan," interpretation of these verses within the section on Al-Mu'minun: 99 and onwards; the preferred interpretation of the duration as remaining in the graves and its comparison to eternal life in the Hereafter.

[2] The Holy Quran, Ghafir: 46; Al-Kulayni, "Al-Kafi," vol. 3, pp. 246–247, chapter on the Paradise of this World, hadith 1, authenticated in "Mir'at al-'Uqul," vol. 14, p. 228. The reference here is to temporal terms without specifying their nature.

[3] Al-Kafi, vol. 3, pp. 244–245, another chapter on the souls of believers, hadith 4, and the chapter on the souls of disbelievers, hadith 1; Al-Majlisi judged both chains of transmission to be hasan (good) in Mir'at al-'Uqul, vol. 14, pp. 225–226.

[4] The Holy Quran, Ar-Rum: 55–56, and Ya-Sin: 52; the verses are referred to in the context of resurrection, and their wording is not transformed into physical quantities that are not explicitly stated.

Part 14: Return, Resurrection and Ultimate Destiny

The story of the human being does not end with what we see of the body, nor with what the texts tell us about the intermediate realm (Barzakh). Resurrection remains, in which creation is gathered, deeds are manifested, justice is established, and destiny is determined. This part first examines these scenes from the Quran and includes what can be authenticated from the narrations, while clarifying points of interpretation and disagreement.

We begin with the Return (Raj'a) because it is not the general Resurrection, then we move on to the end of the world, the Resurrection, the Gathering, and the Reckoning. The order of the chapters is not a claim to possess a comprehensive timeline of all the events of the Hereafter; rather, it is an educational arrangement that distinguishes the topics and maintains the connection between them.

Chapter 122: Al-Raj'ah in Imami Sources

The Return, in its known meaning among the Imamiyyah, is the return of a group of people who have died to this worldly life before the general Resurrection. It is not the ordinary birth of another person, nor is it a name for a memory that returns in the mind. Because the word is sometimes used without specification, we should begin by clarifying its meaning, then the sources of the belief in it, and the limits of what has been established regarding its details.

Its Place in Books of Belief

Al-Saduq opened the chapter on the Return in his book "Al-I'tiqadat" (The Beliefs) by saying: "Our belief regarding the Return is that it is true," then he cited verses about resurrection after death [1]. This is a clear account of his doctrinal position, not a recounting of an opinion he then rejects. However, not all the historical details he provides in explaining the Quranic stories are derived from the Quran itself.

Al-Mufid mentions in his "Awa'il al-Maqalat" the Imamiyyah's agreement on the return before the Day of Resurrection, while noting a difference in its meaning. He then explains elsewhere the return of specific individuals, distinguishing one group that will be honored for upholding the truth and another that will receive the punishment for its injustice [2]. We affirm his assertion of the agreement while also preserving the exception and interpretation he mentions; thus, we do not remove the qualifications from his statement.

Possibility Does Not Establish Every Detail

The Quran recounts the resurrection of the dead in this world, as in Al-Baqarah: 243 and 259, and the resurrection of the dead by God's permission at the hands of Jesus, peace be upon him, in Al Imran: 49. From this, those who affirm raj‘a (the return) argue that the return of the dead is not impossible for God's power. However, proving possibility is one thing, and proving the occurrence of a particular return,

the identities of those involved, and its timing is another.

Therefore, the story of a past resurrection alone is insufficient to establish a future list of all those who will return. This requires specific evidence. Similarly, medical resuscitation is not equivalent to raj‘a in the doctrinal sense; it involves restoring functions before irreversible death has occurred according to the relevant criteria, a distinction we have already made in the chapters on dying and the determination of death.

The Specific and General Gathering

God Almighty says: “And on the Day We will gather from every nation a group of those who denied Our signs, and they will be driven forth.” [An-Naml: 83]. And He says in another passage: “And on the Day We will set the mountains in motion and you will see the earth laid bare, and We will gather them all together, leaving none of them behind.” [Al-Kahf: 47].

At-Tabarsi, in his “Majma’ al-Bayan,” presents the argument of those who believe in the return of the dead based on the partial nature of the verse in An-Naml, in contrast to the general nature of the gathering in the verse in Al-Kahf. He also presents the other view that considers the gathering of the legion a special scene of the Day of Resurrection, intended to establish proof against leaders and those whom others followed [3]. Thus, we understand the basis of the argument and the point of discussion, instead of presenting the interpretation of the verse as if it were beyond question.

Al-Tabarsi then mentions the convergence of reports concerning the return of a group of people at the rise of the Mahdi. He mentions the interpretation of a group of Imami scholars regarding the return as the return of the state, not the individuals, and refutes this interpretation [3]. This is a presentation of the history of the issue and its arguments, not an equation between the position he adopts and what he discusses. Furthermore, it does not absolve us from examining each report if we wish to build a specific detail upon it.

Who is included in the return?

In “Tashih I‘tiqadat al-Imamiyya (Correcting Imami Beliefs),” Al-Mufid quotes Imam al-Sadiq (peace be upon him) as specifying the return as being for those who were purely faithful or disbelieving, and he places this at the rise of the Qa’im [4]. We attribute the quotation to its source; Al-Mufid does not provide a complete chain of transmission there that would allow us to assign the chain of transmission an independent level of reliability based solely on this page.

In his “Awa’il al-Maqalat,” he explains that the return is not universal for every person, and that both groups will then face death and resurrection [2]. Therefore, the return is not a substitute for the Resurrection, nor a final escape from the rule of death in this world. Those not included in the return are not exempt from the general resurrection, nor will their reckoning be lost.

As for the names, numbers, order of return, and durations, there are accounts, each requiring its own specific investigation. We will not present them in this book as a

complete calendar unless their evidence is verified. The existence of extensive research in books on the return does not mean that everything compiled within them is authentically transmitted or consistent in meaning.

The Return, Reincarnation, and the Intermediate Realm

In the return presented here, the same person returns by God's permission in a specific event, and the resurrection in the Hereafter remains a reality. As for the transmigration of souls discussed by theologians, it is the transfer of souls between earthly bodies in a way that replaces the concept of resurrection or is linked to other false notions in their view. The shared use of the term "return" in both statements is insufficient to negate the difference.

The intermediate body (Barzakh) is another matter; it pertains to the conditions between death and resurrection, not necessarily to a renewed earthly life. These boundaries were explained in Chapter 116. Thus, not every narration about the image of the soul becomes a narration about the return (Raj'a), nor does every account of resurrection become an explanation of the imaginal body.

Texts Related to the Discussion of the Return (Raj'a)

The verse about the beast in Surah An-Naml (27:82) precedes the verse about the gathering of the multitudes (Hashr al-Fawj). Commentators present various narrations and interpretations of its meaning and manner of speaking. At-Tabarsi includes some of these narrations along with others [3]. We do not equate them in terms of authenticity, nor do we consider an imaginary depiction of the beast or a contemporary personification of it to be part of the definitive meaning of the verse.

Similarly, the discussion of raj‘a does not become a license to designate living individuals as returning, nor does it lead to believing in anyone who claims to be an Imam or a saint who has returned in a new body. These are extraneous claims that require evidence, and they are not a necessary consequence of believing in the return. They cannot be used to impose obedience, money, or relationships on people.

The awaited justice does not permit present injustice.

Al-Mufid’s account highlights the meaning of revealing the truth and giving justice to the oppressed. However, this meaning does not grant an individual or group a mandate to seek revenge in the name of future events. Rights and obligations in the present are derived from their evidence, and they are not invalidated by a narrative in which someone chooses a role for themselves.

Thus, the fruit of the search is the hope for the completion of justice, not the obstruction of the legitimate pursuit of it, and trust in God's power, not a life-consuming curiosity about setting dates. The return (raj'ah) in the sources we have consulted is a specific event occurring before the Resurrection. However, the ultimate destiny, which spares no one, is the general resurrection, the preliminaries of which are explained in the following chapters.

Chapter Sources and References

[1] Al-Saduq, "Beliefs in the Religion of the Imamiyyah," p. 60 and following, Chapter on Belief in the Return.

[2] Al-Mufid, "Awa’il al-Maqalat," p. 46, The Discourse on the Return, Bada’, and the Compilation of the Qur'an; and pp. 77-78, Discourse 55 on the Return. The attribution of consensus and the limits of the return are based on his explanation.

[3] Al-Tabarsi, “Majma’ al-Bayan,” Interpretation of An-Naml: 82–83 within sections 76–85; aspects of interpretation, argumentation for the return, interpretation of the return of the state and its discussion.

[4] Al-Mufid, “Correcting the Beliefs of the Imamiyyah,” p. 90, transmission regarding the specification of the return; no claim is made that an independent chain of transmission has been authenticated in this chapter for the abridged transmission.

Chapter 123: The End of the World and the Blowing of the Trumpet

Human senses perceive a world in which things repeat themselves: the sun rises, the earth remains firm beneath the feet, and a mountain seems more enduring than generations. Then the Qur’an comes and speaks of the end of this familiar order. Not to tempt people to speculate about the day of the catastrophe, but to shatter the illusion that what is constant in its custom is independent of its Creator, and that history will continue without encounter or reckoning.

When the World's Landscapes Change

God Almighty says: “When the sun is folded up” [At-Takwir: 1], “And when the stars are dimmed” [At-Takwir: 2], “And when the mountains are moved” [At-Takwir: 3]. The surah continues by mentioning the seas, souls, scrolls, the sky, Hell, and Paradise, then this series concludes with humankind and their deeds.

In his commentary on the opening of At-Takwir, Tabatabai presents linguistic interpretations of “folded up” and “dimmed,” explaining that the abandonment of pregnant she-camels symbolizes people's preoccupation with other matters and their neglect of their most precious possessions [1]. We will convey the general meaning of this interpretation, without assigning a precise name for a modern astronomical phenomenon not explicitly mentioned in the text, simply because a word with a linguistic meaning is open to interpretation.

In Surahs Al-Infitar, Al-Inshiqaq, and Az-Zalzalah, there are other images of the transformation of what we are accustomed to regarding the heavens, the earth, and the graves. Their convergence does not necessitate a detailed, seconds-by-second sequence for each transformation. Some describe the horror of the end times, while others depict the resurrection of people and the manifestation of deeds. Connecting these requires reading the contexts, not simply compiling scenes into a cinematic sequence and attributing it to divine revelation.

The Trumpet of the Swoon and the Trumpet of the Resurrection

God Almighty says: “And the Trumpet will be blown, and all who are in the heavens and all who are on the earth will swoon, except for whom God wills. Then it will be blown again, and at once they will be standing, looking on.” [Az-Zumar: 68] The text combines swoon and then resurrection, preserving an exception related to God’s will.

This verse alone is sufficient to establish the mention of two blasts in this context, but it does not list the names of all those excluded, nor the length of the interval, nor the construction of the trumpet and its effect. If we find information on one of these details, it has its own chain of transmission and meaning; we do not transfer the certainty of the verse to the report merely because the report explains its subject.

God Almighty says: “And on the Day the Trumpet is blown, all those in the heavens and all those on the earth will be terrified, except those whom God wills. And all will come to Him in humility.” [An-Naml: 87]. Terror is mentioned here. Is it a description of what occurs with the blast that strikes creation down, or a separate stage in some attempts to reconcile the texts? This is a matter of interpretation, so we cannot assert an additional number or a comprehensive order without providing evidence.

Israfil in the Supplication

In the third supplication of “Al-Sahifa al-Sajjadiyya,” Israfil, the one in charge of the trumpet, is mentioned. He is the one awaiting permission and the fulfillment of the command, and he will awaken the dead in their graves with the blast [2]. We identify the passage in its place in the Sahifa, and we do not claim that this chapter has completed an independent investigation of all its chains of transmission.

The supplication draws attention to an important meaning: the one who holds the position does not act independently of God, but rather awaits His command. The angels are not forces that rival the Creator or operate outside His authority. And what is mentioned as intermediaries in the management of the world and the resurrection does not take the action outside of divine permission.

The name mentioned in the supplication should not be attributed to a verse that does not mention it. The Qur’an, in the preceding verses, mentions the blowing of the trumpet and the result, while the supplication names Israfil. Combining the two sources is permissible with explicit mention, but saying that the name Israfil is mentioned in those verses is not an accurate transmission.

The End Is Not a Date We Extract from Fear

The texts we have read do not provide a calendar date for the Day of Judgment. A fleeting celestial phenomenon or an earthly catastrophe is insufficient to determine it, nor does the numerical calculation of words become proof simply because the result coincided with a year that caused people anxiety. A determination is a claim that requires evidence, and fear cannot replace it.

Warnings of the end do not justify abandoning studies, work, and caregiving, or selling one's possessions in response to a soothsayer. Those who believe in the Reckoning fulfill their responsibilities and do not surrender them to conjecture. As

for preparing for disasters whose causes are known, that is another practical matter, the information for which should be obtained from specialists, not from those who claim to know the unseen.

Between Cosmic Research and Eschatological Prophecies

Science can investigate the history of the stars and the Earth and the evolution of cosmic systems according to its evidence. However, this does not prove that any particular scientific model is the sole explanation for the blowing of the trumpet or the scenes of resurrection. The subject of revelation here involves re-creation and reckoning, not merely the continuation of a law we deduce from observation.

Conversely, it is not permissible to use verses as a pretext for rejecting all natural knowledge of the universe. Understanding the causes of what happens in the world does not equate to denying that God is its Creator. The point is not to erase the boundaries of evidence: a scientific finding is attributed to its source, an interpretation to its proof, and a prophecy to its origin.

Therefore, we do not include in this book a technical diagram of the Trumpet or a curve showing the energy of its blast. This kind of apparent precision might give the illusion of knowledge we do not possess. It suffices for us to explain the action described in the text and the result it establishes, while acknowledging that the manner of this is beyond the reach of ordinary experience.

From the Scene of the Universe to the Right of a Little Girl

Amidst the scenes of Surah At-Takwir's scenes of cosmic upheaval, God Almighty says: "And when the girl buried alive is asked" [At-Takwir: 8], "For what sin was she killed?" [At-Takwir: 9]. The surah does not forget the vulnerable human being as it mentions the upheaval of the world. A crime hidden beneath the earth will not go unpunished simply because the powerful one was able to silence his victim.

This transition from the sun and the mountains to the buried alive reveals that the discourse of the end times is not merely a display of cosmic terror. It is also a manifestation of truth and an accountability for injustice. The reader should not become preoccupied with the details of the catastrophe and neglect a child being harmed or a right being violated in their immediate life.

The series concludes with the words of God Almighty: "Every soul will know what it has brought forth" [At-Takwir: 14]. The most important question is not: In what order will things fall apart? Rather: What did this soul bring forth when what it had been postponing was revealed? Thus, the description of the end becomes an entry point to human responsibility, not a way to absolve one of it.

Another Beginning After the End

The Trumpet of Resurrection prevents us from understanding the end of the world as the end of meaning or a victory for nothingness. He who brings creation to an end also brings it back, and He who ends the opportunity for action reveals its consequences. The verses of Surah Az-Zumar follow the Trumpet, describing the placement of the Book, the judgment based on truth, and the recompense of every

soul for what it has done, without injustice.

Therefore, we do not stop at the stunned scene as if the story were closed. The last scene we read depicts people standing and looking on. How does the Quran provide evidence for this re-creation, and how does it answer the objection that dispersed bones cannot be restored? That is the subject of the next chapter.

Chapter Sources and References

[1] The Holy Quran, At-Takwir: 1–14; Al-Tabataba'i, "Al-Mizan," interpretation of the opening verses of the Surah, on linguistic meanings and the image of turning away from precious wealth.

[2] "As-Sahifa As-Sajjadiyya," the third supplication, in the prayer for the bearers of the Throne and every angel close to God, the section on Israfil, the one who carries the trumpet. No independent investigation of the chains of transmission of the Sahifa has been conducted here.

[3] The Holy Quran, Az-Zumar: 68–70; An-Naml: 87; Al-Infitar: 1–5; Al-Inshiqaq: 1–6; Az-Zalzalah: 1–6. This chapter preserves the distinction between text and interpretation, and between the fact of the blowing of the Trumpet and details that have not been verified.

Chapter 124: Resurrection and Re-creation

Man stood before decayed bones and asked: How can life return to what has dispersed? The Quran did not ignore this question, nor did it ask the questioner to deny the decay of bodies. Rather, it conveyed the objection and then referred it back to the origin of creation, the Creator's knowledge, power, and wisdom. Thus, the proof of resurrection differs from attempts to conceal death or pretend it did not occur.

He Forgot His First Creation

God Almighty said: "And he presents for Us an example and forgets his own creation. He says, 'Who will give life to bones while they are disintegrated?'" [Ya-Sin: 78]. Then He said: "Say, 'He will give them life who produced them the first time; and He is, of all creation, Knowing.'" [Ya-Sin: 79]. The answer does not deny that they are disintegrated, but rather it denies that this implies any inability on the part of the One who created them.

The question about God's power differs from the question about what a doctor can do with a decomposing body. The doctor works within available means and known limits, while the argument here concerns the action of the Creator. The fact that humans are incapable of resurrecting a person after their death does not imply any incapacity on the part of the One who granted them existence in the first place; otherwise, we would be making the extent of our own power a measure of divine power.

Then God Almighty said: "Is not He Who created the heavens and the earth able to create the like of them? Yes, indeed, and He is the All-Knowing Creator." [Ya-Sin: 81]. The reference to the vastness of creation serves to refute the claim that resurrection is implausible, not to prescribe a physical formula that God must follow.

What the earth scatters is not lost from God's knowledge.

God Almighty says: “We know what the earth takes away of them, and with Us is a Preserved Record.” [Qaf: 4]. This verse addresses another aspect of the objection: we may not have any trace of the body's location, but our ignorance of its fate does not mean it is lost from God's knowledge.

Al-Tabatabai explains the beginning of Surah Qaf as a response to the improbability of the individual's return after the body has turned to dust, by demonstrating the encompassing nature of divine knowledge and its preservation. He then points to the signs of power in the heavens, the earth, and the growth of vegetation [1]. This interpretation clarifies the structure of the argument and does not make the Preserved Record a genetic repository in the medical sense.

One who dies in the sea or fire, or whose body parts are scattered, does not fall outside of this knowledge. Belief in resurrection does not require the assumption that every body will remain intact until the end. The book addresses natural decay as it is, and here it demonstrates that the divine promise of resurrection is not contingent upon the living beings' ability to preserve remains.

Initial Creation and Re-creation in the Verse of Growth

Verse 5 of Surah Al-Hajj evokes the stages of human origin and growth, followed by the scene of the barren earth when water falls upon it. We have already read the details of these stages of human development in their respective chapters, without attempting to transform the Quranic language into a laboratory diagram. Here, the purpose of gathering these scenes becomes clear in the context of refuting doubts about the Resurrection.

Then Allah Almighty says: “That is because Allah is the Truth, and that He gives life to the dead, and that He is over all things competent” [Al-Hajj: 6], “and that the Hour is coming, there is no doubt about it, and that Allah will resurrect those in the graves” [Al-Hajj: 7]. The transition from our creation to our resurrection is explicitly stated in the context.

The comparison of resurrection to the revival of the earth is not to suggest that a human being grows like a plant, with all its biological mechanisms, or that the soul is a seed that can be isolated in a laboratory. Rather, it is an inference from an observable act to the power of its Creator, while each creation retains its unique characteristics as evidenced by the evidence.

Abraham and the Request for Reassurance

God Almighty said: {And when Abraham said, “My Lord, show me how You give life to the dead,” He said, “Do you not believe?” He said, “Yes, but [I ask] only that my heart may be satisfied.” He said, “Then take four birds and draw them close to you. Then place a portion of them on each hill, then call them; they will come to you in haste. And know that God is Exalted in Might and Wise.”} [Al-Baqarah: 260]

Abraham's question about the manner of resurrection came alongside his affirmation of faith, as the text clearly states. It is incorrect to interpret his request for

reassurance as a denial, which the dialogue did not establish. Similarly, a believer is not required to know every detail to accept the core of the story; he may know the truthfulness of the informant and still desire further observation.

This scene is paralleled by the story of the man whom God caused to die for a hundred years and then resurrected, as mentioned in Al-Baqarah 2:259. The verse does not name the man, although some commentators have identified him in their interpretations. Preserving this distinction serves as a small example of the importance of faithful reading: what the Quran does not name, we do not attribute to it; and what it mentions of resurrection, we affirm as it is stated.

Wisdom and Purpose

God Almighty says: “Did you think that We created you in vain and that you would not be returned to Us?” [Al-Mu’minun: 115]. The discussion here shifts from the ability to resurrect to the meaning of return in a life that is not in vain. The story does not end simply with the oppressor and the oppressed alike ending in a grave.

Reasoning based on wisdom does not permit us to invent details of reward and punishment according to our whims. Rather, it clarifies that human existence and responsibility should not be understood as a project without purpose. As for how the reckoning will take place and who will be included in forgiveness, these are addressed in the following texts.

Resurrection in al-Saduq's Report

In his book "al-I'tiqadat" (The Beliefs), al-Saduq dedicates a chapter to resurrection after death, affirming its truth. He then quotes the Prophet (peace and blessings be upon him and his family) comparing death to sleep and resurrection to waking up [2]. This narration is presented without a detailed chain of transmission, so we cannot claim authentication of the report that we have not verified. The comparison merely suggests the transition, not that death is medically equivalent to sleep.

It is noteworthy that the chapter follows the section on the Return: the author, who affirms a specific return, also affirms a general resurrection. Therefore, it is incorrect to portray his belief in the Return as a substitute for the Day of Judgment. This distinction became clear in Chapter 122.

Not Cloning or Mere Preservation of Memory

Cloning, preserving a person's information, or erecting a monument in their name are not the re-creation the Quran speaks of. The account concerns a person who is resurrected, held accountable, and finds out about their deeds, not another person who resembles them or a social memory that preserves their biography. Therefore, proving the similarity alone does not answer the question of the identity of the resurrected person.

Belief in this principle does not make us experts in its mechanism. We can say that the Creator is All-Knowing and All-Powerful, and that His pronouncement of resurrection is true within this framework of faith, and then we refrain from specifying a manner in which He has not revealed it to us. True knowledge does not

lose its value when it acknowledges its limitations.

The question that accompanies all of this remains: What makes the one who returns the same human being, despite the difference in the mode of existence and the change in body? This is what we will explore in the following chapter, while preserving the presence of both body and soul in the texts concerning resurrection.

Chapter Sources and References

[1] The Holy Quran, Qaf: 1–11; Al-Tabataba'i, "Al-Mizan," Explanation of the opening of the surah regarding the rejection of resurrection and the response based on knowledge and power.

[2] Al-Saduq, "Al-I'tiqadat fi Din al-Imamiyya," p. 64, Chapter on Belief in Resurrection after Death; The prophetic tradition in this instance is not fully supported by a chain of transmission.

[3] The Holy Quran, Ya-Sin: 78–82; Al-Hajj: 5–7; Al-Baqarah: 259–260; Al-Mu'minun: 115. Arguments for the beginning, knowledge, power, wisdom, and the scenes of resurrection.

Chapter 125: The Human Being at the Resurrection

The question of resurrection is not merely: Can one body exist after another? Rather, it is also: Is the one being resurrected the same person who loved, erred, acted, and repented? If the one being resurrected were someone else, unrelated to the one who performed the action, then their reckoning would not be the same as that person's. Therefore, the question of identity lies at the heart of the Hereafter, not on its periphery.

The Presence of the Body in the Text

God Almighty says: “Does man think that We will not gather his bones?” [Al-Qiyamah: 3], “Yes, We are able to perfectly recreate his fingertips.” [Al-Qiyamah: 4]. These two verses address the gathering of bones and the reshaping of fingertips. Therefore, it is incorrect to reduce the concept of resurrection to the mere preservation of a person's image or reputation among people.

The mention of fingertips in the verse does not refer to forensic fingerprinting or a database that preserves identity. The reader may contemplate the intricate creation of fingers, but interpreting this contemplation as the sole meaning of the text or as the mechanism of resurrection requires evidence that the verse does not provide. The direct intent here is to refute the claim that re-creation is implausible.

Similarly, texts describing Paradise and Hell describe food, drink, clothing, and sensations, which will be explained later. We do not negate this physical presence by claiming that everything mentioned is merely metaphorical and has no basis in reality. Conversely, we do not assume that every function in the afterlife corresponds to a worldly function not explicitly stated in the text.

The Human Being Is More Than the Corpse

God Almighty says: “Say, ‘The angel of death who has been entrusted with you will take you, then to your Lord you will be returned.’” [As-Sajdah: 11]. The address is directed to the person who dies and then returns, not to a name that has been

replaced by another. The discussion of the soul, death, the states of the intermediate realm (Barzakh), and the extent of scholarly disagreement regarding them has already been covered.

Therefore, we should not equate the disappearance of some outward characteristics with the complete absence of the person from God’s knowledge. A person whose body has weakened or whose face has changed does not become, in our daily lives, someone with no connection to their past. This is an approximation of the problem of identity, not independent empirical proof of the nature of the afterlife.

A Mode of Existence Whose Characteristics We Cannot Fully Grasp

God Almighty said: {We have decreed death among you, and We are not to be outdone.} [Al-Waqi'ah: 60] {That We may replace you with others like you and bring you forth in a form you do not know.} [Al-Waqi'ah: 61] {And you have already known the first creation, so why do you not remember?} [Al-Waqi'ah: 62]

Al-Tabataba’i interprets creation in what we do not know as the afterlife, distinguishing it from the transient worldly existence [1]. This allows for a reconciliation between the reality of resurrection and the difference in characteristics, instead of demanding that every description of the afterlife conform to all the conditions of our current life.

We have no right to assert a biological age for every resurrected person or a uniform size for people's bodies without investigating the report that states this. Nor can we claim that someone who dies incapacitated will carry the same pain into Paradise; texts that negate sorrow and hardship have their place in understanding that Paradise. Dignity remains connected to the individual, not to the value of their body according to market standards.

The Objection Concerning Shared Bodily Matter

Among the ancient theological questions is the well-known question of the eater and the eaten: If the substance of one body enters another, to whom does it belong upon resurrection? The question aims to test a concept that makes identity dependent on the sum of all the substances that passed through the body during its life. Responding to this with sarcasm is insufficient, as it reveals the need to define the meaning of the resurrected body.

In his "Concepts of the Qur'an," Ja'far al-Subhani presents a theological answer, taken from "Unveiling the Intended Meaning," which distinguishes essential parts from superfluous nutritional parts, and makes the basis of resurrection those essential parts [2]. This is a theological conception in interpreting resurrection, not an anatomical discovery of parts that the laboratory has proven to be unchanging.

We do not arbitrarily identify these parts as genes or stem cells, nor do we make the theological hypothesis a result of biology. The researcher can discuss the definition of identity, the role of the soul and body, and the premises of each answer, while keeping the principle of resurrection, which we are investigating, independent of obligating all readers to a single interpretation of its mechanism.

Like the brick in the hadith

In Al-Ihtijaj, a report from Hafs ibn Ghiyath recounts Ibn Abi al-‘Awja’ asking al-Sadiq (peace be upon him) about the replacement of skins in An-Nisa’: 56: “What sin has the replacement committed?” The reply was: “It is the same, yet it is different.” He offered the example of a brick that is broken and then remade in its mould [3].

The transmission in its place is not supported by a complete chain of transmission from the author to Hafs, and we have not established an independent level of authenticity for it here. There is another transmission of it in al-Tusi’s Amali, which al-Bahrani included in “al-Burhan,” but the existence of another chain of transmission alone is not sufficient to judge its authenticity [4]. We establish the narration, its source, and the limits of its verification before applying its meaning.

The parable, assuming its authenticity, demonstrates the possibility of a continuity and a change coexisting. Therefore, a change in form does not necessarily mean that the one being punished is a stranger to the one who performed the action. However, it is not an instruction on the construction of the afterlife body, nor does it alone resolve all the philosophical disagreements concerning the nature of the person.

No transfer of sin through organ transplantation

On a moral level, the one responsible is the one who performs the action and makes the choice, not a piece of flesh that alone carries an independent file of sins. Therefore, the discussion of bodily parts does not justify intimidating organ recipients by suggesting that the donor's sins have been transferred to them, or by claiming that purity of intention is a quality that transfers with the tissue. The medical and religious legal rulings on organ donation have been previously discussed elsewhere.

Similarly, matching some genetic information does not equate to the unity of two individuals, nor does preserving a person’s data necessarily create a conscious copy of that person. These are warnings against confusing different levels of inquiry, not claims that empirical science has completely resolved the problem of personal identity.

Body and Soul in the Unity of Responsibility

Schools of thought may differ in their interpretation of the relationship between the soul and the body, and in their terminology of immateriality and form. However, the resurrection presented in the verses is not a reward for a body that lacks awareness, nor a judgment for a name without its owner. A person returns to find what they have done, and descriptions of bliss and torment are presented in accounts of experiences that are understood by the individual.

Hence, we should not despise the body on the grounds that the soul is more important, for it was the locus of action, service, and worship. Nor should we reduce the human being to the body in such a way that the meaning of intention and responsibility disappears. The book that studied bones, the brain, and the heart ultimately returns to the unity of the human being, while acknowledging that the study of organs alone does not exhaust the meaning of its destiny.

In conclusion, the reality of resurrection, the presence of the body, and the continuation of responsibility are matters established by the texts in this methodology. However, the detailed construction of identity and the manner of resurrection are matters of theological and philosophical inquiry. We affirm the former, attribute the latter to its proponents, and refrain from transforming the points of contention into empirical facts or additional conditions not clarified by revelation.

Sources and References for this Chapter

[1] The Holy Quran, Al-Qiyamah: 3-4; As-Sajdah: 11; Al-Waqi'ah: 60-62. Al-Tabataba'i, "Al-Mizan," Commentary on Al-Waqi'ah: 61, on the difference in the mode of existence.

[2] Ja'far As-Subhani, "Concepts of the Quran," vol. 8, p. 111, presenting the theologians' response and referring to "Kashf Al-Murad." This is a transmission of a theological concept, not an adoption of a biological definition of the original parts.

[3] Ahmad ibn Ali al-Tabarsi, “Al-Ihtijaj,” vol. 2, p. 105 in the electronic edition consulted, the narration of Hafs ibn Ghiyath concerning the changing of skins and the example of the brick. It is mentioned without a complete chain of transmission to Hafs in the same place.

[4] Al-Bahrani, “Al-Burhan fi Tafsir al-Qur’an,” vol. 2, p. 99, hadiths 2456 and 2457, he quoted it from “Amali al-Tusi” and “Al-Ihtijaj”; the chapter did not independently verify the two chains of transmission.

Chapter 126: The Gathering and the Place of Gathering

Man was not alone at the beginning of the story; he was carried by a mother, protected by hands, and lived among generations that preceded him and generations that followed him. When he returns to life, he does not return to a room isolated from human history, but to a gathering from which no one can buy exemption. However, this gathering, in its vastness, does not dissolve the individual into the group: all people are present, and each person comes with his own reality and responsibility.

A gathering where no one is hidden by the multitude

God Almighty said: “And they will be presented before your Lord in rows. [He will say], ‘You have certainly come to Us just as We created you the first time. But you claimed that We would never make for you an appointment.’” [Al-Kahf: 48]. And He said: “And all of them will come to Him on the Day of Resurrection alone.” [Maryam: 95].

There is no contradiction between rows and individuals. The first describes the presence among creation, and the second prevents belonging to a group from becoming a substitute for the true nature of a human being. This does not invalidate the intercession that God permits, nor the mutual recognition that the texts speak of. It negates the independence of wealth and supporters in saving their master from God's dominion. This is a meaning emphasized by al-Tabataba'i in his interpretation of the verse in Surah Maryam: On that Day, the true nature of human dependence will be revealed, and the image of kingship and independent power that one imagined in this world will crumble. [1]

How much injustice has been hidden behind the phrase, "Everyone did it!" And how many rights have been lost because their owners lacked influence. The Resurrection returns the question to its proper place: What did you know? What were you able to do? What did you do? This is an educational reading of the meaning of responsibility, not an invention of specific questioning formulas not found in the text.

The Earth Whose Map We Do Not Possess

God Almighty said: "On the Day when the earth will be changed to another earth, and the heavens [as well], and they will come forth before God, the One, the Prevailing." [Ibrahim: 48] The text establishes the transformation and the coming forth before God, but it does not provide a geographical map that we can project onto the borders of modern countries. Therefore, it is incorrect to interpret images of cities or climate changes as a definitive identification of the place of the Gathering.

Among the narrations on this topic is what al-Kulayni related, on the authority of Zurarah, on the authority of Imam al-Baqir (peace be upon him), in response to al-Abrash al-Kalbi regarding the transformation of the earth: “It will be transformed into pure bread, from which people will eat until the reckoning is complete.” The narration then discusses the objection that eating would be implausible due to the severity of the situation, citing what the Quran tells us about the food and drink of the inhabitants of Hell. Al-Majlisi deemed this chain of transmission hasan (good) in “Mir’at al-‘Uqul” (Mirror of Intellects). [2]

We preserve the wording and degree of authenticity of the narration, and we do not consider it an experiment in earth chemistry, nor do we assume that sustenance in the Hereafter requires all the processes we have studied concerning the intestines and liver. The mention of food in a text about the unseen does not specify its mechanism; and the reality of the body in the Hereafter does not necessitate the repetition of all the conditions of the earthly body. Furthermore, judging this chain of transmission does not automatically validate every other narration concerning the shape, color, or size of the earth.

The gravity of the situation and the disparity in circumstances

God Almighty says: “On the Day when a man will flee from his brother” [Abasa: 34]. “And his mother and his father” [Abasa: 35]. “And his wife and his children” [Abasa: 36]. “For every man, that Day, will be a matter that preoccupies him” [Abasa: 37].

These verses choose the closest relationships to the heart to illustrate the intensity of self-preoccupation. This image should not be used as an excuse to despise family in this world; parents, spouses, and children have rights, and fulfilling those rights is part of preparing for that Day. Rather, it dispels the misconception that kinship alone can erase transgression or buy innocence.

In Nahj al-Balaghah, in sermon number 101 of the referenced source, there is a description of the gathering of the first and the last generations to face close scrutiny in the Reckoning and recompense for their deeds, and what they will experience of intense standing, sweat, and the distress of the situation. We present this as a text from Nahj al-Balaghah, not as a separate hadith with its chain of

transmission authenticated independently; for al-Sharif al-Radi compiled the sermons without including the complete chains of transmission in their respective places. [3]

It is not permissible to reduce the entire Day of Resurrection to a single image of terror that afflicts all people in the same way; for in the Qur’an it also says: “The Day We will gather the righteous to the Most Merciful as honored guests” [Maryam: 85]. Thus, the warning to the sinner and the glad tidings to the righteous are combined, and it is not permissible to negate one with the other. As for judging a specific person as being among the people of security or punishment, this requires evidence that our conjectures do not possess.

Multiple Situations, Not a Timetable

It is easy for the imagination to transform the Day of Resurrection into numbered halls and to draw a single path with a detailed timetable. However, simply compiling the verses about the Gathering, the Reckoning, the Testimony, and the Scales does not give us a strict chronological order for all the scenes. Some texts describe the state of a particular group, some highlight an aspect of the event, and some accounts require verification before being combined with others.

Therefore, this book distinguishes between the educational division of chapters and the actual order of events. Placing the Gathering before the Book of Deeds here helps the reader understand, but it does not mean that we have established that everything mentioned in one chapter occurs in its entirety before everything mentioned in the following chapter. The issue of situations and obstacles will return when discussing the Reckoning and the Bridge.

Individual responsibility does not negate the impact of relationships; the stories of the oppressed and the oppressor, the teacher and the student, the misleader and those who followed him are not separate. However, it forbids holding children responsible for the sins of their fathers simply because of lineage, or using the name of a sect as a predetermined judgment on the fates of all its members. The principle of establishing the divine proof and the situation of those unable to attain it have already been explained, and the details of justice and rights will follow.

What does a person bring to the final gathering?

Belief in the Resurrection does not lead a person to withdraw from their duties, but rather to a more genuine engagement with them. Whoever hopes for a day when no right will be lost should not neglect the rights of others now. And whoever fears the exposure of treachery should return what was entrusted to them and repent, not create a perpetual fear that paralyzes their ability to reform.

In summary, the Gathering is real in the Quranic conception, the earth will be transformed, and people will not be equal in their circumstances. We believe what the text clarifies, attributing the narrative details to their source and degree of authenticity, and leaving what is not established regarding geography, timing, and manner without filling the gaps with conjecture. From this general presence, we now approach another presence: the presence of the deed itself and bearing witness to it.

Chapter Sources and References

[1] The Holy Quran, Al-Kahf: 48; Ibrahim: 48; Abasa: 34–37; Maryam: 85, 95. Al-Tabataba'i, "Al-Mizan," Commentary on Maryam: 95; used to explain human isolation and dependence.

[2] Al-Kulayni, "Al-Kafi," Book of Foods, Chapter: The Son of Adam is Hollow and Must Have Food, Hadith 1, Narration of Zurarah from Al-Baqir (peace be upon him).

Al-Majlisi, "Mir'at al-'Uqul," Vol. 22, p. 96: The ruling on the first hadith in the chapter is that it is good (hasan), not the ruling on the hadiths preceding it on the page.

[3] "Nahj al-Balaghah," Sermon 101 according to the numbering on the Nahj al-Balaghah website, the section on the gathering of the first and the last. The chapter did not provide an independent verification of the chain of transmission of the sermon.

Chapter 127: The Record of Deeds, Witnesses and the Testimony of the Limbs

A person writes their life story as they wish to be seen: they choose scenes, omit others, and justify what is difficult to defend. The passage of time may cause them to forget what they did, or fear and desire may cloud their memory. But the Book of Deeds is not a biography written by its author for themselves; it is the unveiling of life before an infallible justice, where forgetting an act is not proof of its non-occurrence, nor is the accusation of others proof of its occurrence.

Read Your Book

God Almighty said: {And We have fastened every man's deeds to his neck, and We will bring forth for him on the Day of Resurrection a book which he will find wide open.} [Al-Isra: 13] "Read your record. Sufficient is yourself this Day as accountant against you." [Al-Isra: 14]

Here, a person stands before what pertains to him personally. He is not told: "Read the rumor that has spread about you," nor the version fabricated by your adversary, but rather your own record. Therefore, it is not permissible to borrow the majesty of divine reckoning to justify human judgments based on conjecture or defamation. God's knowledge is one thing, and the limits of our knowledge of people are another.

And Allah Almighty said: "And the record [of deeds] will be placed [open], and you will see the criminals fearful of that within it, and they will say, 'Oh, woe to us! What is this record that leaves nothing small or great unrecorded?' And they will find what they did present [before them]. And your Lord does not wrong anyone." [Al-Kahf: 49]

The precision of the record is linked in this verse to the negation of injustice. Therefore, we should not read its beginning and forget its end, nor should we interpret the mention of minor sins as a denial of repentance and forgiveness. He who knows the deed also knows compulsion, incapacity, excusable ignorance, and intention, and He knows the sincerity of turning away from it. This will be discussed in the section on reckoning and intercession.

The Delivery of the Book: Glad Tidings and Regret

God Almighty says: “Then as for him who is given his record in his right hand” [Al-Inshiqaq: 7]. “He will be judged with an easy reckoning” [Al-Inshiqaq: 8]. “And he will return to his family in joy” [Al-Inshiqaq: 9]. In contrast: “But as for him who is given his record behind his back” [Al-Inshiqaq: 10]. “He will cry out for destruction” [Al-Inshiqaq: 11].

The Quran affirms the difference in reception and outcome. This does not imply any disparagement of those who use their left hand in this world, nor does it pass judgment on those with disabilities or amputated limbs. These are descriptions of a situation in the Hereafter, not a moral classification of people's physical constitution. Similarly, the term "book" does not necessitate specifying the material of its paper or its printing method, nor is it correct to declare it a digital device simply because our era has the capability to store information.

The body that participated in the work bears witness.

God Almighty says: {This Day We will seal over their mouths, and their hands will speak to Us, and their feet will testify about what they used to earn.} [Ya-Sin: 65] He said: “Until, when they reach it, their hearing, their sight, and their skins will testify against them as to what they used to do.” [Fussilat: 20]

This is followed by the answer to their question: “And they will say to their skins, ‘Why did you testify against us?’ They will say, ‘Allah has caused us to speak, He Who causes all things to speak. And He created you the first time, and to Him you will be returned.’” [Fussilat: 21]

In the chapters on anatomy, we learned about the organs of sensation and movement, and in the chapter on perception, we learned about some of the conditions of memory in this worldly life. But the verses do not say that the skin holds a digital archive of every deed, nor that DNA records virtues and sins. They attribute speech to God. Adding a laboratory mechanism that is not proven by either the text or experience does not strengthen faith; rather, it conflates two different levels of knowledge.

The testimony of the organ does not imply the transfer of the donor's sin to the recipient, nor does it mean holding a person accountable for another's sins because of tissue transplantation. We have already distinguished identity and responsibility from the material of the body. Similarly, it is incorrect to conclude that someone who is unable to speak in this world will be unable to present their case in the hereafter. Divine power is not limited by our usual means.

Witnesses from outside the body

God Almighty said: “And on the Day when We will raise up from every nation a witness against them from among themselves, and We will bring you as a witness against these. And We have sent down to you the Book as clarification of all things and as guidance and mercy and good tidings for the Muslims.” [An-Nahl: 89]. And He said concerning the earth: “On that Day it will declare its news.” [Az-Zalzalah: 4]. “Because your Lord has revealed to it” [Al-Zalzalah: 5].

Al-Kulayni, in his book Al-Hujjah, dedicates a chapter to the fact that the Imams, peace be upon them, are God’s witnesses over His creation. In his first narration, on the authority of Sama’ah, on the authority of Imam al-Sadiq, peace be upon him, it is stated that in every generation there is an Imam from among them who is a witness over the people, and that the Prophet, peace and blessings be upon him and his family, is a witness over them. Al-Majlisi’s ruling in Mir’at al-‘Uqul, vol. 2, p. 337, was that it is “weak.” Therefore, we do not present this particular narration as having a sound chain of transmission, nor do we generalize its status to all the narrations in this chapter. [1]

As for the principle of the presentation of deeds to the Prophet and the Imams, it was discussed in chapter 119 with another chain of transmission, on the authority of al-Washsha’, on the authority of Imam al-Rida, peace be upon him, and al-Majlisi ruled it authentic. Its mention here is a reference to the previous investigation, not to confuse the narration of the presentation of deeds with the narration of the witnessing, nor to claim that every method, timing, and detail in this chapter is established by that single chain of transmission.

The multiplicity of witnesses does not imply that God needs someone to inform Him of what He is ignorant of; rather, it aligns with the manifestation of truth, the establishment of proof, and the revelation of the deed to its doer. Attributing this meaning to the wisdom behind the scene is an explanation of its meaning, not a description of a need in divine knowledge.

The Presence of the Deed and the Question of its Embodiment

The phrase "the presence of the deed" opens a well-known door in exegesis and theology: Is the discussion about witnessing the deed itself in a form appropriate to it, or about its manifestation through its reward and effects? And how are the images of deeds mentioned in the narrations to be understood? Al-Tabataba'i, in his commentary on Az-Zalzalah: 6, mentions the showing of recompense, or witnessing the deeds themselves based on their embodiment. [2]

The reader does not need to adopt a detailed philosophical theory to understand that life is not something whose effects vanish with the passing of its hour. As for how the deed remains and is embodied, this is a broader discussion than measuring mass and energy, and the law of conservation of energy does not provide empirical proof for the transformation of falsehood into an otherworldly body.

The chapter concludes that the Book and the testimony preserve human responsibility and do not close the door of hope. What is required today is that we make the limbs that will bear witness instruments of trustworthiness and mercy: a hand that restores rights, a tongue that repairs harm, and an eye that does not intentionally insult. Thus, the Book of Deeds will not remain merely a scene we await, but a question we answer with what we write of our lives now.

Chapter Sources and References

The Holy Quran: Al-Isra: 13-14; Al-Kahf: 49; Al-Inshiqaq: 7-11; Ya-Sin: 65; Fussilat: 20-21; An-Nahl: 89; Az-Zalzalah: 4-6.

[1] Al-Kulayni, Al-Kafi, Book of Proof, Chapter on the Imams, peace be upon them, being God Almighty's witnesses over His creation, Hadith 1. Al-Majlisi’s grading of the report as “weak” was checked in Mir'at al-'Uqul, vol. 2, p. 337; his ruling pertains to this chain of transmission.

For the authentic hadith on the presentation of deeds according to al-Majlisi, see the documentation of Chapter 119: “Al-Kafi,” Book of Proof, Chapter on the Presentation of Deeds to the Prophet and the Imams, Hadith 6; “Mir’at al-‘Uqul” 3/6.

[2] Al-Tabataba’i, “Al-Mizan,” Interpretation of Al-Zalzalah: 6, on the presentation of deeds and recompense; the interpretive reading is mentioned without presenting it as a physical reality.

Chapter 128: The Reckoning, the Scales and Divine Justice

In people’s lives, there are incomplete accounts: the oppressed go unheard, the benefactor’s good deeds go unrecognized, sins are concealed by power, and the weak are punished more severely than they deserve for their mistakes. Belief in the Hereafter does not say that these shortcomings become acceptable, but rather that they are not the final word. With the reckoning, justice returns to a balance that cannot be bought by self-interest or misled by appearances.

The principle by which the details are interpreted

God Almighty said: {And We will place the scales of justice for the Day of Resurrection, so no soul will be wronged at all. And if there is [even] the weight of a mustard seed, We will bring it forth. And sufficient are We as Reckoners.} [Al-Anbiya: 47]. And He said: {Indeed, God does not wrong [anyone] even by an atom's weight; while if there is a good deed, He multiplies it and gives from Himself a great reward.} [An-Nisa: 40].

Therefore, mentioning accountability is not synonymous with negating mercy, nor is speaking of mercy a license to nullify justice. Equity prevents any right from being diminished, and grace opens the door to giving that is not exhausted by any limited entitlement. It is a mistake to construct an image of God as if He were seeking a pretext to destroy His servants, just as it is a mistake to make forgiveness a personal guarantee that allows one to continue harming people.

It is part of perfect justice that accountability varies according to knowledge, choice, ability, and the establishment of proof. Disability is not a sin, nor is mental illness in itself a transgression, nor is being deprived of the means of learning equivalent to deliberately rejecting the truth after knowing it. We have referred the details of responsibility and vulnerability to their respective places; the principle here is that perfect judgment requires perfect knowledge, and this belongs to God, not to the human observer.

What does the weight of the scales mean?

God Almighty says: “And the weighing on that Day will be the truth. So those whose scales are heavy [with good deeds] - it is they who will be the successful.” [Al-A'raf: 8]. “And those whose scales are light - it is they who have lost themselves for what

injustice they used to do with Our verses.” [Al-A'raf: 9].

There is no disagreement in this Book regarding the fundamental truth of the weighing and the recompense, but determining the nature of the scales is not a settled matter simply by likening the wording to a market tool. Sheikh al-Mufid interprets the scales as establishing a just correspondence between deeds and recompense, and the fulfillment of rights. He rejects interpreting them as worldly scales with two pans on which actions are weighed, basing his interpretation on his theological conception of deeds as accidents. This is his opinion and reasoning, not an empirical description or a consensus that we can impose on all Imami scholars. [1]

Al-Saduq, in “Ma’ani al-Akhbar,” narrates on the authority of Hisham ibn Salim, on the authority of Imam al-Sadiq (peace be upon him), regarding the scales: “They are the prophets and the successors (peace be upon them).” The complete chain of transmission is established in its source; this chapter does not establish an independent biographical evaluation of it. [2] It is possible to understand their being scales in that their guidance reveals the standard of righteousness, but this is an explanation of the meaning, not a continuation of the hadith’s wording.

There are those who affirm for the scales an eschatological reality that they do not measure by worldly instruments. We do not need to negate the reality of reward in order to refrain from describing its mechanism, nor to transform a single theological opinion into a standard for condemning all who disagree. The clear point here is that a person's worth is not measured by their physical weight or the value of their possessions, and that justice leaves no good or evil unaddressed.

Good deeds are not a currency to buy the rights of others.

God Almighty says: “Whoever comes with a good deed will have ten times its reward, and whoever comes with an evil deed will not be recompensed except with its equivalent; and they will not be wronged.” [Al-An'am: 160]. This verse promises reward for good deeds and justice for evil deeds, but it does not provide us with a special calculating mechanism by which to judge beforehand that a particular action erases all the consequences of injustice.

Islamic jurisprudence distinguishes between rights related to the performance of worship and the rights of people concerning their property, dignity, and safety. Performing an act of worship does not permit withholding someone's property, just as a verbal apology does not erase the harm done. The return of rights and bequests were explained in Chapter 109; however, regarding the forms of compensation in the Hereafter, we do not offer a numerical conversion of money into good deeds based on our own interpretation.

Individual responsibility should not be understood as negating the consequences of misguidance. God Almighty says: {That they may bear their own burdens in full on the Day of Resurrection, and also some of the burdens of those whom they misguide without knowledge. How evil is that which they bear!} [An-Nahl: 25]. The one who misleads is responsible for his own actions and their consequences, and is not held accountable for a sin that is not his own doing. And thus, the share of those who

choose to follow, while possessing the ability to discern, is not lost.

The Ease of the Reckoning and the Severity of the Situation

The description of the ease of the reckoning was mentioned in Surah Al-Inshiqaq. The texts must not be combined into a claim that every person experiences the same duration and severity. God Almighty says: “The angels and the Spirit ascend to Him in a Day the measure of which is fifty thousand years” [Al-Ma’arij: 4]. We read the verse in its context and do not extract from it alone fifty halls with names and a detailed sequence.

In Rawdat al-Kafi, there is a narration from Hafs ibn Ghiyath on the authority of Imam al-Sadiq (peace be upon him), urging self-examination and mentioning fifty situations, each lasting a thousand years. Al-Majlisi deemed this chain of narration weak in Mir’at al-‘Uqul, vol. 25, p. 343. The wording of the verse used in some versions of the hadith varies; therefore, we verify the Quranic text from the Mushaf (the written text of the Quran), and we do not authenticate the details of the report merely because multiplying the figures gives the number stated in the verse. [3]

This reservation does not invalidate the existence of stages or of reckoning, but rather prevents the transformation of a particular chain of transmission into absolute certainty. Furthermore, the speed of God's reckoning is not measured by the speed of an employee reviewing successive files; He does not need to discover information after it has been lost, nor does He allow knowledge of one person to distract Him from knowledge of another.

An Accountability That Builds Up, Not Crushes

A person can review their day with three simple questions: What right did I fulfill? What harm should be rectified? And what is the possible step tomorrow? This is an educational method suggested by the book, not a prescribed supplication or a ritualistic count. It differs from endlessly dwelling on potential sins or holding oneself responsible for what is beyond one's control.

In conclusion, the reckoning restores actions to their true nature and rights to their rightful owners, and the scales bear witness to justice, not to favoritism towards the powerful. If justice is established, the door of hope remains open on that basis: how will mercy encompass those burdened by sins, and what role will intercession play in this reckoning? This is the question of the following chapter.

Chapter Sources and References

The Holy Quran: Al-Anbiya: 47; An-Nisa: 40; Al-A'raf: 8-9; Al-An'am: 160; An-Nahl: 25; Al-Ma'arij: 4; and Al-Inshiqaq: 7-9, regarding the easy reckoning.

[1] Sheikh Al-Mufid, "Correcting the Beliefs of the Imamiyyah," p. 114, Chapter on Reckoning and Scales; the interpretation of the scales is attributed to its author, and no consensus is claimed on it.

[2] Al-Saduq, “Ma’ani al-Akhbar,” p. 31, chapter on the meaning of the scales by which the deeds of the servants are weighed, hadith 1, on the authority of Hisham ibn Salim; the chain of narration was not independently authenticated.

[3] Al-Kulayni, “Al-Kafi,” vol. 8, p. 143, hadith 108, the hadith on self-examination; the hadith of the fifty stations.

Al-Majlisi, “Mir’at al-‘Uqul,” vol. 25, p. 343: “Hadith 108: Weak.” The volume number 15 shown in the Thaqalayn reference does not match the volume consulted here, which is 25.

Chapter 129: Intercession, Mercy and Forgiveness

When a person recognizes their shortcomings, they may take one of two opposing paths: despair, believing that reform is no longer effective, or complacency, thinking that a name they bear or a love they profess will absolve them of all responsibility. Between despair and self-deception, the Quran opens the door of hope. Intercession, in the Imamite perspective, is one aspect of this hope. No authority can stand against God, and no human mediation can overturn His justice.

Permission Before All Intercession

God Almighty says: “On that Day, no intercession will avail except [that of] one to whom the Most Merciful has given permission and whose word He has approved.” [Ta-Ha: 109] And He said concerning His honored servants: “He knows what is before them and what is behind them, and they do not intercede except for whom He approves, and they are apprehensive from fear of Him.” [Al-Anbiya: 28]

These two verses place intercession within God’s authority: permission comes from Him, and approval is His, and no one can impose upon Him a pardon He does not desire. Therefore, it is not valid to liken it to an influential person who embarrasses the judge or conceals the truth about the accused. The authorized intercessor does not correct God’s knowledge or wrest mercy from Him; rather, his intercession is by His will and grace.

This explains the necessity of combining the texts of negation and affirmation instead of extracting a single sentence. Not everything people imagine constitutes acceptable intercession, and denying independent intercession does not negate what God has permitted. Furthermore, its inclusion in the core tenets of faith does not provide the reader with a list of names of those for whom intercession will be made or the timing of their salvation.

Its Place in the Words of Imami Scholars

In his book "Al-I'tiqadat" (The Beliefs), Sheikh al-Saduq states that intercession is for sinners whose religion God has approved. He mentions the prophets, the successors, the believers, and the angels, distinguishing this from the case of the repentant person who does not need intercession to remove the sin from which he repented. We quote this as his doctrinal statement, and we do not consider all the numbers and details he provides in this chapter to be authenticated hadiths. [1]

In his book "Awa'il al-Maqalat", Sheikh al-Mufid mentions the consensus of the Imamiyyah on the intercession of the Prophet (peace and blessings be upon him and his family) for a group of those who committed major sins, and the intercession of

the Commander of the Faithful and the Imams of the Ahl al-Bayt (peace be upon them) for those who committed sins. He presents the opposing view of those who limit intercession to increasing the benefits for the obedient. Thus, in his view, intercession is a means of salvation for the sinner, not merely an honor for those who do not need forgiveness. [2]

The phrase “God’s approval of a person’s religion” does not mean that every action of the sinner is pleasing to God; The subject of intercession here is a person who possesses the essence of faith but also has shortcomings that require forgiveness. Conversely, it is not permissible to equate mere social labels with the reality of faith, which is known only to God, nor to transform the discussion into a judgment on the inner thoughts of specific individuals or groups.

Love is inseparable from following

Al-Kulayni narrated, on the authority of Abu Basir, on the authority of Imam al-Kadhim (peace be upon him), that his father, Imam al-Sadiq (peace be upon him), said to him upon his death: “O my son, our intercession will not be granted to one who treats prayer lightly.” Al-Majlisi judged this fifteenth hadith to be “apparently authentic” in “Mir’at al-‘Uqul,” vol. 15, p. 18; we preserve his qualification and attribute the judgment to him. [3]

The educational significance of this warning is clear: The connection to the Ahl al-Bayt (the Prophet’s family) should not be used as a pretext for despising the worship they called for. However, “treating prayer lightly” is not a description we apply to every sick person who is unable to perform the usual prayer, or to someone who experiences forgetfulness or a disturbance requiring treatment. Understanding the ruling on an individual case and its conditions is a matter of jurisprudence, not the emotional appeal of a preacher.

Love that bears fruit in truthfulness, mercy, and trustworthiness differs from affiliation used to defend injustice. One who hopes for the intercession of a just leader should not use that hope as an excuse to abandon justice. This is a moral consequence of the meaning of emulation, not a newly invented numerical condition, nor a judgment that every negligent person is definitively deprived of intercession.

The door of repentance is wider than despair.

God Almighty says: “Say, ‘O My servants who have transgressed against themselves [by sinning], do not despair of the mercy of God. Indeed, God forgives all sins. Indeed, He is the Forgiving, the Merciful.’” [Az-Zumar: 53]. And it is followed by: “And turn to your Lord and submit to Him before the punishment comes upon you; then you will not be helped.” [Az-Zumar: 54].

The call to not despair is connected to the call to repentance, and is not a promise that persistent disobedience without turning back will inevitably be forgiven. Elsewhere, it says: “Indeed, Allah does not forgive association with Him, but He forgives what is less than that for whom He wills. And whoever associates others with Allah has certainly fabricated a tremendous sin.” [An-Nisa: 48]

This verse is understood to mean that one can repent from polytheism itself before

death, not that whoever sincerely turns away from it remains deprived of forgiveness. The phrase “God wills” regarding other sins prevents turning hope into a personal guarantee of salvation. And God knows best who has been presented with the proof and how they responded. We have already distinguished between denial and helplessness and weakness.

Repentance is not a story one uses to embellish their image in public. It is a return to God, a renunciation of sin, and an effort to rectify any wrongs committed against others, according to one's ability and Islamic law. Accepting the repentance of an aggressor does not necessitate erasing the pain from the victim's memory, nor does it require them to resume a relationship that harms them. People's rights are not tools for extortion in the name of forgiveness.

Justice and mercy are not incompatible.

The reader might ask: If the sinner is saved through intercession, what about the rights of the wronged? The systematic answer is to establish the principle of forgiveness and the negation of injustice, without inventing a detailed method of settlement not supported by authentic texts. We must not understand mercy in a way that disregards the victim's rights, nor should we limit God’s capacity to satisfy those wronged and bestow grace based on the narrowness of our human experience.

Intercession may be connected with the lifting of punishment or salvation after a trial, but its mere existence does not guarantee that everyone included in it is exempt from all the trials of the intermediate realm and the reckoning. Therefore, we do not promise the sinner a specific timeframe, nor do we make definitive pronouncements about a particular deceased person regarding matters we do not know. Rather, we pray for him, hope for his forgiveness, and entrust the judgment to God.

The chapter concludes that intercession is a permissible hope, repentance is an available act as long as its door remains open, and mercy does not contradict justice. A person cannot write their own guarantee of salvation, but they can now take steps towards it: to return to God, restore rights, seek forgiveness, and act. This step leads us to the meaning of the path and the straight way.

Chapter Sources and References

The Holy Quran: Ta-Ha: 109; Al-Anbiya: 28; Az-Zumar: 53-54; An-Nisa: 48. Verses of hope are read in conjunction with repentance, permission, and acceptance, not separately from them.

[1] Al-Saduq, “Beliefs in the Religion of the Imamiyyah,” p. 66, Chapter on Belief in Intercession; the author's doctrinal report, not automatic authentication of all narrations in the chapter.

[2] Al-Mufid, “Awa’il al-Maqalat,” p. 47, The Discourse on Intercession; The account of agreement and disagreement is attributed to his presentation.

[3] Al-Kulayni, Al-Kafi, vol. 3, p. 270, hadith 15, on the authority of Abu Basir, on the authority of Abu al-Hasan al-Awwal, regarding the testament of al-Sadiq (peace be upon him) concerning prayer. Al-Majlisi’s grading was checked in Mir’at al-‘Uqul, vol. 15, p. 18: “Apparently sahih (sound).” Quoting the ruling verbatim does not imply a claim of consensus or the undertaking of

an independent biographical investigation.

Chapter 130: Al-Sirat and the Human Being's Ultimate Fate

Human life is not merely movement in space; it is also a choice of direction. One’s feet may advance while one’s justice falters, and one’s physical strength may diminish while one’s heart expands with trustworthiness. When discussing the Straight Path, we approach this connection between the path we have taken and the destiny we will face, without making the moral meaning a substitute for the reality of the Hereafter.

The Path in Supplication and the Path in Destiny

In his prayer, the believer recites: “Guide us to the straight path” [Al-Fatihah: 6]. It is not enough to know the name of the path; he asks to be guided to it and to remain steadfast upon it. As for the path in the narrations of the Day of Resurrection, it relates to a person’s crossing to his final destination, and Imami sources discuss it, though with some differences in explaining certain of its characteristics.

In his book “Al-I’tiqadat,” Sheikh al-Saduq states that the path is real and that it is the bridge over Hell, upon which all of creation passes. He also mentions another meaning of the name related to God’s proofs and following them. This is the author’s statement, not a verse that names the bridge or describes its dimensions. [1] The original meaning of the Quranic word “path” is broader than this specific eschatological usage.

In “Ma’ani al-Akhbar,” there is a narration from al-Mufaddal ibn Umar on the authority of Imam al-Sadiq (peace be upon him), distinguishing the path of this world —which is the Imam whom one is obliged to obey and whose guidance one follows— from the path of the Hereafter, which he describes as the bridge of Hell. We have established the narration by citing its source, but we have not conducted an independent verification of all the narrators in its chain. Therefore, it is not permissible to directly transfer its widespread acceptance to a claim of the soundness of its chain of transmission. [2]

The narration demonstrates the connection between knowledge and following; it does not contain anything that permits reducing following the Imam to a mere title or partisanship. Nevertheless, the application of the rulings on salvation to specific individuals remains governed by what has been previously stated regarding the establishment of proof, ability, and weakness, not by our incomplete knowledge of their circumstances.

Does Coming to the Fire Mean That Everyone Is Punished?

God Almighty said: “There is none of you but will come to it. This is a decree which your Lord has imposed.” [Maryam: 71]. Then He said: “Then We will save those who feared God and leave the wrongdoers therein, kneeling.” [Maryam: 72].

The interpretations of “coming to it” vary among the commentators: Is it entering, or being present and observing? Al-Tabataba’i discussed these interpretations and concluded that the word, in terms of its meaning, does not establish more than

approaching, being present, and looking upon it, while separating this from the indication of other texts regarding entering in specific circumstances. [3] Therefore, we do not attribute to the commentators a consensus that does not exist.

The crucial point that should not be overlooked is that coming to the Fire is not necessarily equivalent to being tormented by it. Even the mere mention of entering does not necessitate that everyone who enters will suffer. The established fact of the salvation of the righteous precludes using this verse to negate the promised security for them. Furthermore, we cannot, from these two verses alone, calculate the speed of passage, its distance, or the duration of each stage.

Thinner than a hair and sharper than a sword

This phrase is common in narrations about the bridge (Sirat), but hearing it from a young age does not determine its interpretation. In his book "Correcting Beliefs," Sheikh al-Mufid explains the description by referring to the severity of the crossing and the terrors of the situation that befall the disbeliever. He uses it as a metaphor for the arduousness of the journey and affirms that the Sirat is a path leading to Paradise or Hell. We attribute this interpretation to him, without considering it a denial of the existence of the Hereafter or a universally accepted view. [4]

In another reading, the descriptions are interpreted as referring to an eschatological reality that cannot be measured by the laws of worldly life. This chapter does not rely on experience to favor a specific geometric design. Therefore, it does not depict the bridge (Sirat) with a line of a specific thickness, nor does it inquire about the weight it can bear, nor does it link safety on it to the walking ability that a sick person or a child might lack.

The established fact that people's circumstances differ is interpreted in light of their deeds and God's mercy upon them, not in light of their limbs or physical capabilities. A person with a disability is not deprived of salvation simply because they cannot cross a bridge in this world; this is a flawed comparison between the conditions of two different realms.

Obstacles: Narrative Detail and Theological Reading

Al-Saduq describes the obstacles on the path of the Gathering by the names of obligatory duties, commands, and prohibitions, and as places where a person is detained over duties in which they fell short. In contrast, Al-Mufid interprets the obstacles as deeds, the responsibility for them, and the difficulty of escaping the consequences of negligence, not as mountains to be climbed. He also discusses the authenticity of the narrative detail upon which this picture is based. [5]

Presenting both interpretations preserves the integrity of the Book: we neither conceal the literal reading nor omit the theological interpretations from the Imami tradition. Nor do we simply copy a list of obstacles and durations and present it as a Qur'anic map. Every additional detail requires a source and an examination of its meaning and evidential reliability, not merely its impact on the listener.

Al-A'raf and those awaiting God's command

God Almighty says: “And between them will be a barrier, and on the Heights will be men who recognize each by their marks. And they will call out to the companions of Paradise, ‘Peace be upon you.’ They have not yet entered it, but they long to.” [Al-A'raf: 46]

Al-Mufid presents the Heights as a place between Paradise and Hell, and relates accounts of the Prophet and the Imams, peace be upon them, being present there. He also mentions those who await God's command and discusses various opinions regarding the different categories of those who will be there. He concludes his explanation by referring matters not definitively settled to God's knowledge. [6] These are degrees within his own presentation, so it is not permissible to equate every possibility he mentions with what he considers definitive.

We do not confuse the men of the Heights in the Imamite reading with all those waiting by it; nor do we make it, without evidence, an eternal abode for every child or every person who has not received the message. The discussions of those not obligated to perform religious duties and the vulnerable have already been addressed, and they prevent a metaphysical concept from becoming a blanket judgment on those who lack free will.

Light That Cannot Be Borrowed Through Mere Affiliation

God Almighty says: “On the Day you see the believing men and believing women, their light proceeding before them and on their right, [it will be said], ‘Your good tidings today are [of] gardens beneath which rivers flow, wherein you will abide eternally. That is the great attainment.’” [Al-Hadid: 12]

This is followed by the scene of the hypocrites seeking to borrow from the light, revealing that outward association is insufficient. This light is not a description of the amount of illumination emitted by the skin or the result of a biological examination; it is a vision of the promise of the Hereafter. Mentioning believing women alongside believing men prevents portraying salvation as a journey belonging solely to men.

The chapter concludes that the Straight Path connects the meaning of guidance to the meaning of destiny, and that narrations and interpretations are not equal in their authenticity or in their explanation. The step we have today is not drawing the bridge, but rather steadfastness on the path: sincere faith, rights protected, and repentance that is not delayed. After the path comes the discussion of the eternal abode and its bliss.

Chapter Sources and References

The Holy Quran: Al-Fatihah: 6; Maryam: 71-72; Al-A'raf: 46; Al-Hadid: 12-14.

[1] Al-Saduq, "Al-I'tiqadat", p. 70, Chapter on Belief in the Straight Path.

[2] Al-Saduq, "Ma'ani al-Akhbar", p. 32, Chapter on the Meaning of the Straight Path, Hadith 1, on the authority of Al-Mufaddal ibn Umar; the chain of narration was not independently authenticated.

[3] Al-Tabataba’i, “Al-Mizan,” Commentary on Maryam: 71–72, Discussion of coming to the Fire

and entering it.

[4] Al-Mufid, “Correcting the Beliefs of the Imamiyyah,” pp. 109–111; Commentary on the description of the Sirat. Al-Mufid’s text is distinguished from the editor’s footnotes.

[5] Al-Saduq, “Al-I’tiqadat,” pp. 71–72, on the obstacles; and compare it with Al-Mufid, “Correcting the Beliefs,” pp. 112–113.

[6] Al-Mufid, “Correcting the Beliefs,” pp. 106–107, on Al-A’raf; the narrations, possibilities, and the point of certainty are attributed to his presentation without independent verification of all their chains of transmission.

Chapter 131: Paradise and the Life of Its People

In this world, humankind learns that joy is quickly intertwined with fear: one loves and then fears loss, one is healthy and then fears illness, and one rests knowing that hardship will return. Therefore, the verses describing Paradise do not merely describe an increase in beloved things, but a transformation in the very conditions of life: security that is not haunted by departure, bliss that does not turn into harm, and contentment that the bitterness of rivalry cannot take away.

The Well-being of Life Precedes Abundant Pleasures

God Almighty says: {Indeed, the righteous will be in gardens and springs} [Al-Hijr: 45]. {Enter them in peace and security} [Al-Hijr: 46]. {And We will remove whatever rancor is in their hearts, [so they will be] brothers, facing one another on thrones.} [Al-Hijr: 47] {No fatigue will touch them therein, nor will they be expelled therefrom.} [Al-Hijr: 48]

These verses combine the concepts of place, tranquility, relationship, and permanence. To understand true bliss, it is insufficient to imagine a beautiful garden while envy, humiliation, sickness, and fear remain. The removal of rancor is not merely an added adornment; it is a transformation of what was corrupting the best that a person possesses.

Al-Saduq describes Paradise as the abode of permanence, peace, and honor, negating sickness, old age, poverty, and worry from it, and mentioning the varying ranks of its inhabitants. We present his description as a doctrinal report based on his understanding of the texts, not as a single hadith in which we attribute all its statements to the Imam. [1]

Physical Bliss Not Reducible to Metaphor

God Almighty says: “They will be served with trays of gold and goblets, and therein is whatever the souls desire and whatever delights the eyes, and you will abide therein eternally.” [Az-Zukhruf: 71]. And in Surah Al-Waqi'ah, there are descriptions of fruits, food, drink, and the houris, along with the negation of idle talk and sin. [2]

The methodology of this book does not negate the presence of the body and pleasure by confining Paradise to a purely psychological meaning. But at the same time, the names of food and drink do not imply that all the earthly laws of metabolism, digestion, and excretion will be restored exactly as we knew them. Demonstrating

sensory pleasure is not the same as claiming to know the functions of its organs in detail.

Therefore, we cannot assert a uniform age or height for all its inhabitants, nor a numerical measure of bodily strength or pleasures, based on a widely circulated report without verification. Anyone wishing to include a detailed narrative on this matter must provide its exact wording, source, and credibility, not merely rely on its prevalence in sermons.

The Quran says regarding the drink of the people of Paradise: “They will not suffer headaches from it, nor will they be intoxicated” [Al-Waqi'ah: 19]. Therefore, the characteristics of harmful drinks in this world should not be applied to the drink of the Hereafter, nor should its name be used to justify the permissibility of worldly intoxicants. A shared name does not equate to a shared set of characteristics and rulings.

Relationships, Encounters, and the Dignity of Women and Men

God Almighty says: {And those who believed and whose descendants followed them in faith - We will join with them their descendants, and We will not deprive them of anything of their deeds. Every person, for what he has earned, is retained.} [At-Tur: 21]. This promise opens the door to intimacy and encounters, but it remains subject to its Quranic conditions; we do not promise every family a single destiny simply because of blood ties.

It also says: {Enter Paradise, you and your spouses, in happiness.} [Az-Zukhruf: 70]. The description of Paradise encompasses companionship, beauty, and marriage, not a life of isolation devoid of connection. However, the details of who is with whom, and the circumstances of those who have multiple marriages or remain unmarried, are not determined by social inferences that impose upon the unseen.

The mention of the houris in the text does not justify reducing all of Paradise to sexual pleasure, nor portraying the believing woman as merely an element of someone else's bliss. The Quranic promise includes both believing men and women, and contentment and dignity are for them. We do not derive from worldly desires tainted by jealousy or domination a system that we impose upon a life devoid of malice.

As for pregnancy, childbirth, procreation, and all the other details that curiosity seeks, each account has its own place of investigation. It is neither honest to deny all of this arbitrarily, nor to affirm it without evidence. The silence of this chapter regarding the uncertain nature of these matters is not due to forgetfulness of humanity, but rather respect for the limits of our knowledge.

God's pleasure is greater.

God Almighty says: “God has promised the believing men and believing women gardens beneath which rivers flow, wherein they abide eternally, and pleasant dwellings in gardens of perpetual bliss; but the greatest reward is the pleasure of God. That is the supreme triumph.” [At-Tawbah: 72]

The greatness of God's pleasure does not negate the gardens and dwellings mentioned in the verse; rather, it prevents us from viewing bliss as separate possessions, distinct from the relationship between the servant and his Lord. The levels of worship, including the worship of love, were discussed in Chapter Two. Whoever understands this meaning does not despise food and beauty, but knows that true happiness is not limited to them.

In the passage describing Paradise from Sermon 165 in Nahj al-Balaghah, the description combines the beauty of trees and fruits with honor, attaining the eternal abode, and freedom from the fear of having to leave. We present this text within its exhortative context, while noting that this chapter has not independently investigated the sermon’s chain of transmission. [3]

Yearning for this promise does not mean hastening death or neglecting treatment and duty. Preparing for Paradise is achieved through action in the life entrusted to humankind, not by destroying it. He who hopes for the abode of peace is more deserving of preserving his own well-being and that of others.

What Our Image Cannot Contain

God Almighty says: “No soul knows what has been hidden for them of delights of the eyes as a reward for what they used to do.” [As-Sajdah: 17]. This verse affirms the promise and simultaneously reveals the limitations of imagination. What we call closeness and divine favor here does not mean a human being’s indwelling in God or his transformation into a divine being; rather, he is a servant honored by the grace of his Lord.

In conclusion, Paradise is a complete life in body, perception, and relationship, as the texts indicate. It is not a replication of the imperfections of this world, nor an empty symbol devoid of reality. Many aspects remain beyond our comprehension. It suffices for us to know that the promise does not diminish human dignity, and that He who created within us the capacity for joy is certainly capable of bestowing upon us an unfailing joy.

Chapter Sources and References

The Holy Quran: Al-Hijr: 45–48; Az-Zukhruf: 70–73; Al-Waqi'ah: 17–26, 35–38; At-Tur: 21; At-Tawbah: 72; As-Sajdah: 17.

[1] Al-Saduq, “Beliefs in the Religion of the Imamiyyah,” pp. 76–77, Chapter on Belief in Paradise and Hell; the author's description of safety and levels.

[2] Surah Al-Waqi'ah: 11–56, the referenced Quranic text, especially the descriptions of bliss and drink; details of worldly physiology cannot be used to determine the nature of the Hereafter.

[3] “Nahj al-Balaghah,” Sermon 165 according to the source, the section on the description of Paradise after the description of the peacock. The reference is to the text, not to an independent verification of its chain of transmission.

Chapter 132: Hell and the Conditions of Its People

It is not easy for a person to read the verses about Hell. They challenge our tendency

to let actions go unpunished and prevent us from reducing life to a fleeting victory. However, the difficulty of reading them does not justify adding terrifying images to the text, nor does it justify removing it because it does not suit our desires. The safest way is to affirm the warning as it is stated and to read it with justice, mercy, and the establishment of proof.

The Reality of Punishment and the Presence of Perception

God Almighty says: “Indeed, those who disbelieve in Our verses - We will drive them into a Fire. Every time their skins are roasted through We will replace them with other skins so that they may taste the punishment. Indeed, God is ever Exalted in Might and Wise.” [An-Nisa: 56]

The punishment in this verse is connected to the body and its perception. We should not reduce it to a purely psychological metaphor that negates the fire and the skins. Conversely, the verse does not make the earthly human being a laboratory model from which we deduce how the body is renewed in the Hereafter. The continuity of identity with the changing of the skin, and the non-transfer of responsibility to another person, were discussed in Chapter 125.

The scientific chapters examined pain receptors and their networks, but the verse does not claim that pain exists only in the skin, nor is it evidence to deny the existence of deep or visceral pain. Hastily linking a Quranic verse to partial anatomical information can misinterpret the text and distort the science it seeks to cite.

God Almighty says: {And those who disbelieve will have the Fire of Hell. They will not be decreed to die, nor will its punishment be lightened for them. Thus do We recompense every ungrateful one.} [Fatir: 36]. Continued life here does not guarantee safety, nor is earthly death a suitable benchmark for measuring all that will occur in the Hereafter.

Regret and Broken Relationships

God Almighty says: “And they will cry, ‘O Malik, let your Lord put an end to us!’ He will say, ‘Indeed, you will remain [here].’” [Az-Zukhruf: 77]. The cry indicates awareness and a connection to retribution, not to bodies devoid of feeling. Images of blame, conflict, and regret appear in the Quran, thus combining physical suffering and emotional pain in the threat.

Surah Al-Waqi’ah presents the Zaqqum tree and boiling water in the discourse of the misguided and the deniers. We establish their description from the text, without adding heat levels, chemical compositions, or detailed scenes simply because the imagination can depict them. The book's purpose is to explain what is mentioned about humankind, not to create scenes of torture that expand the text.

Saying that the inhabitants of Hell suffer does not permit a person to torment their opponent in this world or to take pleasure in harming them. Retribution belongs to God, and the limits of our interactions with the living are governed by the principles of justice and the prohibition of aggression. Belief in divine threats does not grant an individual the power of divine retribution.

Levels of Hell are not a pre-defined social map.

God Almighty says: {Indeed, the hypocrites will be in the lowest depths of the Fire, and you will never find for them a helper.} [An-Nisa: 145]. The text reveals a difference in the ultimate fate, but it does not give us the right to label everyone who disagrees with us a hypocrite. Hypocrisy is a description of a reality known only to God, not an insult with which we assign levels of Hell.

Similarly, a difference in religion or sect, as a social fact, is insufficient to fully understand an individual's standing before God: What message reached him? How did he understand it? Was the proof established against him? Was he a denier or incapable? This inquiry does not negate the warnings against disbelief, but it prevents general rulings from determining the fate of every individual. We have previously discussed the principle of vulnerability and the rights of those not obligated to follow religious law.

Entry is not eternity

In the chapter on Paradise and Hell, al-Saduq distinguishes between those who will abide eternally and those who will receive forgiveness or intercession from among the sinners of the monotheists. Al-Mufid, in his "Awa'il al-Maqalat," states that the threat of eternal damnation does not apply to every sinner among those who profess faith, have knowledge, and pray, and that those among them who are punished will not remain in torment forever. We attribute this presentation to its authors, as it is an important foundation for addressing the issue from an Imamite perspective. [1]

Therefore, not every sin is disbelief, and not every deserving of punishment is eternal damnation. Likewise, the absence of eternal damnation does not make the sin insignificant. It has already been established that intercession is by God's permission and not a personal promise written by a person for themselves. We cannot definitively say that anyone who does not repent will escape all punishment, nor can we definitively say that everyone who errs has had the door of mercy closed to them.

Detailed accounts of the timing of suffering or the manner of the release of some monotheists appear in some books. Their mere presence in a book of creed is insufficient to establish them definitively. A general statement needs to be distinguished from a specific account whose verification is incomplete. Thus, we do not allow a single report to govern the entirety of the texts without investigation.

How should the question of eternal damnation be investigated?

The reader asks: How can prolonged torment be related to a limited lifespan? This is a serious theological question that cannot be addressed by rebuking the questioner. One common answer is to consider the firmness of one's choice and the inclination of the soul, not merely the number of years. In al-Kafi, in the chapter on intention, there is a hadith explaining the eternal abiding of the inhabitants of Hell and Paradise based on their intentions, had their lives been extended. Al-Majlisi described this fifth hadith as weak in Mir'at al-'Uqul, vol. 8, p. 104; this is also the ruling reported by Maktabat al-Thaqalayn. [2]

Therefore, we do not present it as conclusive proof that resolves all aspects of the

question. Even when considering its meaning, a distinction must be made between a settled, voluntary inclination and a fleeting thought or an unwanted compulsive thought. It is unjust to tell someone who is troubled by intrusive thoughts: "You have chosen eternal damnation because of them."

There remain philosophical discussions regarding the nature of the soul, the embodiment of deeds, and the permanence of reward and punishment. What we lack here is a complete understanding of the unseen realms or the inner states of those accountable. What we do possess, as a fundamental principle of the methodology, is that God does not wrong anyone, that His word is true, and that differing interpretations of wisdom do not justify disregarding or distorting the texts.

The Warning That Calls for Repentance

God Almighty says: {Except for those who repent, believe, and do righteous deeds. For them, God will replace their evil deeds with good. And ever is God Forgiving and Merciful.} [Al-Furqan: 70]. This exception comes in the context of grave sins; therefore, the fear of Hellfire does not become an argument that repentance is no longer possible.

The chapter concludes that Hell is a real threat, that the human beings in it do not lack awareness, and that entering it and remaining there eternally are two different concepts in the Imami discourse. The purpose of remembering it is to deter us from injustice and to rectify what we can, not to despair of God or to appoint ourselves as judges over the destinies of His servants. The final question remains: What is the meaning of a life that is not interrupted by death?

Chapter Sources and References

The Holy Quran: An-Nisa: 56, 145; Fatir: 36; Az-Zukhruf: 74–77; Al-Waqi'ah: 51–56; Al-Furqan: 70. See Chapter 125 on the identity of the body and the changing of the skin, and Chapter 129 on intercession.

[1] Al-Saduq, “Al-I'tiqadat,” p. 77; distinguishing eternal damnation from the release of sinners among the monotheists, without adopting every detailed report that follows.

Al-Mufid, “Awa’il al-Maqalat,” pp. 46–47, The Discourse on Threat; the aforementioned agreement is attributed to the author.

[2] Al-Kulayni, “Al-Kafi,” Book of Faith and Disbelief, Chapter on Intention, Hadith 5, The Narration on the Reason for Immortality through Intention. The text of the chain of transmission was compared in Al-Thaqalayn, and the ruling of “weak” was compared with the digital text of “Mir’at al-‘Uqul,” vol. 8, p. 104, in the library of the School of Jurisprudence. This is a comparison with the ruling of Al-Majlisi; there is no independent ruling on the narrators in this book.

Chapter 133: The Hereafter and the Meaning of Eternity

The story of the human being has reached the question that no clock can answer: What would life be like if death no longer awaited it at its end? We are accustomed to knowing things by their limits; the day begins and ends, and lifespans come and then pass. Therefore, it is difficult for us to imagine eternity, but the difficulty of imagining it is not proof of impossibility. The ease with which an image can be formed in the

mind does not make that image a prediction of the unseen.

A Life Beyond Merely Extending Our Lifespan

God Almighty says: {And this worldly life is nothing but play and amusement. And indeed, the Hereafter is the true life, if only they knew.} [Al-Ankabut: 64]. The Arabic word al-hayawan here means life, not “animal” in the modern usage that contrasts animals with human beings. This description of worldly life does not invalidate work within it; for it is within this world that we are held accountable, and it is from this world that we will be judged for our deeds.

We cannot define the Hereafter by simply adding zeros to the average lifespan. Sickness, fatigue, and the fear of loss are conditions of our current experience, and the state of the people of Paradise differs from it. Therefore, it is not permissible to base a judgment of immortality on a body that ages every day, and then assume that it will age indefinitely. The text describes a different mode of existence, not the continuous, uninterrupted biological decline we know.

The End of Death, Not the End of Need for God

God Almighty said regarding the people of Paradise: {They will not taste death therein except the first death, and He will protect them from the punishment of Hellfire} [Ad-Dukhan: 56]. And He said: {As a favor from your Lord. That is the great attainment} [Ad-Dukhan: 57]. Grace does not mean that man has become self-sufficient or a partner with God in divinity; rather, he continues to exist because God sustains him and enjoys bliss by His grace.

The endless existence promised to a created being is distinct from beginningless existence. Human existence was preceded by non-existence, and he passed through stages in which he was incapable of self-governance. The promise of eternity does not erase this reality, nor does it make Paradise independent of its Creator. Rather, it removes the fear of the cessation of blessings and strengthens trust in the promise of the One who never breaks His word.

God Almighty says: “As for those who are blessed, they will be in Paradise, abiding therein as long as the heavens and the earth endure, except as your Lord wills—a gift uninterrupted.” [Hud: 108] Tabatabai discusses the aspects of the exception, and reads it here in conjunction with the verse's conclusion: the continuity of bestowal does not diminish God's power, and the exception does not imply that the inhabitants of Paradise will actually leave it. This is a statement of his interpretation, not a denial of the existence of other interpretations in books of exegesis. [1]

Does bliss turn into boredom?

The question of boredom arises from an understandable experience: things we love become repetitive, diminishing their pleasure, or we obtain them and find ourselves desiring something else. However, applying this experience wholesale to the Hereafter adds a condition to the text that it does not establish. We have no psychological test of the inhabitants of Paradise, nor empirical knowledge of how they experience time.

God Almighty says: “They will abide therein eternally, desiring no change therefrom” [Al-Kahf: 108]. And He says: “They will have whatever they wish therein, and with Us is more” [Qaf: 35]. The promise affirms contentment, the absence of any desire to leave it, and the vastness of the bounty, but it does not provide us with a daily schedule of life there. It is only fair to stop here, rather than inventing details about sleep, professions, or the order of generations.

Contentment does not necessitate the disappearance of a person's personality or the erasure of all their memories, nor is it permissible to assert that they will carry all the pain of memory in its current form. The promise's connection to the individual who lived, chose, and was held accountable differs from the claim that we know all the mechanisms of their perception in the afterlife. We have discussed the issue of identity and the survival of humankind in detail in Chapter 125.

The Narration of the Slaughter of Death: Its Significance and Limits of Reliance

Al-Fayd al-Kashani, in his commentary on Surah Maryam (39), al-Safi, cites the narration of the slaughter of death, citing al-Qummi's commentary. This narration was compared to the digital text of al-Qummi's own commentary on Surah Maryam, which includes the chain of transmission: Ali ibn Ibrahim, from his father, from al-Hasan ibn Mahbub, from Abu Wallad al-Hannat, from Imam al-Sadiq (peace be upon him). The narration describes the announcement of the cessation of death as the slaughter of a ram. Establishing the source and chain of transmission of this narration does not independently validate its chain of transmission, nor does it elevate its details to the level of a Quranic verse. [2]

The point of interest is the announcement of the cessation of death in the final destiny, not the claim that the cessation of bodily functions in this world is a hidden animal within us. This narration does not permit conflating death with the Angel of Death, nor does it allow for determining the fate of everyone who enters Hell without considering the texts on intercession and the release of some sinners, which have been previously discussed. Combining all the relevant chapters is preferable to isolating a single scene and disregarding all other texts based on it.

Eternity, Justice, and Mercy

The description of eternity does not equate the bliss of Paradise with the torment of Hell. The previous chapter discussed the difference between entering Hell and remaining there eternally, the limits of relying on the report of intention, and the question of the justice of recompense. We do not close these questions again with a general statement; rather, we will maintain the distinctions between the Quranic text, the theological report, and the narration whose chain of transmission has not been established in this work.

Likewise, belief in destiny does not grant us the right to judge specific individuals. We see only a part of the actions and do not fully comprehend the argument, the capacity, the intention, and the repentance. Our responsibility remains to redress injustice, protect rights, and act according to what we know. The final judgment

belongs to God, who wrongs no one.

Returning from the end of the journey to the first obligation

Discussing eternity may seem far removed from a child who needs food or an elderly person who needs care. But the fruit of reflecting on destiny becomes apparent when it brings us back to these people: time is limited, ability is a trust, and the human being before us is not a mere detail on the path to the Hereafter. It is not right to speak grandly of the Reckoning while neglecting the rights of those for whom we will be held accountable.

The chapter concludes that the promised eternity is a permanence granted by God, not a divinity acquired by humankind; that the Hereafter is not measured by the limitations of our present bodies through empirical observation; and that we know of it through divine revelation, distinguishing this from interpretations and reports that require verification. Thus, the final chapter of the narrative leads to the beginning of action: as long as a person lives, they have an opportunity for truthfulness, mercy, and reform.

Chapter Sources and References

The Holy Quran: Al-Ankabut: 64; Ad-Dukhan: 56–57; Hud: 108; Al-Kahf: 108; Qaf: 35. See chapters 125, 129, and 131–132 on identity, intercession, Paradise, and Hell.

[1] Al-Tabataba'i, "Al-Mizan fi Tafsir al-Qur'an," commentary on Hud: 100–108, particularly the discussion of the exception and the description of the gift as undiminished; the summary is attributed to his interpretive choice.

[2] Tafsir al-Qummi, Surah Maryam, verse 39, the narration of Abu Wallad al-Hannat on the authority of Imam al-Sadiq (peace be upon him); the text and its chain of transmission were compared in the digital version on the Huda al-Qur'an website. See "Al-Safi" by al-Fayd al-Kashani in the same place for transmission and comparison. No independent authentication of the chain of transmission or verification of all parallel narrations has been undertaken here.

General Conclusion: From Knowing the Beginning to Bearing Responsibility

We began this story with a small hand that possessed neither food nor protection for itself, and we ended with man standing before his deeds and his destiny. Between these two scenes lies a body forming, a mind learning, a soul wavering between fear and hope, and relationships that either give life meaning or burden it with injustice. The journey was not merely a transition from one piece of information to another, but an attempt to see the human being in the fullness of their existence: in their weakness and dignity, and in their need for both knowledge and compassion.

What did the beginning teach us?

The verses on creation taught us that the material from which humanity began should not become a pretext for its contempt, nor should honor be transformed into a claim of self-sufficiency. For he who can speak, choose, and build civilizations was once in need of someone to carry him, feed him, and heed his cries. This truth does not disappear with age; rather, the forms of need change, and his connection with others remains an integral part of his life.

Our examination of the formation of the human body taught us that naming the stages is no substitute for understanding them, and that the Qur'anic description and the detailed embryological analysis cannot be reconciled by erasing the differences between language and laboratory experience. We saw how calculating gestational age differs from age measured from fertilization, and how it harms both science and religion to transform an approximation into a precise date or an interpretive opinion into a definitive experimental result.

One Body, Not a Collection of Adjacent Organs

We contemplated the skin, bones, and muscles; the blood, heart, and lungs; digestion, excretion, glands, nerves, and senses. The more detailed the analysis, the more the unity became apparent: no single organ sustains human life, and no single measurement can explain everything that occurs within it. What is true of the body reminds us of an important ethical principle: a patient is not a diagnostic statistic, a person with a disability is not a missing function, and an elderly person is not simply the sum of their weakened organs.

Therefore, the chapters on illness and care were not merely scientific appendages to the narrative. They are a test of what we do with our knowledge. We may know the name of an illness and then hurt its sufferer with a word, or we may memorize a text on patience and then leave the afflicted without treatment. Knowledge that does not refine our treatment of the vulnerable remains incomplete, no matter how numerous its terms.

The Soul, the Mind, and Action

In memory, emotion, sleep, dreams, and choice, we have encountered questions that cannot be reduced to a single answer. We have distinguished between what neurological research measures and what theology and philosophy discuss, between mental disorder and sin, and between an unwanted thought and the intention adopted by a person. We have no right to make science a witness to what it has not tested, nor to make the discourse of obligation a denial of illness or the disparity in ability.

Likewise, acknowledging limitations does not absolve us of action. A person can ask for help, correct information, apologize, and reconsider a habit that has harmed them or others. Purification of the self is not a promise that we will never err again, but a commitment not to let error become a homeland we refuse to leave.

Death does not negate the rights of the living.

When we entered the chapters of dying and death, we distinguished medical signs from the popular feeling of impending doom, palliative care from abandoning the patient, and medically determined death from the unseen realm that measurement devices cannot describe. The deceased retained their dignity, their family their need for solace, and their caregivers their right to support and comfort.

It is neither merciful to demand that the bereaved forget their loved ones, nor is it faithful to attribute all pain to some specific punishment. These chapters have taught

us to offer relief where we can, to allow space for questioning and grief, and not to sell people certainty we haven't verified in news, practice, or promises of treatment.

What is established and what remains open to discussion

This book is based on the Qur'an, with an Imamite reading of the narrations and doctrine, and by utilizing scholarly sources according to their subject matter. However, this methodological approach does not elevate every interpretation to an infallible text, nor every report in a reliable book to a hadith with a sound chain of transmission, nor every ruling attributed to a critic to a consensus. Therefore, we have established cases of omitted links in transmission, unknown narrators, and weak chains, and we have named the author of the interpretation or opinion where the context required.

Issues remain concerning the origin of humankind, the interpretation of the covenant, the details of the soul and the intermediate realm (Barzakh), the nature of resurrection and eternity, and other matters, with varying degrees of disagreement, which are explained in their respective places. Presenting the differences does not imply that all opinions are equally valid, nor does favoring one opinion mean that all questions regarding it have been resolved. The reader should be able to refer to the evidence and distinguish it from the explanation.

The book's chapters, sections, and appendices are complete, while the scope of the investigation and research remains as outlined elsewhere. The collection of material does not negate the need for extensive hadith verification or specialized medical review. The series' style was inspired by models from its previous books; the appendices document the methods used and how they were accessed. Scientific and linguistic review, detailed referencing, and publisher proofreading remain stages with their own requirements.

The Answer That Becomes a Behavior

The most important thing we hope to retain from this book is not that the reader remembers every name, but that they become more accurate in their transmission, more humble in their ignorance, and more compassionate when they possess the ability. That they see in the knowledge of creation a reason to care for creation, in the belief in accountability a motivation to restore rights, and in the hope of mercy a gateway to reform, not an excuse for persisting in harm.

The story ultimately returns to the human being standing before us now: a child learning, a young man searching, a pregnant woman, a laboring worker, a sick person hoping, and an elderly person needing someone to listen. We do not know their ages or their ultimate fates, but we know that we have a duty towards them. And this knowledge is enough for us to begin.

O God, grant us knowledge that benefits, sincerity that preserves it, and mercy whose effect is felt in those around us. Whatever we have achieved is by Your grace, and whatever we have erred in, we ask You for the guidance to review and correct it. Praise be to God, Lord of the Worlds.

This conclusion is followed by the nine appendices, sources, and indexes in this

volume.

The Story of the Human Being — Appendices, Sources, and Indexes

From the Beginning of Creation to After Death

Sayyid Hussam Zaha Murtadha Al-Saraf Al-Husayni

The Nine Appendices, Sources, and Indexes — Within the Unified Edition

These appendices accompany the main text, with its fourteen parts, one hundred and thirty-three chapters, and conclusion.

How to use these appendices?

The appendices are reading and review tools, not a book independent of the main text’s evidence. Reference to a chapter means referring to its text, sources, and scope; it does not mean adopting everything in the referenced source. The front index shows the pages of the chapters and sections, and the concluding section guide shows the pages with detailed headings. The book's atlas is textual and does not include anatomical illustrations.

The verse map is thematic, and the concluding Qur'anic index records the verses quoted within Qur’anic quotation marks in the Arabic text in the introduction and chapters; incidental references not quoted are consulted in the chapter sources. The register of narrations includes references to the narrations used and notes on the degrees of specific chains of transmission, not a comprehensive compilation of all chains of transmission for each hadith. The indexes of names and terms provide guides to the locations of verbal occurrences, without implying that every opinion mentioned is adopted by this book.

The medical information is for educational purposes only and should not be used to diagnose an individual, prescribe treatment, or determine decision-making capacity or death. Fatwas are attributed to their authors and sources and should not be considered general rulings for all readers simply by being copied. The compilation date does not preclude reviewing updates when making practical decisions.

Contents of Appendices and Indexes

Scientific and Documentary Appendices

Appendix 1: Map of verses related to the creation, life, death, and resurrection of humankind.

Appendix 2: Record of narrations, their original sources, and the results of the investigation.

Appendix 3: Timeline of embryonic development and the basis for calculating age.

Appendix 4: Simplified anatomical atlas of body systems and organs.

Appendix Five: Growth and Age-Related Transformation Tables with References and Limitations.

Appendix Six: Glossary of Arabic Scientific and Anatomical Terms and their Foreign Equivalents.

Appendix Seven: Glossary of Qur'anic, Narrative, and Theological Terms.

Appendix Eight: Disputed Issues, the Nature of the Dispute, and Areas of Discussion.

Appendix Nine: A Guide to Distinguishing Between Scientific Information, Interpretation, Narration, and Opinion.

Sources and References

The Holy Qur'an.

Imami Hadith and Narration Books, with priority given to original sources over later collections.

Imami Commentaries, Language Studies, and Works on Unfamiliar Qur’anic Vocabulary.

Books on Creed, Theology, Resurrection, and Philosophy, as needed.

Jurisprudential references and fatwas attributed to their authors, with dates of reference.

References in biology, genetics, embryology, anatomy, and physiology.

References in neurology, psychology, development, aging, forensic medicine, and palliative care.

Peer-reviewed scientific studies, systematic reviews, and specialized documents used.

Concluding indexes.

Index of Quranic verses.

Index of hadiths and narrations.

Index of prophets, imams, prominent figures, and names mentioned in the book.

Index of organs, systems, and scientific terms.

Index of religious and doctrinal terms.

Index of illustrations, images, and tables.

Detailed Subject Index.

Table of Contents in the Introduction and a Detailed Section Guide in the Conclusion, with page numbers.

Appendix 1: Map of Verses Related to the Human Being

This map compiles the main reading paths and does not aim to include all verses directly or indirectly related to humanity. Continuous sections are sometimes included to maintain the reading flow, even if the text quotes only some verses from

a section. The concluding index of quotations is more precise when searching for the location of a specific verse.

Identity, Dignity, and Unity of Origin

Key to Reading: Al-Isra: 70; An-Nisa: 1; Al-Hujurat: 13; At-Tin: 4–6.

Search Locations: Chapters 1, 5–6, 90.

The Purpose of Creation, Responsibility, and Trial

Key Reading: Adh-Dhariyat: 56–58; Al-Mulk: 2; Al-Mu'minun: 115–116; Al-Baqarah: 286

Areas of Study: Chapters 2, 77, 79

The Material of Creation, Adam, Education, and the Descent

Key Reading: As-Sajdah: 7–9; Al-Hijr: 26–29; Al-Baqarah: 30–39; Ta-Ha: 115–123

Areas of Study: Chapters 3–4

Marriage, Offspring, Covenant, and Innate Nature

Key Reading: An-Nisa: 1; Al-A'raf: 172–173; Ar-Rum: 30

Areas of Study: Chapters 5–7

Reproduction, Formation, and Pregnancy

Key Reading: Al-Mu'minun: 12–14; Al-Hajj: 5; Al-Insan: 2; Az-Zumar: 6; Luqman: 14; Al-Ahqaf: 15.

Areas of Study: Chapters 16–34.

The Soul and the Limits of Knowledge

Key Reading: Al-Isra: 85; As-Sajdah: 9.

Areas of Study: Chapters 34, 72, 102, 113.

Organs, Senses, and Knowledge

Key Reading: An-Nahl: 78; Al-Isra: 36; Al-Mulk: 23.

Areas of Study: Chapters 1, 48–52, 73–74.

Food, Water, Sleep, and Balance

Key Reading: Abasa: 24–32; An-Nahl: 66; Al-Furqan: 47; An-Naba: 9–11

Areas of Study: Chapters 53–60, 63, 91

Age and Stages of Strength and Weakness

Key Reading: Ar-Rum: 54; Al-Hajj: 5; An-Nahl: 70

Areas of Study: Chapters 64–71, 95–96

The Soul, Purification, and Choice

Key Reading: Ash-Shams: 7–10; Yusuf: 53; Al-Qiyamah: 2; Al-Fajr: 27–30

Research Topics: Chapters 72, 75, 77–79.

Illness, Mercy, and Dignity

Key Reading: Ash-Shu'ara: 80; Al-Anbiya: 83–84; Al-Isra: 70.

Research Topics: Chapters 88–95.

Death, Passing, and the Taking of the Soul

Key Reading: Al 'Imran: 185; Az-Zumar: 42; As-Sajdah: 11; Al-An'am: 61; Qaf: 19.

Research Topics: Chapters 96–104.

Returning to Earth and the Rights of the Deceased

Key Reading: Ta-Ha: 55; 'Abasa: 21; Al-Baqarah: 181.

Research Areas: Chapters 105–110.

Grief and Hope

Key Reading: Yusuf: 84, 86; Al-Baqarah: 155–157.

Research Areas: Chapter 111.

The Intermediate Realm and Perception After Death

Key Reading: Al-Mu'minun: 99–100; Ghafir: 46; Al 'Imran: 169–171; Ya-Sin: 26–27.

Research Areas: Chapters 112–121.

The Return, Resurrection, Trumpet Blowing, and Gathering

Key Reading: An-Naml: 83; Az-Zumar: 68; Ya-Sin: 78–81; Al-Qiyamah: 3–4; Ibrahim: 48.

Research Topics: Chapters 122–126.

Work, Testimony, Reckoning, and the Balance

Key Reading: Al-Isra: 13–14; Al-Kahf: 49; Ya-Sin: 65; Fussilat: 20–21; Al-Anbiya: 47; Al-A'raf: 8–9.

Research Topics: Chapters 127–128.

Intercession, the Bridge, and Mercy

Key Reading: Ta-Ha: 109; Al-Anbiya: 28; An-Nisa: 48; Maryam: 71–72; Az-Zumar: 53–54.

Research Topics: Chapters 129–130.

Paradise, Hell, and Eternity

Key Reading: Al-Hijr: 45–48; At-Tawbah: 72; An-Nisa: 56; Fatir: 36; Hud: 108; Ad-Dukhan: 56–57; Qaf: 35.

Research Areas: Chapters 131–133.

Three Precautions for Thematic Collection

A verse of promise should not be taken out of its context, nor a verse of threat out of the context of repentance and mercy. Mentioning an organ in a moral discourse should not be equated with explaining its medical anatomy. Grouping verses on a single topic should not replace examining their wording, contexts, and interpretations.

Appendix Two: Record of Narrations, Their Sources, and Limits of Investigation

This is a record of the hadith references used in the chapters, retaining the description of the source and the limits of reliance upon it. A reference may include more than one hadith, and a hadith may be repeated in more than one chapter; therefore, the number of cards in the record does not represent the number of unique hadiths. Some cards refer to a hadith explanation or a transmitting source, and this has been indicated instead of being described as an original source providing an isnad.

Key to Reading the Rulings

“Sahih,” “Hasan,” “Muwaththaq,” “Da’if,” and “Majhul” are descriptions attributed to the author of the ruling, and according to his terminology, to a specific chain of transmission. They do not become a ruling on all chains of transmission of the text or the entire book. “Not independently verified” describes the limitations of this work, and is not a ruling that the hadith is fabricated or invalid. “Mursal” or “Marfu’” necessitates examining the continuity of the chain of transmission, along with reviewing the author’s use of the terminology.

When transmitting via the Thaqalayn digital library or a digital database, we state the intermediary. When a comparison with “Mir’at al-‘Uqul” is possible, the direct text is used. Volume and page numbers may differ in the digital transmitter field; therefore, the chapter title and hadith are presented along with the location of the verified ruling. Rulings were not transmitted simply because the news was widely circulated in sermons.

Editorial Notes

The reference to Chapter 4 was corrected to "Mir'at al-'Uqul" 14/230, not 4/230: The second hadith in the chapter on the Paradise of this World is described as unknown. The first hadith in the chapter has a different ruling. This comparison does not change the limits of reliance established by the chapter.

Source used for this comparison: al-Majlisi, Mir’at al-‘Uqul, vol. 14, p. 230, the second hadith in the chapter on the Paradise of this World; see also the neighbouring chapters on souls and children in the same volume.

In the hadith on self-examination before the reckoning, found in Chapter 128, the place where al-Majlisi ruled it "weak" is 25/343, not the different number that might appear in the transmission. In the hadith on the Prophet's weeping for Ibrahim in Chapter 111, the wording transmitted from al-Majlisi is "weak according to the most well-known opinion"; it was not replaced with “weak according to the well-known opinion.”

Authenticating a chain of transmission alone does not resolve all issues of meaning or contradiction. Examples of differentiation include: the hadith on Adam's Paradise is not used to establish a geographical location; the hadiths on the intermediate realm (Barzakh) do not provide a medical diagnosis of death. The reports of intention do not make the involuntary thought an intentional sin. See the explanation in its chapter.

Source cards arranged by chapter

Chapter 1: Who Is the Human Being?

[2] Muhammad ibn Ya'qub al-Kulayni, Al-Kafi, vol. 1, Book of Intellect and Ignorance, Hadith 3, according to the numbering of the digital version in Al-Thaqalayn. In the chain of transmission: "From some of our companions, who traced it back to Abu 'Abd Allah." The reference establishes the location of the narration but does not grant the chain of transmission a connection that does not exist there.

[3] Nahj al-Balaghah, compiled by al-Sharif al-Radi, Letter 53, The Covenant of Malik al-Ashtar; the Arabic text published with translation on the Islam website. No independent investigation of the chains of transmission of the covenant has been completed in this chapter.

[4] Ibn Shu'bah al-Harrani, Tuhaf al-Uqul, Treatise on Rights, the right of the self, p. 256 in the available digital edition in the Al-Muntaqim Library. No grading of the treatise's chain of transmission is reported here; comparison of its transmission routes and wording remains a task for further investigation.

Chapter 2: Why Was the Human Being Created?

[2] Shaykh al-Saduq, Ilal al-Shara'i', vol. 1, chapter 9: The Reason for the Creation of Mankind and the Differences in Their Conditions, hadiths 1 and 2, p. 9 in the version displayed in the Ahl al-Bayt Digital Library. Al-Saduq's commentary is separated from the text of the first hadith. The two texts were compared, but the ruling based on their chains of transmission was not completed.

[3] Al-Kulayni, Al-Kafi, vol. 2, Book of Faith and Disbelief, Chapter on Worship, hadith 5. Al-Majlisi's ruling, "good like authentic," and its explanation in Mir'at al-'Uqul, vol. 8, p. 86, were compared. The ruling is attributed to him, but there is no claim of consensus or independent biographical investigation.

Chapter 3: The Original Matter of Creation

[2] Nahj al-Balaghah, compiled by al-Sharif al-Radi, First Sermon, section on the description of the creation of Adam, peace be upon him; the text displayed in the Rafid Library with commentary. The text of the sermon was used, not the scholarly or theological annotations of the commentator, and no independent investigation of its chains of transmission was conducted.

[3] Al-Kulayni, Al-Kafi, vol. 1, Book of Tawhid, Chapter on the Spirit, Hadith 1. The text and al-Majlisi's ruling of "authentic" were compared in Mir'at al-'Uqul, vol. 2, p. 82. The ruling pertains to this hadith and does not apply to the rest of the hadiths in the chapter.

Chapter 4: The Creation of Adam, Peace Be upon Him

[2] Al-Kulayni, Al-Kafi, vol. 3, Book of Funerals, Chapter on the Paradise of This World, Hadith 2, on the authority of al-Husayn ibn Maysar. The text and al-Majlisi's ruling of "unknown" are compared in Mir'at al-'Uqul, vol. 14, p. 230; this is not the first hadith of the chapter.

Chapter 5: The Creation of Eve and the Beginning of the Human Family

[2] Sheikh Al-Saduq, Ilal Al-Shara'i', Vol. 1, Chapter 17 “The Reason for How Procreation Began,” Hadith 1, pp. 17–18. The hadith was included to clarify the existence of a narration denying creation from a rib, and no authentication of its chain of transmission or generalization of all its details was adopted.

Chapter 6: Adam's Descendants and the Spread of Humanity

[2] Al-Saduq, Ilal al-Shara'i, vol. 1, chapter 17, hadiths 1 and 2, pp. 17-20. The second hadith's chain begins on p. 18, and the account of the two wives concludes on p. 20. Its chain includes an unidentified intermediary, expressed as 'from someone who heard Zurarah'. A comprehensive assessment weighing the chains of reports about the beginning of human reproduction has not been completed here.

[3] Al-Kulayni, Al-Kafi, vol. 2, Book of Faith and Disbelief, Chapter on Tribalism, Hadith 7. Al-Majlisi's ruling on the narration in Al-Thaqalayn: "Weak." The volume number displayed in the "Mirror of Intellects" section was not used because it appeared on the page in an inconsistent manner.

Chapter 7: The Covenant, Fitrah and the Realm of the Primordial Covenant

[1] Al-Kulayni, Al-Kafi, vol. 2, Book of Faith and Disbelief, Chapter on the Creation's Innate Inclination towards Monotheism, Hadiths 2, 3, and 4. Al-Majlisi's rulings were compared in Mir'at al-'Uqul: Hadith 2 is "Sahih" (7/56), Hadith 3 is "Sahih," and Hadith 4 is "Hasan" (7/57). These are his rulings based on specific chains of transmission; they should not be generalized to every narration on the subject.

[2] Ahmad ibn Muhammad ibn Khalid al-Barqi, al-Mahasin, vol. 1, p. 241, the hadith of Zurarah concerning the establishment of knowledge and the forgetting of the situation, no. 225; edited by Sayyid Jalal al-Din al-Husayni al-Armawi, Dar al-Kutub al-Islamiyyah, Tehran. The number 225 is repeated for another hadith in the corresponding electronic text; therefore, this hadith is distinguished by its narrator and its beginning. This is a comparison of the location and text, not an independent correction of the chain of transmission.

[5] Al-Saduq, Al-Tawhid, Chapter 53, “God Almighty created humankind upon the principle of monotheism,” Hadith 7, narrated by Abd al-Rahman ibn Kathir from Imam al-Sadiq (peace be upon him). This confirms the source and content, but does not independently verify the chain of transmission.

[6] Nahj al-Balaghah, First Sermon, Section on the Sending of the Prophets and the Covenant of Innate Nature. The text of the sermon is used without the publisher's commentary.

Chapter 8: Human Origins in Modern Science

[10] Al-Saduq, Al-Tawhid, p. 277, hadith 2, from Jabir ibn Yazid. The biographical entry for Amr ibn

Shimr, a narrator in its chain, was checked in Rijal al-Najashi, p. 287, entry 765, where he is described as 'very weak'. This does not constitute an exhaustive study of all supporting reports or a judgement that the report's text was fabricated.

Chapter 16: The Male Reproductive System

[7] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul 'an Aal al-Rasul, edited by Ali Akbar al-Ghaffari, p. 258, Risalat al-Huquq, the right of the private parts. A specific passage was quoted; no judgment was made affirming the soundness of its chain of transmission.

Chapter 22: Delayed Conception and Assisted Reproduction

[6] Al-Sahifa al-Sajjadiyya al-Kamila, his supplication (peace be upon him) for his children, p. 135 in the referenced edition; the phrase about raising, disciplining, and treating them kindly. The passage's location was established; an independent study of all chains of transmission of the Sahifa was not undertaken here.

Chapter 30: Mother and Fetus

[9] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, Risalat al-Huquq, The Rights of Kinship: The Mother's Right, p. 263, edited by Ali Akbar al-Ghaffari. The quotation is taken from the text without claiming to verify its attribution.

Chapter 34: The Breathing of the Spirit in the Narrations

[1] Al-Kulayni, Al-Kafi, vol. 1, Book of Tawhid, Chapter on the Spirit, Hadith 1; the text of Imam al-Sadiq's (peace be upon him) response, along with al-Majlisi's ruling in Mir'at al-'Uqul 2/82.

[2] Al-Kulayni, Al-Kafi, vol. 6, Book of 'Aqiqah, Chapter on the Beginning of Human Creation and its Development in the Mother's Womb; especially Hadiths 1-3 and 7. We consulted the Arabic texts and al-Majlisi's rulings presented, not just the translations.

[3] Al-Kulayni, al-Kafi, vol. 6, Book of Aqiqah, chapter on the beginning of human creation and development in the mother's womb, hadith 4, the long report of Zurarah; the wording concerning the breathing of the spirit of life and continuance. Al-Majlisi grades it sahih in Mir'at al-Uqul 21:23. A sound chain does not settle every question about interpreting the text.

[4] Al-Majlisi, Bihar al-Anwar, vol. 57, p. 365, Hadith 59, quoting Qurb al-Isnad; al-Bazanti’s report and its division into thirty-day periods. Documentation here is limited to the quotation in Bihar al-Anwar; no independent investigation of the transmission of Qurb al-Isnad or collation of its manuscripts was undertaken.

Chapter 37: Bones, Joints and Cartilage

[8] Dua Kumayl, Arabic text published in the Thaqalayn Library; a devotional example from the well-known supplication, not an authentication of its chain of transmission.

Chapter 38: Muscles, Tendons and Ligaments

[7] Dua Kumayl, Arabic text in the Thaqalayn Library; the phrase relating to strengthening the limbs and resolve. The text was not adopted as a source for a medical mechanism.

Chapter 43: The Mouth, Teeth, Tongue and Salivary Glands

[8] Al-Kulayni, Al-Kafi, Vol. 6, Book of Dress, Adornment, and Noble Conduct, Chapter on the Miswak, Hadith 1. Al-Majlisi’s grading of “hasan or muwaththaq” was checked against Mir’at al-‘Uqul, Vol. 22, p. 394. The volume number in this comparison is 22, not the abbreviated number 2 displayed in the Thaqalayn reference.

Chapter 44: The Esophagus, Stomach and Intestines

[2] Al-Kulayni, Al-Kafi, vol. 1, Book of the Excellence of Knowledge, Chapter on Rare Narrations, Hadith 8; Al-Majlisi's ruling: mursal (a type of hadith with a missing link in the chain of narrators), Mir'at al-'Uqul 1/167, as quoted by the source.

Chapter 48: The Brain, Spinal Cord and Nerves

[8] Al-Kulayni, Al-Kafi, vol. 1, Book of Intellect and Ignorance, Hadith 3. The chain includes “from one of our companions, who traced it back [to the Imam without naming the intervening transmitters]”; this is a reference to the text, not an independent authentication of the chain of transmission.

Chapter 49: The Eye and Vision

[9] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, edited by Ali Akbar al-Ghaffari, p. 257, Treatise on Rights, Right of Sight. The reference in this version is to the wording, not to an independent judgment on its chain of transmission.

Chapter 50: The Ear, Hearing and Balance

[9] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, edited by Ali Akbar al-Ghaffari, p. 257, Treatise on Rights, The Right of Hearing. The text was not given an unverified grading of its chain of transmission.

Chapter 52: Voice and Speech

[9] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, edited by Ali Akbar al-Ghaffari, p. 256, beginning of the section on the right of the tongue; the rest of the paragraph is on p. 257. Textual reference while maintaining the limits of the assessment of the chains of transmission.

Chapter 55: Hunger, Thirst and Satiety

[6] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, edited by Ali Akbar al-Ghaffari, p. 258, Treatise on Rights, The Right of the Stomach. The chain of transmission for the treatise has not been fully investigated, and no nutritional doses can be derived from it.

Chapter 56: Sleep, Wakefulness and the Biological Clock

[2] NHLBI, Your Sleep/Wake Cycle: Sleep pressure, adenosine, caffeine, and the interaction of the need for sleep with its timing.

[10] Al-Sahifa As-Sajjadiyya Al-Kamilah, the consulted edition edited by Haj Abdul Rahim Afshari Zanjani, p. 47, Morning and Evening Supplication. The supplication is identified by name because its numbering differs between some collections; the chains of transmission (isnad) have not been fully investigated here.

Chapter 63: Breastfeeding and Early Nutrition

[7] Al-Kulayni, Al-Kafi, vol. 6, p. 40, Book of Aqiqah, Chapter on Breastfeeding, Hadith 1; for the text and chain of narration.

[8] Al-Majlisi, Mir'at al-'Uqul, vol. 21, p. 71; for his ruling on the first and second hadiths from the chapter on breastfeeding.

[9] Thaqalayn, Al-Kafi 6/1/28/1; to convey the difference of opinion between Al-Majlisi and Al-Bahbudi, not as an independent check against Al-Bahbudi’s original work.

Chapter 64: Early Childhood

[8] Al-Majlisi, Mir'at al-'Uqul, Vol. 21, p. 86, Chapter on Kindness to Children; includes the text of the hadiths of al-Kafi and al-Majlisi's commentary, and the ruling on the third hadith is "majhul" (unknown).

Chapter 65: Childhood and Learning

[7] Al-Majlisi, Mir'at al-'Uqul, vol. 21, p. 82, chapter on disciplining children; the text of the narrations in al-Kafi and the ruling on the third hadith is "muwaththaq" (reliable) and on the first is "mursal" (a report with an omitted link in its chain).

Chapter 67: Youth and Maturity

[6] Nahj al-Balaghah, Letter 31, the text of the annotated version by Muhammad Abduh, vol. 3, p. 51; the text was used, not the marginal commentary, and no independent verification of the chain of transmission was conducted.

[7] Nahj al-Balaghah, Letter 31, the Arabic text on Thaqalayn; for the section on justice between oneself and others, while maintaining the limit of verification shown above.

Chapter 68: Motherhood and Fatherhood

[7] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, p. 263, Treatise on Rights, The Rights of the Child; while maintaining the limits of the investigation outlined in the text.

Chapter 70: Ageing and Its Diverse Courses

[8] Al-Kafi, vol. 2, Book of Social Relations, Chapter on the Obligation to Respect Elderly Muslims, Hadith 6; cited with the statement that the chain of transmission was not verified here.

Chapter 71: Age, the Appointed Term, and Weakness and Strength in the Texts

[5] Al-Kafi, Vol. 1, Book of Tawhid, Chapter on Bada', Hadith 4; the text of the hadith and the two gradings reported in the Thaqalayn database.

[7] Al-Saduq, Kamal ad-Din wa Tamam an-Ni'mah, Chapter 16; distinguishing between the author's explanation and the hadith of the chapter, and citing his explanation to negate ignorance and regret.

[8] Al-Kafi, Vol. 2, Book of Faith and Disbelief, Chapter on Maintaining Kinship Ties, Hadith 14; with an explanation of the ruling transmitted on this chain of narration.

[10] The Complete Sahifa al-Sajjadiyya, Supplication Twenty, p. 101 in the displayed edition; partial quotation with no definitive chain of transmission here.

Chapter 72: Self, Spirit, Intellect and Heart

[9] Al-Kafi, Vol. 1, Book of Intellect and Ignorance, Hadith 3; partial transmission with note of ambiguity and omission in the chain of transmission.

Chapter 74: Memory, Learning and Forgetting

[8] Al-Majlisi, Mir'at al-'Uqul, vol. 1, p. 180; Includes the texts of the hadiths of al-Kafi 9–11 from the aforementioned chapter and their distinct rulings.

Chapter 75: Emotions, Motivation and Personality

[7] Al-Majlisi, Mir'at al-'Uqul, vol. 8, p. 197, chapter on suppressing anger, hadith 1; the beginning of the text and its ruling, and its continuation on the following page.

Chapter 76: Dreams and Visions

[5] Al-Kafi, Al-Rawda, Hadith 61; Mir'at al-'Uqul, vol. 25, p. 205: The text and the grading "hasan" (good) and a discussion of the word "warning." We consulted the same commentary; the volume number in some electronic indexes is inaccurate.

[6] Al-Bahrani, Al-Hada'iq al-Nadhira, vol. 7, p. 436, quoting Al-Kafi, Book of Prayer, Chapter on Rare Narrations, the narration of 'Umar ibn Udhayna; the grading of the chain is quoted according to Al-Bahrani's wording, without claiming consensus on it.

Chapter 77: Will, Choice and Responsibility

[6] Al-Kafi, Kitab At-Tawhid, Bab Al-Jabr wa Al-Qadar wa Al-Amr Bayn Al-Amrayn, Hadiths 13 and 14; Mir'at Al-'Uqul, vol. 2, p. 195: The first is mursal (a hadith with a missing link in the chain of narrators) and the second is sahih (authentic) according to Al-Majlisi. The text of each hadith and its reported ruling were compared with its separate page in the Thaqalayn Library; and the textual indexing of Mir'at Al-'Uqul supports the attribution of the two rulings to Al-Majlisi. This is a comparison of the reported texts, not an independent biographical investigation.

Chapter 78: The Relationship between Self and Body

[8] The Holy Quran, Ash-Shu'ara: 80; and the supplication alluding to the supplication of Kumayl according to the text referred to in Chapter 38, while retaining the qualification that its complete chain of transmission has not been independently verified.

Chapter 79: Spiritual Life and Purification of the Self

[4] Al-Kafi, Book of Faith and Disbelief, Chapter on Avoiding Prohibited Matters, Hadith 4; the text is in the Dar Al-Hadith edition, pp. 207–208 of the presented volume. The ruling is “hasan ka-l-sahih” (good, akin to sound) in Mir’at Al-‘Uqul, vol. 8, p. 342, according to the textual index of the commentary.

[8] Al-Kafi, Chapter on Accountability for Deeds, Hadith 2, 2/453 in the common numbering; the Arabic text, with the ruling of Al-Majlisi quoted in the index. We did not adopt the inaccurate identification of the Imam in the English translation of the page.

[10] Al-Sahifa Al-Sajjadiyya, The Twentieth Supplication on Noble Character, p. 100 in the digital edition shown. The quotation is from the supplication, not from a modern commentary on it.

Chapter 85: Injury, Disability and Rehabilitation

[7] Nahj al-Balaghah, Letter 53, The Covenant of Malik al-Ashtar, the section on caring for the needy; the Arabic text was compared with its location in the digital version and with the commentary of Muhammad Abduh, Vol. 3, pp. 100–101. The chains of transmission for the covenant were not assessed here.

The collated version: Nahj al-Balaghah, commentary by Muhammad Abduh, Vol. 3, p. 100, which includes the beginning of the section and an explanation of the historical term al-zamna.

Chapter 88: Illness in the Qur'an and Narrations of the Ahl al-Bayt

[1] Al-Kulayni, Al-Kafi, Book of Funerals, Chapter on the Limits of Complaint, Hadith 1; Arabic

text.

Ruling on Hadith [1]: Al-Majlisi, Mir'at al-'Uqul, Vol. 13, p. 268; "The first hadith: Hasan" (good), with the text of the narration compared in the same place.

[2] Al-Kafi, Vol. 8, p. 194, Hadith 230. The text and Al-Majlisi's ruling ("Hasan" or "Muwaththaq") were compared with Mir'at al-'Uqul, Vol. 26, p. 94. The reference on Thaqalayn lists volume 16, but the corresponding volume is 26. The citation does not include a recommendation for a historical therapeutic procedure.

[3] Al-Kafi, Book of Funerals, Chapter on the Reward of Visiting the Sick, Hadith 2; Arabic text.

Ruling on Hadith [3]: Mir'at al-'Uqul, vol. 13, p. 274; “The second hadith: muwaththaq (reliable),” from the available original text.

[4] Al-Kafi, Book of Funerals, Chapter on the Duration of Visits, Hadith 2. Al-Majlisi's ruling of “good” was compared in Mir'at al-'Uqul, vol. 13, p. 270, and the rest of the text is on p. 271. We did not convert the analogy into a fixed medical duration.

Chapter 89: Treatments Attributed to the Transmitted Medical Tradition

[2] Shaykh al-Mufid, Tasheeh I'tiqadat al-Imamiyya, Chapter on Medicine; the beginning of the discussion was compared to p. 144, and the section on differing circumstances and generalizations was completed from its transmission in Bihar al-Anwar, vol. 59, p. 75 in the available digital edition. We do not present his statement as a hadith with a chain of transmission.

Chapter 90: Human Dignity and the Inviolability of the Body

[1] Nahj al-Balaghah, Letter 53, Covenant of Malik al-Ashtar; the passage beginning “And fill your heart with mercy for the people,” in the numerical division of Thaqalayn No. 284. The text is quoted without an independent assessment of the covenant's authenticity.

Chapter 91: Nutrition, Hygiene, Movement and Prevention

[4] Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, p. 256, Treatise on Rights, The Right of the Self. Textual reference, not an independent authentication of all chains through which the treatise was transmitted.

Chapter 92: Marital Life and Reproductive Health

[1] Al-Kulayni, Al-Kafi, vol. 5, p. 320, chapter on the love of women, hadith 1; text of the narration.

Grading of hadith [1]: Al-Majlisi, Mir’at al-‘Uqul, vol. 20, p. 5: “Hasan (good) or muwaththaq (reliable).” Checked against the original; the incomplete volume reference displayed on Thaqalayn was not used.

Chapter 95: Caring for the Sick, Older People and People with Disabilities

[5] Nahj al-Balaghah, The Covenant of Malik al-Ashtar, Letter 53, Commentary by Muhammad Abduh, Vol. 3, pp. 100–101; the two quotations are from p. 101, without assessing the chain of transmission here.

Chapter 97: Palliative Care

[6] The Complete Sahifa al-Sajjadiyya, Supplication 15, p. 80 in the referenced edition; Religious citation without a chain of transmission ruling here.

Chapter 102: The Taking of the Spirit, the Angel of Death and His Helpers

[2] Al-Saduq, Man La Yahduruhu al-Faqih, vol. 1, pp. 136–137, hadith 368; it is presented as a question put to the Imam without a continuous chain of transmission in the relevant section, and its authenticity has not been established here.

[3] Al-Saduq, Man La Yahduruhu al-Faqih, vol. 1, p. 134, hadith 354; the hadith about the proximity of the East and the West, the bowl, and the dirham, without authenticating its chain of transmission here.

Chapter 103: Accounts of What the Dying Person Witnesses

[1] Al-Kulayni, Al-Kafi, Book of Funerals, Chapter: That a believer is not forced to have his soul taken, Hadith 2, as reproduced by Al-Majlisi in Mir'at al-'Uqul, Vol. 13, pp. 285–286. The chain of narrators according to Al-Majlisi: Weak according to the majority opinion; The possibilities for how this is represented are derived from the explanation, not from the text of the hadith.

[2] Al-Kafi, Book of Funerals, Chapter on What the Believer and the Disbeliever Witness, Hadith 3; Mir'at al-'Uqul, Vol. 13, pp. 289–290. Al-Majlisi’s grading: Muwaththaq (reliable); the text of the hadith of Sa'id ibn Yasar is completed on the following page.

[3] Al-Kafi, the preceding chapter on the believer not being forced to have his spirit taken, Hadith 1; Mir'at al-'Uqul, Vol. 13, pp. 284–285. Al-Majlisi’s grading: Majhul (unknown).

[4] Mir'at al-'Uqul, Vol. 13, pp. 286 and 290, explanation of hadiths 1 and 4 from the chapter on witnessing; both are considered “weak according to the prevalent assessment” in al-Majlisi’s grading. This presentation does not include a comprehensive investigation of all the chains of transmission for this chapter.

Chapter 109: The Inviolability, Rights and Grave of the Deceased

[1] Al-Kafi, vol. 7, Narrations on Assaulting the Deceased, hadith 3; Mir'at al-'Uqul, vol. 24, p. 164. Al-Majlisi's ruling: Weak according to the majority; and in the same place, hadith 2 is graded ka-l-hasan (like a hasan report), and hadith 4 majhul (unknown).

Chapter 110: Accounts of the Preservation of Some Bodies

[2] Al-Saduq, Man La Yahduruhu al-Faqih, vol. 1, p. 191, hadiths 580–582, corrected by Ali Akbar al-Ghaffari. No independent authentication of hadiths 581 and 582 is undertaken in this chapter.

Chapter 111: Loss, Grief and Mourning

[1] Al-Kulayni, Al-Kafi, vol. 3, Book of Funerals, Chapter of Rare Narrations, hadith 45, pp. 262–263; several of our companions, on the authority of Sahl ibn Ziyad, on the authority of Ja'far ibn Muhammad, on the authority of Ibn al-Qaddah, on the authority of Abu Abdullah (peace be upon him). Al-Majlisi's ruling in Mir'at al-'Uqul, vol. 14, p. 267: Weak according to the most widely accepted view; and this is a ruling based on the aforementioned chain of transmission. Beginning of the text.

Continuation of Reference [1]: Al-Kafi, vol. 3, p. 263, continuation of the narration of the Prophet (peace and blessings be upon him and his family) weeping for Ibrahim.

Chapter 112: What Is Barzakh?

[2] Al-Kulayni, Al-Kafi, vol. 3, p. 242, Chapter on What the Grave Speaks, Hadith 3; Definition of the Barzakh in the context of the hadith.

[3] Al-Majlisi, Mir'at al-'Uqul, vol. 14, p. 218: The third hadith is graded majhul (unknown). Its

ruling is not applied to all hadiths about the Barzakh.

Chapter 113: The Spirit after Separation from the Body

[3] Al-Kafi, vol. 3, another chapter on the souls of believers, hadith 1, p. 244; and the ruling of Mir'at al-'Uqul, vol. 14, p. 221: Hasan (good). Original text.

[4] Al-Kulayni, Al-Kafi, vol. 3, Another Chapter on the Souls of Believers, Hadith 6-7, p. 245; the ruling of Al-Majlisi in Mir'at al-'Uqul, vol. 14, pp. 225-226: The sixth is weak and the seventh is reliable.

[5] Al-Majlisi, Mir'at al-'Uqul, vol. 14, pp. 221–226; gradings of the chains of transmission and an explanation of the imaginal body and approximation through sleep, with the explanation separated from the text.

Chapter 114: Questioning and Trial in the Grave

[1] Al-Kafi, vol. 3, p. 238, Chapter on Questioning in the Grave: Who is Questioned and Who is Not, Hadith 10; Mir'at al-'Uqul, vol. 14, pp. 210–211, considered weak by the majority. The correct verse number is Ibrahim: 27, although it appears as 26 in some printed footnotes.

[2] Al-Kulayni, Al-Kafi, vol. 3, chapter on questioning in the grave, who is questioned and who is not, hadith 4, p. 236; Mir'at al-'Uqul, vol. 14, p. 207: Authentic.

[3] Al-Majlisi, Mir’at al-‘Uqul, vol. 14, pp. 206–210; hadith 1: hasan (good); hadith 3: muwaththaq (reliable); hadith 4: sahih (sound); hadith 7: majhul (unknown); explanation of who is subject to questioning.

[5] Mir'at al-'Uqul, vol. 14, pp. 211–212; Hadith 11 is mursal (a hadith with a missing link in the chain of narrators), and Hadith 12 is da'if (weak). These rulings should not be generalized to all narrations on this topic.

[6] Mir'at al-'Uqul, vol. 14, p. 214; Hadith 15 is marfu' (a report with omitted links in its chain in this context), and it contains a question about the five matters mentioned in the text; distinguishing the text of the hadith from the commentator's interpretations.

Chapter 115: The Pressure of the Grave and the Bliss and Torment of Barzakh

[1] Al-Kulayni, “Al-Kafi”, vol. 3, p. 236, Chapter on Questioning in the Grave: Who is Questioned and Who is Not, Hadith 5; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, p. 207: Authentic, with its explanation of the relationship between the question and pressure.

[2] Al-Saduq, “Al-Amali,” Session 80, Hadith 2, the chain of transmission of Ibn al-Walid from al-Saffar from Ibrahim ibn Hashim from al-Nawfali from al-Sakuni. This chapter does not independently verify its chain of transmission.

[3] Al-Kulayni, “Al-Kafi,” vol. 3, p. 236 and onwards, the same chapter, Hadith 6; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, p. 207: Weak according to the well-known opinion.

[4] Al-Kulayni, “Al-Kafi,” vol. 3, pp. 244–245, another chapter on the souls of the believers, Hadiths 4 and 7; “Mir’at al-‘Uqul,” vol. 14, pp. 225–226: Hasan (good) and muwaththaq (reliable), respectively.

[5] Al-Kulayni, “Al-Kafi,” vol. 3, p. 245, chapter on the souls of the disbelievers, hadith 1; “Mir’at al-‘Uqul,” vol. 14, p. 226: Hasan (good).

Chapter 116: The Barzakh or Imaginal Body

[1] Al-Kulayni, “Al-Kafi,” vol. 3, p. 244, another chapter on the souls of believers, hadith 1; Al-

Majlisi, “Mir’at al-‘Uqul,” vol. 14, p. 221: Hasan (good).

[2] Al-Kulayni, “Al-Kafi,” vol. 3, p. 245, the same chapter, hadith 7; “Mir’at al-‘Uqul,” vol. 14, p. 226: Muwaththaq (reliable).

[3] The same source, hadith 6; “Mir’at al-‘Uqul,” vol. 14, p. 225: Weak. The ruling is specific to the aforementioned chain of transmission.

[5] Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, pp. 221–224, his explanation and transmission from Al-Mufid and Sheikh Baha’i on the imaginal form, reincarnation, and the imaginal world. The interpretation is attributed to its authors, not to the wording of the hadiths.

Chapter 117: The Meeting and Mutual Recognition of Spirits

[1] Al-Kulayni, “Al-Kafi,” vol. 3, pp. 246–247, Chapter on the Paradise of this World, Hadith 1; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, pp. 228–229: Authentic.

[2] Al-Kulayni, Al-Kafi, vol. 3, p. 243, chapter on the spirits of believers, hadiths 1–2. The first is Habba al-‘Urani’s report; the second chain includes rafa‘ahu, indicating omitted links. Al-Majlisi’s gradings were checked in Mir’at al-‘Uqul, vol. 14: the first is majhul (unknown), p. 218; the second “weak according to the prevalent assessment,” p. 220. These are his judgments on the two chains, not an independent investigation of all supporting reports.

[3] Al-Kulayni, Al-Kafi, vol. 3, p. 244, another chapter on the souls of believers, hadiths 3 and 5; Mir'at al-'Uqul, vol. 14, pp. 224–225: weak and unknown, respectively.

[4] The same source, hadith 4; Mir'at al-'Uqul, vol. 14, pp. 224–225: hasan (good), with interpretations of the joining mentioned in the preceding discussion.

Chapter 118: People's Conditions in Barzakh

[1] Al-Kulayni, “Al-Kafi,” vol. 3, pp. 246–247, chapter on the Paradise of this World, hadith 1; “Mir’at al-‘Uqul,” vol. 14, pp. 228–229: Authentic. The details concerning sinners, the vulnerable, and children are part of the same hadith.

[3] Al-Kulayni, “Al-Kafi,” vol. 3, p. 248, chapter on children, hadith 1; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 14, pp. 230–231: Hasan, with his presentation of differing opinions and his rejection of the unjust torture of those who are not legally responsible.

Chapter 119: The Relationship between the Dead and the Living

[1] Al-Kulayni, “Al-Kafi,” vol. 3, p. 228, chapter on visiting graves, hadith 1; “Mir’at al-‘Uqul,” vol. 14, pp. 191–192: the text and its continuation, graded hasan (good), with an explanation of loneliness.

[2] Al-Kulayni, “Al-Kafi,” Chapter on Visiting Graves, Hadiths 3–4; with Al-Majlisi’s explanation and rulings in “Mir’at al-‘Uqul” 14/193; “Mir’at al-‘Uqul,” vol. 14, p. 193: Hasan (good) for the third, and weak according to the well-known opinion for the fourth.

[3] “Al-Kafi,” vol. 3, p. 229, chapter on visiting graves, hadith 5; “Mir’at al-‘Uqul,” vol. 14, p. 193: Hasan (good).

[4] “Al-Kafi,” vol. 3, pp. 230–231, chapter on the deceased visiting his family, hadiths 1–5; “Mir’at al-‘Uqul,” vol. 14, pp. 195–197, which includes a detailed explanation of the degrees mentioned in the text.

[6] Al-Kulayni, “Al-Kafi,” Kitab al-Hujjah, chapter on the presentation of deeds to the Prophet and the Imams, hadith 6; Al-Majlisi, “Mir’at al-‘Uqul,” vol. 3, p. 6: Sahih (sound).

Chapter 120: What Benefits the Deceased after Death?

[1] Al-Saduq, “Man La Yahduruhu al-Faqih,” Chapter on Condolences and Grief at the Time of Calamity, Visiting Graves, Lamentation, and Mourning, Hadith beginning “There reach the deceased in his grave…”, No. 56 in the electronic division of the chapter; it appears as a statement without a detailed chain of transmission in the relevant section.

[3] Al-Saduq, al-Khisal, chapter on six beneficial qualities for the believer after his death; and al-Amali, session 32, hadith 2. The chain of transmission in both is: al-Saduq’s father, on the authority of Sa‘d, on the authority of Muhammad ibn ‘Isa, on the authority of Muhammad ibn Shu‘ayb al-Sayrafi, on the authority of al-Haytham Abu Kahmas, on the authority of the Imam; therefore, they are not considered two independent chains of transmission, and the chain of transmission here has not been authenticated.

Chapter 121: Time, Perception and Awaiting Resurrection

[2] The Holy Quran, Ghafir: 46; Al-Kulayni, "Al-Kafi," vol. 3, pp. 246–247, chapter on the Paradise of this World, hadith 1, authenticated in "Mir'at al-'Uqul," vol. 14, p. 228. The reference here is to temporal terms without specifying their nature.

[3] Al-Kafi, vol. 3, pp. 244–245, another chapter on the souls of believers, hadith 4, and the chapter on the souls of disbelievers, hadith 1; Al-Majlisi judged both chains of transmission to be hasan (good) in Mir'at al-'Uqul, vol. 14, pp. 225–226.

Chapter 123: The End of the World and the Blowing of the Trumpet

[2] “As-Sahifa As-Sajjadiyya,” the third supplication, in the prayer for the bearers of the Throne and every angel close to God, the section on Israfil, the one who carries the trumpet. No independent investigation of the chains of transmission of the Sahifa has been conducted here.

Chapter 125: The Human Being at the Resurrection

[3] Ahmad ibn Ali al-Tabarsi, “Al-Ihtijaj,” vol. 2, p. 105 in the electronic edition consulted, the narration of Hafs ibn Ghiyath concerning the changing of skins and the example of the brick. It is mentioned without a complete chain of transmission to Hafs in the same place.

[4] Al-Bahrani, “Al-Burhan fi Tafsir al-Qur’an,” vol. 2, p. 99, hadiths 2456 and 2457, he quoted it from “Amali al-Tusi” and “Al-Ihtijaj”; the chapter did not independently verify the two chains of transmission.

Chapter 126: The Gathering and the Place of Gathering

[2] Al-Kulayni, “Al-Kafi,” Book of Foods, Chapter: The Son of Adam is Hollow and Must Have Food, Hadith 1, Narration of Zurarah from Al-Baqir (peace be upon him).

Al-Majlisi, “Mir’at al-‘Uqul,” Vol. 22, p. 96: The ruling on the first hadith in the chapter is that it is good (hasan), not the ruling on the hadiths preceding it on the page.

[3] “Nahj al-Balaghah,” Sermon 101 according to the numbering on the Nahj al-Balaghah website, the section on the gathering of the first and the last. The chapter did not provide an independent verification of the chain of transmission of the sermon.

Chapter 127: The Record of Deeds, Witnesses and the Testimony of the Limbs

[1] Al-Kulayni, Al-Kafi, Book of Proof, Chapter on the Imams, peace be upon them, being God Almighty's witnesses over His creation, Hadith 1. Al-Majlisi’s grading of the report as “weak” was

checked in Mir'at al-'Uqul, vol. 2, p. 337; his ruling pertains to this chain of transmission.

Chapter 128: The Reckoning, the Scales and Divine Justice

[2] Al-Saduq, “Ma’ani al-Akhbar,” p. 31, chapter on the meaning of the scales by which the deeds of the servants are weighed, hadith 1, on the authority of Hisham ibn Salim; the chain of narration was not independently authenticated.

[3] Al-Kulayni, “Al-Kafi,” vol. 8, p. 143, hadith 108, the hadith on self-examination; the hadith of the fifty stations.

Al-Majlisi, “Mir’at al-‘Uqul,” vol. 25, p. 343: “Hadith 108: Weak.” The volume number 15 shown in the Thaqalayn reference does not match the volume consulted here, which is 25.

Chapter 129: Intercession, Mercy and Forgiveness

[3] Al-Kulayni, Al-Kafi, vol. 3, p. 270, hadith 15, on the authority of Abu Basir, on the authority of Abu al-Hasan al-Awwal, regarding the testament of al-Sadiq (peace be upon him) concerning prayer. Al-Majlisi’s grading was checked in Mir’at al-‘Uqul, vol. 15, p. 18: “Apparently sahih (sound).” Quoting the ruling verbatim does not imply a claim of consensus or the undertaking of an independent biographical investigation.

Chapter 130: Al-Sirat and the Human Being's Ultimate Fate

[2] Al-Saduq, "Ma'ani al-Akhbar", p. 32, Chapter on the Meaning of the Straight Path, Hadith 1, on the authority of Al-Mufaddal ibn Umar; the chain of narration was not independently authenticated.

Chapter 131: Paradise and the Life of Its People

[3] “Nahj al-Balaghah,” Sermon 165 according to the source, the section on the description of Paradise after the description of the peacock. The reference is to the text, not to an independent verification of its chain of transmission.

Chapter 132: Hell and the Conditions of Its People

[1] Al-Saduq, “Al-I'tiqadat,” p. 77; distinguishing eternal damnation from the release of sinners among the monotheists, without adopting every detailed report that follows.

[2] Al-Kulayni, “Al-Kafi,” Book of Faith and Disbelief, Chapter on Intention, Hadith 5, The Narration on the Reason for Immortality through Intention. The text of the chain of transmission was compared in Al-Thaqalayn, and the ruling of “weak” was compared with the digital text of “Mir’at al-‘Uqul,” vol. 8, p. 104, in the library of the School of Jurisprudence. This is a comparison with the ruling of Al-Majlisi; there is no independent ruling on the narrators in this book.

Chapter 133: The Hereafter and the Meaning of Eternity

[2] Tafsir al-Qummi, Surah Maryam, verse 39, the narration of Abu Wallad al-Hannat on the authority of Imam al-Sadiq (peace be upon him); the text and its chain of transmission were compared in the digital version on the Huda al-Qur’an website. See “Al-Safi” by al-Fayd al-Kashani in the same place for transmission and comparison. No independent authentication of the chain of transmission or verification of all parallel narrations has been undertaken here.

Appendix Three: The Timeline of Embryonic Development and Age Calculation

The usual gestational age is calculated from the first day of the last menstrual period, not from fertilization. The approximate difference is two weeks in the common model, and is not a rule that applies to every woman or to medically assisted pregnancies without reference to their date. The physician may rely on early imaging or fertilization data to determine age; see chapters 19–23 and 28.

The table is an approximate chronological index of the investigations, not a checklist or a diagnostic criterion for developmental delay. Writing a range of weeks does not mean that all systems begin and end at the same moment, nor does it specify the time of ensoulment. The scientific explanation is in chapters 23–29, and the textual research is in chapters 33–34.

Table 1: Two Stages in Calculation and One Developmental Path

Approximate Gestational Age	Approximate Time Since Fertilisation	Topic to Read	Chapter
Weeks 1–2	Pre-Fertilization in the Typical Model	Cycle, Ovulation, and Dating	19, 28
Weeks 3–4	Weeks 1–2	Fertilization, Cell Division, and Implantation	20, 23
Weeks 5–8	Weeks 3–6	Embryonic Layers and the Beginnings of Organs	26–28
Weeks 9–10	Weeks 7–8	Organization continues and the Embryo stage is nearing its end	27–28
Weeks 11–12	Weeks 9–10	Beginning of the Fetus stage and continued growth	28
Weeks 13–20	Weeks 11–18	Growth and the Development of Movement; No Single Time When Movement Is First Felt	28–29
Weeks 21–28	Weeks 19–26	Organ development with varying maturation	28–29, 32
Weeks 29–36	Weeks 27–34	Growth, Maturation and Preparation for Life Outside the Womb	28, 32, 62
Weeks 37–40 and around due date	Usually about two weeks less	End-of-pregnancy monitoring and delivery; The date is estimated.	28, 61

Table reference and limitations of use

This is a summary of the chapter map; there is no new description for each week. Sources for details: MedlinePlus Medical Encyclopedia, “Fetal development”; NHS and NHS 111 Wales week-by-week pregnancy guides; and NICHD pregnancy pages, as cited in Chapter 28. For organogenesis, sensation, pain, and twins, see Chapters 24–27 and 29–32 and their respective references.

A single movement or pulse does not imply organ completion, the attainment of consciousness, or the sensation of pain. Nor does it transfer the limits of survival in an institution or time to every newborn. Furthermore, it does not equate a medical week with a stage described in religious law or narrations without explaining the basis of the calculation.

Appendix IV: Simplified Textual Atlas of Body Systems

This is a textual atlas for guidance between chapters, not a pictorial atlas or a medical procedure manual. It links system names to their major organs and brief general functions. It does not separate the boundaries of vessels and nerves or anatomical differences, nor does it create barriers between systems.

Table 2: The System, its Main Organs, and its Area of Study

System or Group	Examples of Organs and Structures	Main Function	Chapter
Outer Cover	Skin, Hair, and Nails	Protection, Sensation, and Temperature Regulation	36
Support and Joints	Bones, Cartilage, and Joints	Support, Movement, and Protection	37
Movement	Muscles, Tendons, and Ligaments	Generating and Transmitting Force; Stabilising Joints	38, 57
Blood and Its Formation	Plasma, cells, and bone marrow	Transport, immunity, and hemostasis	39
Circulation	Heart, arteries, veins, and capillaries	Blood flow and exchange	40
Lymph and immunity	Vessels, nodes, spleen, and thymus	Fluid return and defense	41
Respiration	Airways, lungs, and diaphragm	Ventilation and gas exchange	42
Mouth	Teeth, tongue, and salivary glands	Chewing, swallowing, and the beginning of digestion	43
Digestive tract	Esophagus, stomach, and intestines	Transport, digestion, and absorption	44
Accessory digestive organs	Liver, gallbladder, and pancreas	Metabolism, bile, and enzymes	45
Urinary system	Kidneys, ureters, bladder, and urethra	Excretion and homeostasis	46, 53

System or Group	Examples of Organs and Structures	Main Function	Chapter
Endocrine glands	Pituitary, thyroid, adrenal glands, and pancreatic islets	Hormonal signaling and regulation	47
Nervous System	Brain, Spinal Cord, and Nerves	Signal Transmission and Integration	48, 72–78
Senses and Voice	Eye, Ear, Receptors and Larynx	Perception, Balance, and Communication	49–52
Reproduction	Testes and Ducts; Ovaries and Uterus	Reproduction and Reproductive Development	16–22
Supporting Pregnancy	Placenta, Umbilical Cord and Membranes	Exchange, Protection, and the Formative Environment	24–25

For detailed anatomical and functional information and specialized educational references, see chapters 35–52, particularly the OpenStax Anatomy and Physiology 2e and SEER Training Modules, with references to specialized health institutes for each organ system. The presence of an organ in more than one functional class, such as the pancreas or gonads, is intentional; the functions are overlapping, not separate boxes.

Appendix V: Growth and Transformation Tables Across Life

These are transition tables and key milestones, not standard height or weight curves, nor a table for determining whether a child is delayed. We did not use undocumented standard numbers or construct curves from memory. Accurate measurement requires an age-appropriate and contextual reference, a series of measurements, and professional evaluation; see the explanation in chapters 64–70.

Table 3: Childhood and Learning — What Do We Track?

Domain	Examples of What to Observe	What Cannot Be Inferred from a Single Sign	Chapter and Reference
Physical Development	Patterns of Growth Measurements and Nutrition	That Every Difference Indicates Disease or Inadequate Care	63–64; Sources of nutrition and growth mentioned therein
Movement	Motor Control, Posture and Mobility	One Fixed Deadline for Every Skill	64; CDC Milestones
Language and Hearing	Comprehension, Response, and Communication	Lack of speech alone is a complete diagnosis	64; NIDCD
Communication and Emotion	Response, Interaction, and Regulation	Moral judgment of the child	64–65; Harvard Developing Child
School Learning	Reading, Writing, and Attention	Laziness or Low Intelligence Based on One Isolated Difficulty	65; NICHD and NASEM
Alteration of Developmental Trajectory	Loss of a Skill or an Ongoing Concern	Relying Solely on Comparison with a Relative or Sibling	64–65; Seek Specialist Assessment When There Is Concern

Table 4: Life stages and transitions that do not necessarily indicate illness

Stage	Main Transition	Interpretive Caution	Chapters
Birth	Transition to breathing and feeding outside the womb	Direct assessment is not reduced to a single score	61–62
Breastfeeding	Nutrition, growth, and relationship to care	No blame on the family when appropriate alternatives are needed	63
Childhood	Learning, language, movement, and relationships	Different Developmental Paths Do Not Remove the Need to Address Concerns	64–65
Adolescence	Puberty and Psychosocial Change	Age Alone Does Not Determine All Aspects of Maturity	66
Youth and Maturity	Expanding Responsibilities and Experience	There Is No Single Peak for All Abilities	67
Motherhood and Fatherhood	Recovery, Care, and Family Roles	Caregiving Is a Shared Responsibility, Not the Mother’s Alone	68
Midlife	Varying Reproductive and Hormonal Shifts	Not Every Symptom or Episode of Fatigue Should Be Equated with Menopause	69
Aging	Variations in reserve, capacity, and illness	Dementia is not an inevitable consequence of age	70, 95–96
End of life	Changing goals and the need for rest	No one schedule works for every dying person	96–100

References and limitations

Childhood and Adolescent Resources: CDC tools, NIDCD and NICHD materials, Harvard Center on the Developing Child, WHO, and Pediatric Endocrine Society references, as referenced in chapters 64–66. No new normative ratios were derived from these sources in this appendix.

Sources for subsequent transformations: Chapter 67 on abilities across the lifespan, 68 on the postpartum period, 69 on menopause and reproductive changes, 70 on aging, and 95–100 on caregiving, frailty, and end-of-life. Consult the NHS, WHO, NIMH, and other pages listed in each chapter before applying a recommendation to an individual case.

Appendix VI: Glossary of Scientific and Anatomical Terms

Foreign equivalents are search keys, and definitions are concise formulations written for this book. They do not replace a detailed specialist definition; terms with more than one possible meaning should be consulted in their respective chapters. The name of a phenomenon does not determine its cause in an individual, nor does it transform the glossary into a diagnostic or treatment guide.

The Cell and Heredity

Cell: The basic living unit of the body. See Chapters 9–10.

Tissue: Cells and interstitial components that work together. See Chapter 13.

Organ: A structure comprising multiple tissues that perform interrelated functions. See Chapters 13, 35.

Organ system: A group of organs that cooperate in major functions. See Chapter 35.

Cell membrane: A selective boundary that regulates exchange and signaling. See Chapter 10.

Nucleus: The compartment that carries most of the genetic material in a nucleated cell. See Chapters 10–11.

Mitochondria: Organelles that contribute to energy production and other cellular functions. See Chapters 10, 54.

Deoxyribonucleic Acid (DNA): The substance that carries genetic information. See Chapter 11.

Ribonucleic Acid (RNA): Molecules that play roles in gene expression and regulation. See Chapter 11.

Gene: A unit of genetic information; it alone does not determine a person's fate. See Chapters 11 and 14.

Chromosome: An organization of genetic material with its proteins. See Chapter 11.

Genetic Variant: A difference in a genetic sequence; not all variations are pathological. See Chapters 14 and 82.

Penetrance: The extent to which a trait is expressed in carriers of a related variant. See Chapters 14 and 82.

Mitosis: Nuclear division involved in the growth and regeneration of many cells. See Chapter 12.

Meiosis: A specialized cell division that produces gametes. See chapters 12 and 18.

Differentiation: The acquisition of specialization in structure and function by a cell. See Chapters 12–13.

Apoptosis: A pattern of organized cell death. See Chapter 15.

Autophagy: The breakdown of cellular components and the reuse of some of their products. See Chapter 15.

Cellular senescence: A cellular state that is not reducible to cell death. See Chapters 15, 70.

Reproduction, Formation, and Growth

Gamete: A reproductive cell: a sperm or an egg. See Chapters 18–20.

Ovulation: The release of an egg from the ovary. See Chapter 19.

Fertilization: The union of two gametes and the beginning of zygote formation. See Chapter 20.

Zygote: The cell resulting from fertilization. See Chapters 20, 23.

Blastocyst: An early stage of cellular organization before and around implantation. See Chapter 23.

Implantation: The attachment of the early embryo to and its insertion into the uterine lining. See Chapter 23.

Placenta: An organ of pregnancy that mediates exchange and important signaling between the mother and the developing baby. See Chapter 24.

Amniotic fluid: The fluid surrounding the developing baby within the amniotic sac. See Chapter 25.

Ectoderm: One of the basic embryonic layers. See Chapter 26.

Mesoderm: One of the basic embryonic layers. See Chapter 26.

Endoderm: One of the basic embryonic layers. See Chapter 26.

Organogenesis: The process of organ formation and early specialization. See Chapter 27.

Embryo: The early embryonic stage. See Chapters 26–28.

Fetus: The stage following the early embryonic period. See Chapter 28.

Gestational Age: The clinical dating of pregnancy; it differs from the time since fertilization. See Chapter 28.

Sex Development: The interplay of chromosomal, glandular, hormonal, and anatomical elements. See Chapter 21.

In vitro fertilization (IVF): An assisted reproductive technology procedure. See Chapter 22.

Intracytoplasmic sperm injection (ICSI): The introduction of a single sperm into an egg using a laboratory procedure. See Chapter 22.

Congenital: Present from birth; not synonymous with hereditary. See Chapters 32, 82.

Prematurity: Birth before the medically determined term of pregnancy; details of the

definition are in the text. See Chapters 32, 62.

Developmental milestone: A marker that helps monitor development, not a standalone diagnosis. See Chapters 64–65.

Organs and Their Functions

Connective Tissue: A class of tissues that provide support, connect, and have various functions. See Chapters 13 and 37.

Cartilage: A connective tissue specialized for support and movement. See Chapter 37.

Tendon: A structure that transmits the force of a muscle to its attachment point. See Chapter 38.

Ligament: A structure that contributes to the connection of bones and the stability of a joint. See Chapter 38.

Bone Marrow: Tissue within bones; some of it produces blood cells. See Chapter 39.

Plasma: The liquid component of blood. See Chapter 39.

Hemostasis: The processes of stopping and controlling bleeding. See Chapter 39.

Capillary: A tiny blood vessel involved in exchange with tissues. See Chapter 40.

Lymph: Fluid that circulates in the lymphatic system. See Chapter 41.

Innate immunity: Rapid defenses with well-defined response patterns. See Chapter 41.

Adaptive immunity: Specific responses involving immunological learning and memory. See Chapter 41.

Ventilation: The movement of air into and out of the lungs. See Chapter 42.

Alveolus: A tiny structure involved in gas exchange. See Chapter 42.

Peristalsis: Muscular movements that propel contents through the digestive tract. See Chapter 44.

Metabolism: The sum of chemical processes of building up and breaking down in the body. See Chapters 45 and 54.

Nephron: A basic functional unit in the kidney. See Chapter 46.

Hormone: A chemical signal that affects responsive cells. See Chapter 47.

Neuron: A nerve cell specialized in signaling. See Chapter 48.

Synapse: The point of communication between a nerve cell and another cell. See Chapter 48.

Retina: Tissue in the eye that receives light and initiates its neural processing. See Chapter 49.

Cochlea: A structure in the inner ear involved in hearing. See Chapter 50.

Proprioception: Awareness of the position and movement of body parts. See Chapter 51.

Interoception: Perception of signals from the body's internal state. See Chapter 51.

Homeostasis: The regulation of bodily variables within ranges suitable for life. See Chapter 53.

Circadian rhythm: A biological rhythm that approximates the day. See Chapter 56.

Microbiome: A term relating to microbial communities, their environment, and their genetic material, depending on the use. See Chapter 60.

The Brain, Disease, and Care

Consciousness: A multifaceted term; Its levels are distinguished by study methods. See Chapter 73.

Neuroplasticity: The ability of the nervous system to change with experience and other conditions. See Chapter 74.

Executive functions: The processes of organizing, planning, and controlling responses. See Chapters 65, 74.

Working memory: The temporary retention and use of information. See Chapter 74.

Correlation: A statistical association that is not sufficient on its own to prove causation. See Chapters 73–78, 87.

Randomized trial: A study in which participants are randomly assigned to specified comparison groups. See Chapters 87, 97.

Blinding: Withholding allocation information from relevant people involved in a study according to the study design. See Chapters 78, 87.

Inflammation: A tissue and immune response; not synonymous with infection. See Chapter 81.

Tumor: A growth or mass whose name alone is insufficient to identify malignancy. See Chapter 83.

Degeneration: A deterioration of structure or function; its causes and pathways vary. See Chapter 84.

Rehabilitation: Support for the restoration of function or adaptation and participation. See Chapter 85.

Informed consent: A decision based on sufficient understanding, freedom, and appropriate capacity. See Chapters 87, 90, and 94.

Palliative care: Care to alleviate suffering and improve quality of life. See Chapter 97.

Frailty: Increased vulnerability; not synonymous with age alone. See Chapter 96.

Dying: A stage of decline toward death, not a single definitive sign. See Chapter 98.

Cardiac arrest: Cessation of effective circulation; distinct from a heart attack. See

Chapters 99–100.

Death by neurologic criteria: A medical determination according to specific protocols and conditions. See Chapters 99–100.

Coma: A state of altered consciousness; not synonymous with death. See Chapter 100.

Cardiopulmonary resuscitation (CPR): Procedures to attempt to restore circulation and breathing in the event of cardiac arrest. See Chapter 100.

Do not attempt CPR (DNACPR): A decision regarding resuscitation, not a cessation of all care. See Chapter 100.

Autolysis: Cellular disintegration through internal mechanisms after life has ceased. See chapters 105–106.

Putrefaction: Decomposition processes involving microorganisms. See chapter 106.

Adipocere formation: Fatty transformation after death under suitable conditions. See chapter 107.

Appendix Seven: Glossary of Qur'anic, Narrative, and Theological Terms

This glossary is a guide to the use of terms in this book, not an attempt to provide a comprehensive and definitive linguistic or theological definition for every school of thought. Terms whose meaning varies according to context are not treated equally across different usages. The degrees of authenticity of narrations are described with reference to the critic who graded them and the particular chain, not on the common usage of the expression.

Al-Bashar: A name for humankind in Qur'anic usage, interpreted according to context and not reduced to a meaningless body. See: 1, 3.

Children of Adam: The title relating humanity to Adam, and in the book it is connected to the unity of origin, dignity, and responsibility. See: 1, 4–6.

Dignity: The value of a human being and their rights to be treated; these rights are not forfeited merely due to illness, disability, or weakness. See: 1, 90, 95.

Innate Nature: A Qur'anic and hadithic concept concerning the origin of orientation and predisposition; its detailed interpretation is explained elsewhere. See: 7.

The Covenant: The pledge mentioned in the texts; interpretations of its nature and form vary. See: 7.

The Realm of the Primordial Covenant: A common expression in discussions of the covenant; the book does not present every common depiction of it as definitive. See: 7.

Taklif (Religious Obligation): The obligation and responsibility attached to the one obligated, along with their conditions, and it does not deny the varying degrees of ability. See: 2, 77.

Trials: Tests in good and bad; they do not justify attributing every misfortune to a specific sin. See: 2, 88.

Nafs (Self or Soul): A term with multiple meanings in the Qur'an, Hadith, and theology, depending on the context; it is not always the name of an organ or a modern psychological term. See: 72.

Ruh (Spirit): A term with multiple uses in religious texts; it must not be replaced by measurements of energy or neural electricity. See: 34, 72, 113.

The blowing of the spirit: A Qur'anic and hadithic expression; it does not mean the emanation of a part of God's essence or a physical blowing. See: 34.

The intellect: In texts, it refers to perception, discernment, and acting in accordance with guidance; it is not always equivalent to the anatomical name for the brain. See: 1, 72.

The heart: It may refer to the organ, or it may be used for perception and inner orientation; the context determines the intended meaning. See: 40, 72.

Desire: An inclination that may oppose guidance; it does not make every feeling or physical need a sin. See: 75, 79.

Purification: Self-development and reform; it does not imply claiming infallibility or dispensing with treatment. See: 79.

Intention: Purpose and direction in action; distinguished from fleeting and involuntary thoughts. See: 2, 77, 132.

Repentance: Turning away from sin and rectifying it according to the right related to it; it is not merely verbal justification. See: 79, 129, 132.

Jabr (Compulsion or Determinism): The denial of responsible free will in a manner discussed in theology; it is not automatically proven from a neuroscience experiment. See: 77.

Tafwid (Delegation): A term with several uses, set against compulsion in theological discussion of action; the discussion does not imply that a created being is independent of God. See: 77.

Al-Amr bayn al-Amrayn (A Matter Between Two Matters): An Imami expression combining human responsibility with dependence on God; it has various explanations. See: 77.

Bada': An Imamite term interpreted as meaning that ignorance or a change in knowledge is not attributed to God. See: 71.

The appointed term: The limit set for life in textual usage; its meanings and connection to causes are discussed elsewhere. See: 71, 101.

At-Tawaffa: Taking something in full; it is used in the Qur'an for death and sleep in a context that distinguishes between them. See: 101–102.

The Angel of Death: An angel tasked with taking souls; mentioning him does not negate attributing at-tawaffa to God or mentioning angels. See: 102.

Al-Barzakh: The barrier or intervening stage; in the discussion of destiny, it refers to the period between death and resurrection. See: 112.

The Questioning in the Grave: A narrative about questioning after death; it does not equate to all that people imagine about the physical grave. See: 114.

The Squeeze of the Grave: A narrative title whose narratives and the limits of their meaning are explored without equating it to the pressure of the earth. See: 115.

The Imaginal Body: A concept found in some theological and philosophical commentaries on the intermediate realm (Barzakh); it is not an organ discovered in anatomy. See: 116.

Reincarnation: The transmigration of the soul, a concept debated by various schools of thought; it is distinguished in the book from resurrection and the concept of the intermediate realm. See: 116, 124–125.

Mustad‘af: A doctrinal term concerning access to the divine proof and the ability to grasp it; it does not automatically describe every poor person or person of a different belief. See: 118.

Pure Faith or Disbelief: An expression found in some narrations about the intermediate realm (Barzakh), which serves to identify the addressee but does not grant us knowledge of the inner states of individuals. See: 114, 118.

Presentation of Deeds: A narrative title that does not permit transforming the unseen into imagined technological surveillance. See: 119.

Dedicating the Reward: Intending to benefit the deceased with the reward of a deed, while distinguishing it jurisprudentially from performing an act on another’s behalf and discharging an obligation. See: 120.

The Return: The return before the Resurrection in the Imamite belief, as discussed in the chapter; it is not synonymous with every resurrection. See: 122.

The Blowing of the Trumpet: A Quranic scene depicting the end of creation and the Resurrection; it is not defined by an earthly instrument or a calculated date. See: 123.

Ba‘th (Resurrection): The raising of the dead and their establishment for their ultimate destiny. See: 124.

Ma‘ad (Return and the Hereafter): The return and ultimate destiny; it includes an examination of the human being, personal identity, and recompense. See: 124–125.

The Gathering: The gathering of all creation for judgment; the text does not depict its location on a contemporary map. See: 126.

The Book of Deeds: A Qur'anic expression for the recording and manifestation of deeds; it is not to be reduced to a familiar storage device. See: 127.

The Testimony of the Limbs: The Qur'anic account of the speech or testimony of human organs; it is not a claim that DNA is a moral record. See: 127.

The Embodiment of Deeds: An interpretation of the manifestation of deeds or their

reward in the Hereafter; the interpretation is attributed to its proponents and are not treated as an experimental discovery. See: 127–128.

The Reckoning: Humanity's confrontation with its deeds according to God's justice, not with a human reckoning limited by knowledge. See: 128.

The Balance: A Qur'anic term referring to the justice of recompense. The text discusses its various interpretations and the need to avoid reducing it to a laboratory device. See: 128.

Intercession: Mediation by God's permission, as established by the text; it is not independent of Him or a license for injustice. See: 129.

The Path: The way in Qur'anic usage, and it has an eschatological dimension in the texts and commentaries. See: 130.

The Heights: A place mentioned in the Qur’an, with differing interpretations concerning some details of its inhabitants; the Book does not make every possibility a definitive ruling. See: 130.

Divine Pleasure: God's pleasure, which is one of the central meanings in describing the bliss of Paradise. See: 131.

Eternity: Perpetual existence in the eschatological context; it does not equate to a created being’s beginningless existence or its independence from God. See: 132–133.

Chain of Transmission: The chain of narrators; examining it is not merely finding the narration in a book. See: Methodology; 34, 114.

Matn (Text): The wording of a report; its wording and transmission may vary, and understanding it requires context. See: Methodology; 89, 128.

Sahih, Hasan, and Muwaththaq (Sound, Good, and Reliable): Technical classifications of narrations, attributed here to a specific critic and not generalized without explanation. See: Appendix II.

Weak and Unknown: Two descriptions in the criticism of the chain of transmission; they do not always equate to ruling the text fabricated, nor do they permit certainty regarding its content. See: Appendix II.

Mursal and Marfu‘: Two descriptions that necessitate examining the continuity of transmission and the terminology of the source; refer to the chain of transmission itself. See: Appendix II.

Tafsir (Exegesis): Explaining the meaning of the text according to the evidence and methodology; the interpretation of the commentator is not a new verse. See: Methodology; 33, 133.

Ta’wil (Interpretation): A term with multiple uses in texts and sciences, and it is not assumed to have a single meaning in every instance. See: 7, 128.

Fatwa: A religious legal opinion of a qualified scholar on its subject and conditions; it is attributed to its author and is not generalized to all followers. See: 90–94, 108–120.

Appendix Eight: Disputed Issues and the Nature of the Disagreement

The purpose of this appendix is to indicate the subject and type of research, not to equate opinions or re-prefer them without their supporting evidence. Differences in narrations are not necessarily differences between schools of thought, differences in interpretation are not scientific discoveries, and differences in fatwas may stem from differences in subject matter, precaution, or methodology.

The Material of Creation and Scientific Details

Interpretive and Methodological Disagreement: The terms “clay” and “dried, sounding clay” are not synonymous with the names of a single laboratory substance, nor is the verse required to describe all chemical processes. See Chapters 3 and 33.

Adam's Paradise, the Nature of the Prohibition, and the Descent

Interpretive and Narrative Disagreement: The definition of Paradise and the interpretation of the prohibition differ. The opinions of the commentators and the degree of certain reports are presented without claiming consensus. See Chapter 4.

The Creation of Eve and the Beginning of Humankind

Narrative and Historical Disagreement: The widespread fame of the story of the rib or the story of marriage between siblings is insufficient to prove all its details. Chains of transmission and opinions are presented, along with an explanation of the limits of preference. See Chapters 5–6.

The Covenant, the Realm of the Primordial Covenant, and Innate Nature

Disagreement in Meaning and Concept: Interpretations of the covenant scene and its connection to innate nature vary, and neither metaphorical nor literal descriptions constitute a silent assumption. See Chapter 7.

Human Origin, Fossils, and Heredity

Difference in the Type of Question and Evidence: Science discusses the history of populations and material evidence; however, the interpretation of Adam and his doctrinal position is not resolved simply by naming a specimen or lineage. See Chapter 8.

Stages of Embryonic Development and Correspondence with Qur'anic Terminology

Interpretive and Methodological Disagreement: The linguistic terminology is distinguished from the embryological term and the medical timeline, and a rigid, separate sequence is not imposed on overlapping development. See Chapters 23–34.

The Time of Ensoulment

Narrative and Jurisprudential Disagreement and the Principle of Calculation: The age of gestation should not be confused with age measured from fertilization, nor should movement or a pulse be considered empirical evidence of the soul. See Chapter 34.

Sexual Development and Reproductive Decisions

Scientific and Jurisprudential Overlap: Chromosomes, hormones, glands, and anatomy are not a single category; practical rulings have their own subjects and conditions. See Chapters 21–22 and 92–94.

Intellect, Spirit, Self, and Consciousness

Terminological and Philosophical Disagreement: A word from a scientific field should not be replaced by one from a doctrinal field without explaining the meaning. See Chapters 72–73 and 78.

Dreams and the Source of Religious Knowledge

Disagreement Regarding the Nature of Authority: A dream experience alone does not establish a religious ruling, diagnosis, or accusation. See Chapter 76.

Choice and Neurological Experiments

Disagreement in Conclusion: Experimental results are limited by the task, the sample, and the measurement, and do not, on their own, prove determinism or negate responsibility. See Chapter 77.

Traditional Medicine

Disagreement in Attribution, Semantics, and Application: The existence of a text regarding a medicine does not prove the accuracy of its attribution, the generality of its prescription, or its safety for every person. See Chapter 89.

Organ Donation, Autopsy, and Research

Jurisprudential and Ethical Disagreement depending on the subject matter, necessity, consent, and the issuing authority; the ruling is not based solely on medical benefit. See Chapter 94.

Declaring Death and Not Attempting Resuscitation

Medical, Jurisprudential, and Procedural Disagreement: The criteria and conditions for their application differ from the question of the soul, and the decision to resuscitate is not the same as the decision to discontinue care. See Chapters 99–100.

Near-Death Experiences

Disagreement in Interpreting the Evidence: The account of the experience and the presence of brain activity in a specific circumstance do not, on their own, prove the details of life in the intermediate realm (Barzakh). See Chapter 104.

The Preservation of Some Bodies After Death

Disagreement in Proof and Interpretation: Historical observation is distinguished from later transmission, and environmental factors for preservation are distinguished from attributing divine favor to a person. See Chapters 107 and 110.

The Soul After Death and the Barzakh Body

Theological, Narrative, and Philosophical Disagreement: The book presents some of the differences between al-Saduq, al-Mufid, and al-Majlisi's commentaries without reconciling them into a single view. See Chapters 112–116.

Who is Questioned in the Grave and the Conditions of Children and the Vulnerable

Disagreement on Reconciling Narrations and Theological Interpretations: A single story should not be generalized to every deceased person, nor should sensory impairment be equated with a lack of understanding. See Chapters 114 and 118.

The Connection Between the Dead and the Living and the Benefit of Deeds

Disagreement on the Extent and Method of Proof, with Jurisprudential Differences Between Dedicating a Reward and Performing an Act on Another’s Behalf. Specific times for spirit visits should not be determined for each individual without evidence. See Chapters 119–120.

The Return

Doctrinal Disagreement and Some Details Within the School: The Imami position is presented and distinguished both from interpreting the Return solely as the restoration of rule and from the general Resurrection. See Chapter 122.

Human Identity in the Hereafter

Theological and Philosophical Discussion: The survival of the individual is not a simplistic hypothesis about the retrieval of every atom, nor does DNA become proof of all the details of eschatological identity. See Chapter 125.

The Balance, the Path, the Obstacles, and the Heights

Interpretive and Theological Disagreement: Readings of the literal and figurative meanings, as well as some narrations, differ. The choices of al-Mufid and others are attributed to their respective authors. See Chapters 128 and 130.

Intercession, Eternity, and Justice

Theological Disagreement and Reconciling Texts: A distinction is made between entering Hell and eternal damnation, between promise and threat, and between a general ruling and the fate of a specific individual. See Chapters 129 and 132–133.

In each issue: Begin with the referenced passage, read the text and its source, and

note its degree or the type of its conclusion. Then return to the original source if you wish to construct an independent research position. The fact that the book does not cover every statement does not render the unmentioned statement nonexistent.

Appendix Nine: A Guide to Distinguishing Between Text, Science, Interpretation, and Opinion

1. What type of statement do you have before you?

First, ask: Is it a verse, a hadith, an exegete's commentary, a jurist's or theologian's opinion, the result of a study, or an explanation by the author? These types may coexist in a single paragraph; coexistence does not confer the same status. Quotation marks alone do not prove the attribution.

2. Did You Read the Source or an Intermediary Quoting It?

A direct reference to a book differs from a digital database’s transmission of a critic’s judgment. If we read an intermediary source, we state that explicitly. If a complete page or chain of transmission is unavailable, we do not invent what is missing. The electronic source's URL is insufficient to distinguish the author's words from the editor's footnotes.

3. What Does Finding a Hadith Establish?

It proves that the text exists in the location where it was read, not that it is authentic through all its chains of transmission or definitively established in its meaning. Verify the narrator, the unknown intermediary, omitted links in transmission, and the differences between versions, then attribute the ruling to its source. Do not transfer the status of an adjacent hadith to the hadith you need.

4. What do you do with differing interpretations?

Present the opinion along with its proponent, their argument, and its limitations. Do not write "The Quran says" and then replace the verse with a commentator's own interpretation. When the difference is linguistic or theological, do not resolve it with medical information unrelated to the point of contention.

5. What does the study measure?

Differentiate between laboratory, animal, and human studies, between observational and experimental studies, and between a selected sample and the entire population. Observe the sample size, the comparison, and the measured outcome. Correlation alone does not prove causation, and a change in an indicator does not always equate to an improvement that is relevant to the patient.

6. Is the source recent and relevant to the decision?

An educational reference may be suitable for explaining anatomy, but it is not sufficient on its own to determine a treatment, a criterion for death, or a reproductive decision. Check the edition, date, and authoritative source. Do not

substitute a news report for the original document or paper when the conclusion depends on its details.

7. Has the information been transformed into a prescription?

A personal anecdote about someone's improvement is not enough to prove a treatment. A text attributed to traditional medicine does not negate the need to verify the attribution, dosage, safety, and potential interactions. Furthermore, a general warning to consult a specialist does not absolve you from correcting the inaccurate information itself.

8. Have you confused two standards of time or measurement?

Examples include gestational age and age measured from fertilization, calendar month and weeks, the onset of organ formation and completion of function, and the time of cardiac arrest and the time at which death is medically determined. State the calculation method and the standard before making comparisons.

9. Have you attributed to the unseen what is not mentioned?

The book does not map souls, nor does it assign an earthly location to every otherworldly scene, nor does it read people's destinies from the appearance of the body after death. What is not proven remains unproven, even if the story is moving.

10. Have you preserved the rights of the person you are talking about?

Do not make illness a stigma, disability a sign of worthlessness or lack of understanding, infertility a sin, or grief a deficiency of faith. Describing symptoms and the need for help is different from judging a person or revealing their private life.

Practical Review Card

Before adopting a passage, record: the text of the claim; its type; its source; its precise location; whether the citation is direct or indirect; the limits of the evidence; what it does not prove; and whether it requires updating or expert review. These questions were used to refine the citation and analysis, and do not imply that every reference constitutes a definitive critical investigation.

Two Examples from the Book

Religious Example: The account of Adam's Paradise is found in al-Kafi, but describing the path as unknown does not permit its presentation as authentic, nor does it justify ignoring its existence. The appropriate conclusion: present the text, its limitations, and its attribution, without definitively mapping the Paradise.

Scientific Example: Observing neural activity during resuscitation confirms an observation under specific circumstances. It is not sufficient on its own to prove all aspects of a personal experience, nor to refute all its philosophical questions. Chapter 104 distinguishes between data, interpretation, and limitations.

What remains before publication?

The compilation of the text and appendices, standardization of indexes and references, and cross-referencing of the wording of Qur'anic quotations and selected references have been completed, along with editorial review and typesetting checks. The following remain: specialized review of the medical material, cross-referencing of quotations with approved editions for publication, hadith verification of issues explicitly identified as not independently investigated, comprehensive linguistic editing, and publisher proofreading. The completeness of the book's structure does not replace these reviews.

Sources and References

The source of the Qur'anic citation is the Qur'an itself, including the names of the surahs and the verse numbers. The following list records the electronic locations associated with the chapter references, after collecting matching links. The title is a brief descriptive summary taken from the reference; details of the edition, chapter, page, route, and reading limits remain in the chapter's source itself. Not every item listed is a standalone book, and a book may appear on different pages, in different versions, or with different links.

The list contains 880 source references linking to 882 unique links, including chapter references and documentary comparisons. This is a count of links, not of the original studies or books. Some items include published summaries or sources whose limitations are stated in the text; the list does not claim to read the entire text if this has not been achieved.

This list was last updated on 17 October 2026, Melbourne time. The purpose is to maintain a record of the sources used, not to guarantee that every link or recommendation will remain up-to-date at the time of reading. Jurisprudential references are attributed to their authors, and medical references do not replace the appropriate professional decision for the individual case.

The Holy Quran

Verse references are provided by surah name and number, not by page number from a specific edition. The verse quotations are based on the electronic text of the Tanzil Project, version 1.1, in fully vocalized standard spelling, after matching their positions with surah names and verse numbers. The links for this comparison facilitate access to the text and do not make the website a source of divine revelation.

The Holy Quran and links to verse comparisons

M880. Tanzil Project, Electronic Quranic Text, version 1.1, in fully vocalized standard spelling (Simple Plain), for textual comparison and quotation correction. Digital text preparation rights: © 2007–2021 Tanzil Project License: Creative Commons Attribution 3.0. Verses copied from the approved text without alteration.

M388. The Holy Quran, An-Naba: 9 — Chapters: 56.

M389. The Holy Quran, Ar-Rum: 23 — Chapters: 56.

M398. The Holy Quran, Al-Mulk: 15 — Chapters: 57.

M404. The Holy Quran, Al-Anbiya: 83 — Chapters: 58.

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M411. The Holy Quran, Ash-Shu'ara: 80 — Chapters: 59.

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M435. The Holy Quran, An-Nahl: 78 — Chapters: 62.

M441. The Holy Quran, Al-Baqarah, Verse 233 — Chapters: 63.

M453. The Holy Quran, Ad-Duha, Verse 9 — Chapters: 64.

M461. The Holy Quran, Luqman, Verses 13 and 17–19 — Chapters: 65.

M472. The Holy Quran, An-Nur, Verse 59 — Chapters: 66.

M473. The Holy Quran, An-Nisa, Verse 6 — Chapters: 66.

M476. The Holy Quran, Surah Al-Qasas, Verse 26 — Chapters: 67.

M478. The Holy Quran, Surah Al-Kahf, Verse 13 — Chapters: 67.

M487. The Holy Quran, Surah Luqman, Verses 14–15 — Chapters: 68.

M495. The Holy Quran, Surah Hud, Verses 72–73 — Chapters: 69.

M502. The Holy Quran, Surah Al-Isra, Verses 23–24 — Chapters: 70.

M504. The Holy Quran, Surah Ar-Rum: 54 — Chapters: 71.

M505. The Holy Quran, Surah An-Nahl: 70 — Chapters: 71.

M506. The Holy Quran, Fatir: 11 — Chapters: 71.

M507. The Holy Quran, Al-An'am: 2 — Chapters: 71.

M509. The Holy Quran, Ar-Ra'd: 39 — Chapters: 71.

M512. The Holy Quran, Al-Munafiqun: 11 — Chapters: 71.

M514. The Holy Quran, Al-'Asr, verses 1–3 — Chapters: 71.

M515. The Holy Quran, Al-Anbiya': 35 — Chapters: 72.

M516. The Holy Quran, Yusuf: 53 — Chapters: 72.

M517. The Holy Quran, Al-Fajr: 27–28 — Chapters: 72.

M518. The Holy Quran, Az-Zumar: 42 — Chapters: 72, 101.

M519. The Holy Quran, Al-Isra: 85 — Chapters: 72.

M520. The Holy Quran, Ash-Shu'ara: 193–194 — Chapters: 72.

M522. The Holy Quran, Al-Hajj: 46 — Chapters: 72.

M533. The Holy Quran, Al-Isra: 36 — Chapters: 73.

M542. The Holy Quran, Al-Baqarah: 286 — Chapters: 74.

M547. The Holy Quran, Yusuf: 86 — Chapters: 75.

M548. The Holy Quran, Al Imran: 134 — Chapters: 75.

M553. The Holy Quran, Yusuf: 4, 43–49, 100 — Chapters: 76.

M554. The Holy Quran, As-Saffat: 102–107 — Chapters: 76.

M555. The Holy Quran, Al-Fath: 27 — Chapters: 76.

M563. The Holy Quran, Al-Insan: 3 — Chapters: 77.

M564. The Holy Quran, An-Najm: 39 — Chapters: 77.

M566. The Holy Quran, An-Nisa: 40 — Chapters: 77.

M573. The Holy Quran, Ar-Ra'd: 28 — Chapters: 78.

M574. The Holy Quran, Ash-Shu'ara: 80 — Chapters: 78.

M575. The Holy Quran, Ash-Shams: 7–10 — Chapters: 79.

M576. The Holy Quran, Al-'Ankabut: 45 — Chapters: 79.

M577. The Holy Quran, Al-Baqarah: 183 — Chapters: 79.

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M580. The Holy Quran, Al-Hujurat: 12 — Chapters: 79.

M581. The Holy Quran, Al-Hashr: 18 — Chapters: 79.

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M676. The Holy Quran: Al-Isra 70 — Chapters: 90.

M678. The Holy Quran: Al-A'raf 31 — Chapters: 91.

M684. The Holy Quran: Ar-Rum 21 — Chapters: 92.

M691. The Holy Quran: Ash-Shura 49–50 — Chapters: 93.

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M737. The Holy Quran: Al-Waqi'ah 83–87 — Chapters: 101.

M741. The Holy Quran: As-Sajdah 11 — Chapters: 102.

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M818. The Holy Quran, Ar-Rum: 55–56, and Ya-Sin: 52 — Chapters: 121.

M828. The Holy Quran, Ya-Sin: 78–82 — Chapters: 124.

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M354. The Holy Quran, Ta-Ha: 25–28 — Chapters: 52.

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M3. Nahj al-Balaghah, compiled by Sharif al-Radi, Letter 53, The Covenant of Malik al-Ashtar — Chapters: 1.

M4. Ibn Shu'bah al-Harrani, Tuhaf al-'Uqul, Treatise on Rights, The Right of the Soul, p. 256, according to the numbering of the digital version available in the Al-Muntaqim Library — Chapters: 1.

M7. Shaykh al-Saduq, `Ilal al-Shara'i`, vol. 1, chapter 9: The Reason for the Creation of Mankind and the Differences in Their Conditions, hadiths 1 and 2, p. 9 in the version displayed in the Ahl al-Bayt Digital Library — Chapters: 2.

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M11. Al-Kulayni, al-Kafi, vol. 1, Book of Monotheism, Chapter on the Soul, hadith 1 — Chapters: 3.

M13. Al-Kulayni, al-Kafi, vol. 3, Book of Funerals, Chapter on the Paradise of This World, hadith 2, on the authority of al-Husayn ibn Maysar on the authority of Imam al-Sadiq, peace be upon him — Chapters: 4.

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M19. Al-Kulayni, Al-Kafi, vol. 2, Book of Faith and Disbelief, chapter on Partisanship,

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M565. Al-Kafi, Kitab al-Tawhid, Chapter on Compulsion, Divine Decree, and a Matter Between Two Matters, Hadiths 13 and 14 — Chapters: 77.

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M582. Al-Kafi, Chapter on Accountability for Deeds, Hadith 2, 2/453 in the common numbering — Chapters: 79.

M584. Al-Sahifa al-Sajjadiyya, The Twentieth Supplication on Noble Character, p. 100 in the displayed digital edition — Chapters: 79.

M640. Nahj al-Balaghah, Letter 53, The Covenant of Malik al-Ashtar, Section on Caring for the Needy — Chapters: 85, 90.

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THE STORY OF THE HUMAN BEING

From the Beginning of Creation to Beyond Death

From the matter of creation to cells and heredity, and from development in the womb to the body's systems and the stages of life, this book explores the human story through the Qur'an and the narrations of the Ahl al-Bayt, alongside biological and anatomical knowledge. It considers the brain, self and spirit, illness and care, and the dignity of the body, before turning to death, barzakh, resurrection and ultimate destiny. Throughout, it distinguishes religious texts and their interpretation from scientific knowledge and its limits.

Fourteen parts exploring the human story

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