

Religion and the Implications
of Radical Life Extension



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Man has to live his life in the shadow of death, and he who clings to life and enjoys its fullness must dread the menace of its end. And he who is faced by death turns to the promise of life. Death and its denial—Immortality—have always formed, as they form to-day, the most poignant theme of man's foreboding. The extreme complexity of man's emotional reactions to life finds necessarily its counterpart in his attitude to death. Only what in life has been spread over a long space and manifested in a succession of experiences and events is here at its end condensed into one crisis which provokes a violent and complex outburst of religious manifestations.

Bronislaw Malinowski
Magic, Science and Religion and Other Essays, 1925

CHAPTER 10

A Thousand Years, Less Fifty: Toward a Quranic View of Extreme Longevity

Aisha Y. Musa

Qur'an

What are the implications of radical life extension (RLE) for Islamic concepts of life and death, of the here and the hereafter? For Muslims, the Qur'an contains the direct and literal words of God, transmitted in Arabic to the Prophet Muhammad, by the angel Gabriel in the seventh century of the Common Era. For Muslims, it the most authoritative source of knowledge about divine commands relating to life, death, the here, and the hereafter; as such, as Muslims seek understanding about these questions in the midst of ongoing biomedical advances, they turn to the Qur'an for guidance. Not only does the Qur'an shape Muslim worldviews, it also informs Muslims about the history of earlier communities and individuals, and Muslims generally accept the claims contained in these stories as true and accurate.

This chapter will examine Quranic verses that touch on the idea of extreme longevity together with Muslim understandings of those verses as they have been reflected in classical exegesis. However, the text is not understood or interpreted in a vacuum. Just as Muslim understandings of life and death are informed by the text, Muslim understandings of the text are informed by experiences and perceptions. Those experiences and perceptions evolve and change in response to a wide variety of cultural and social

changes. Advances in science and technology are among the most potent factors that influence the experiences and perceptions that in turn influence exegesis.

A basic understanding of life and death is clearly articulated in the Qur'an. God predetermines an individual's life span prior to his or her birth:

He is the One who created you from dust, then from a tiny drop, then from a hanging embryo, then He brings you out as a child, then you reach maturity, then you become old—and some of you die before—that you reach an appointed term. (40:67)

The Qur'an also suggests the age at which one reaches full maturity:

We enjoined the human being to honor his parents. His mother carried him with difficulty, gave birth to him with difficulty, and his weaning takes thirty months. Until he reaches maturity and reaches forty years. (46:15)

Although God predetermines one's life span, the Qur'an suggests no minimum or maximum amount of time that span may last. Only God knows the term that he has appointed for anyone. However, the Qur'an does offer a hint of what is possible, in the story of Noah: "We sent Noah to his people, then he remained among them a thousand years, less fifty, and then the flood overwhelmed them while they were unjust."

Opinions on the duration of Noah's life vary. The late thirteenth century commentator al-Qurrubī (d. 1273 CE) surveys the range of views, which extend from the 950 years indicated in the verse itself to an extreme of 1650 years: 350 years before he began preaching, 950 years preaching; God's message before the flood, and 350 years after the flood. In any case, the duration of his life was far longer than the current average human life span or even the currently recognized extreme of life expectancy. Of the major commentators on the Qur'an, both past and present, only al-Qurrubī's early thirteenth-century predecessor Fakhr al-Dīn al-Rāzī (d. 1210 CE) directly addresses the question of what may constitute "natural" life expectancy:

Some physicians say that human life span does not exceed one hundred and twenty years, but the verse indicates the opposite of their statement, and reason agrees. Indeed, survival of the human body is possible; otherwise, he [Noah] would not have survived... Their words go against reason and tradition. We say: "There is no dispute between us and them

because they say that the natural life span is not greater than one hundred and twenty years, and we say this life span is not natural, rather it is a divine gift."

By declaring that the extent of a human being's life span is a gift from Allah, al-Rāzī offers a clear basis for accepting life spans that may go well beyond what human wisdom, even that of medical professions, may deem possible. That the human body can be sustained for such an extended period is clearly acceptable to al-Rāzī because it happened in the case of Noah.

The possibility of an "unnaturally" long life is not limited, in the Qur'anic worldview, to prophets such as Noah. Chapter 18 of the Qur'an also tells the story of a group of young believers who take refuge in a cave to escape religious persecution. The text does not indicate how long they lived. Instead, it says that God "covered their ears" for "a number of years" and afterward "revived/awakened them." During the "number of years," the text further says that they appeared to be awake, when actually they were asleep. Here, in addition to the apparent proposal of an extended physical life, we see the possibility of experiencing an extended period of sleep followed by an awakening, after which the subjects function normally. The story is suggestive of the type of suspension of life and reanimation envisioned in cryonics. Another possibility suggested in the Qur'an is that of earthly resurrection after death. In Chapter 2 of the Qur'an, we find the story of a man who questions how God will be able to resurrect the dead. God demonstrates his power personally to the man by causing him to die and then resurrecting him to his earthly life after a century.

In all of these examples, the extent of life and the timing of death are the exclusive province of God. Physical life is finite, but it is not necessarily limited to forms that human knowledge and experience may consider natural. God is able not only to extend human life for an indefinite period; he can also revive or even resurrect the human being to an earthly existence after an indefinite period. From this perspective, the Qur'an offers Muslims a means to comprehend the possibility of RLE. Moreover, Muslim views of the relationship between science and religion support acceptance of that possibility.

Doctrines—Science and Religion

Muslim contributions to the advancement of scientific knowledge are well-documented throughout history, although this is not widely known outside the Muslim world. Over the past several decades, Muslims have given increasing weight to scientific information and theories in understanding

and explaining the verses of the Qur'an. A key figure in this popular Muslim view of the relationship between science and scripture is Maurice Bucaille, a French physician and author of *The Bible, the Qur'an, and Science: The Holy Scriptures Examined in the Light of Modern Knowledge*. Originally published in French in 1976, the book has been translated into many languages and has enjoyed enormous and widespread popularity throughout the Muslim world. This positive reception is due in part to the author's enthusiastic affirmation of the compatibility of Islam and science (Bucaille 2003, 8):

The Qur'an most definitely did not contain a single proposition at variance with the most firmly established modern knowledge, nor did it contain any of the ideas current at the time on the subjects it describes. Furthermore, however, a large number of facts are mentioned in the Qur'an which were not discovered until modern times.

Skeptics have questioned both the reliability of Bucaille's conclusions and his motives. However, neither the validity of his scientific and scriptural claims, nor his motives, is the issue that concerns us here. What is important in the context of the current discussion is Bucaille's more general conclusion about "the great advantage there is in using scientific data in examining certain aspects of the Holy Scriptures," a perspective that "leads us to establish an agreement between the conclusions drawn from scientific data and the concepts held by exegetes."

The primary importance of Bucaille's work is two fold. Because it is seen by Muslims as a confirmation of the miraculous nature of the Qur'an, it has been not only enormously popular with Muslims, but it has also exerted a powerful influence on contemporary Muslim attitudes toward scientific and medical advancements. Secondly, his work has implications for how Muslims understand the opinions of exegetes, such as al-Rāzī, cited above. Al-Rāzī was responding to medical experts in his own time who held that the natural human life span did exceed 120 years. He did so by arguing first, that the Quranic account of Noah is factual, and thus, the human body must be able to survive well beyond 120 years. Additionally, he maintained that life span is not a natural aspect of humanity; rather, it is a divine gift. In a similar way, if RLE becomes a reality, Bucaille's work can provide Muslims with the means to regard these biomedical advances as being in conformity to norms established in the Qur'an. Even though earlier exegetes lacked scientific data in support of a radical prolongation of human life, they recognized that something of the sort could be possible, as clearly implied in the Quranic story of Noah. In this way, the concept could be accepted as having both scriptural and exegetical legitimacy.

In the three decades since Bucaille's work was first published, interest in Islam as a "scientific religion" has blossomed, and more books have been written on Islam and science. These writings include works of both popular piety and academic inquiry. Topics range from human embryology to biology, astronomy, and oceanography. To date, scholars of Islam have not undertaken a sustained discussion of longevity or RLE in such literature. However, the theme that runs through all of these works is that there is a fundamentally complementary relationship between science and scripture, whether looking at science through the lens of scripture, or looking at scripture through the lens of science.

Traditional Muslim understanding and interpretation appears to have room to accept the possibility of extreme longevity; however, the chance of practical immortality, even for some individuals, could challenge accepted eschatological doctrines related to death, resurrection, and afterlife.

The Qur'an declares unambiguously that "wherever you are death will find you," and "every soul will taste death." These verses have always been understood to preclude the possibility of earthly immortality. However, in another verse that is generally understood to refer to the believers in paradise, the Qur'an states, "They do not taste death in it, except the first death." Most commentators, past and present, generally understand "the first death" to refer to the earthly death that all individuals experience, and that the overall import of the verse is that such death will not occur in paradise. In addition to this common understanding, some exegetes offer more mystical interpretation, seeing "the first death" as a metaphor for the mystical experience of dying in the self, so that the believer is in the true paradise of knowing, obeying and loving God, even while physically still in the world. Both understandings are based on eschatological notions of death, followed by eventual resurrection and judgment, and finally an eternal afterlife in Heaven or Hell. In turn, Heaven and Hell are understood to be actual places where souls of resurrected individuals will go. These notions and the interpretations that are derived from them take for granted the universal human experience of physical death. The possibility of practical immortality, even for some individuals would necessitate a reevaluation and reinterpretation of these key doctrines, opening the way for the development and acceptance of new understandings.

An example of the type of interpretation that might benefit from the challenges that practical immortality offers to inherited notions of death, resurrection, and afterlife is the work of Ghulam Ahmed Parvez, who holds that Heaven and Hell are not localities, but psychological states of being: "Heaven (*Jannah*) stands for fruition coupled with glowing hope for the future. Hell (*Jahannam*) is the experience of frustration tinged with

remorse and regret" (Parvez 2008). Drawing on the work of Parvez, a young Dutch Muslim thinker, Arnold Yasin Mol, goes on to posit that "the Qur'an presents *Jannah* as a state of evolution of the individual and society, and *Jahannam* as a state of non-evolution wherein both individual and society do not develop" (Mol 2008). If Heaven and Hell are understood as states of existence that are already being experienced by individuals and societies, rather than as actual places that souls enter after death, the whole view of life, death, and the hereafter changes.

The Arabic word that is generally translated as hereafter is *al-akhirah* (that which comes after or last). The common inherited understanding is that this refers to the eternal afterlife, which individuals will spend in either Heaven or Hell. Mol offers a quite different understanding, according to which the universe is "slowly working to its next phase called '*Akhirah*.'" Mol explains his theory further (2008b, 47):

The Universe will collapse and is [sic] formed again using the same process, but as with any evolution, it will be on a higher scale of development and so will have more possibilities and features than the first Universe.

Such a radical redefinition of Heaven, Hell, and the Hereafter, if it gained acceptance, could make the sort of practical immortality that might result from RLE acceptable as well, for according to Mol, "As all species, Man will die out due to the ever changing environment of the Universe" (2008b, 47). Therefore, the Qur'an's insistence that each person will experience death would remain true, though it might happen for some not through aging, disease, accident, or violence, but with the collapse of the universe itself. Likewise, if RLE and potential immortality become realities, that realization could make such a radical redefinition of the inherited Muslim doctrines acceptable.

Rituals, Practices, Institutions

Islam is a religion that lacks both a centralized authority and universally accepted institutions. Community religious activities tend to be organized on a local level. While a defined clerical hierarchy does exist in Shi'a Islam, there is no such clergy in Sunni Islam. Anyone who is seen as pious, knowledgeable, and trustworthy may serve as an imam, leading prayers, offering Friday sermons, and serving the general spiritual needs of the community. Indeed, age is something that is traditionally respected. A longer life offers Muslims more opportunities to attain knowledge, gain wisdom, and practice piety. Thus, it would not be inconsistent for Muslims to regard a significantly prolonged life to be an asset to both the family and the community.

On this level, then, RLE seems to offer no particular challenge to the Muslim community.

Although it is a matter of dispute, one of the concerns raised in the discussion of increased life expectancy is overpopulation. Here too, there is no problem for Islam from a doctrinal perspective because the Qur'an teaches that God provides the necessary sustenance for all living creatures. The problem is not the existence of sufficient provisions for all people, but the control and distribution of those provisions. Islam, like other religions, recognizes the potential injustices that might arise as a consequence of the unequal distribution of and access to resources. The religion condemns this unwanted consequence by calling upon believers to avoid greed and hoarding and to redistribute wealth by spending one's excess in charity.

There are two forms of "charity" traditionally recognized in Islam: (1) the obligatory *zakat*, which is often translated as "alms" or "poor-due," and (2) the voluntary charity, *sadaqa*. Voluntary charity may be offered by an individual at any time and in any amount, and it is not associated with any institutionalized practice. *Zakat*, however, is set by tradition as 2.5 percent of an individual's net worth, calculated and paid every year at the end of the fast of Ramadan. It may be paid privately by an individual to needy relatives or community members or paid to the local mosque for distribution to the needy.

The potential challenges that extreme longevity may present on this issue are also unclear. Would an extended life span mean increased dependency on the families and communities or extended economic productivity? A longer life and presence in the work force might lead to greater competition and lower wages, making it more difficult for some individuals to support themselves and their families. This could lead not to increased charitable giving, but to a greater demand on charitable contributions. However, extended productivity and greater wealth accumulation could mean potentially greater contributions to charity and the care of the needy.

Perhaps the religious practice that might face the greatest challenge from more people living much longer is the institution of pilgrimage (*hajj*). According to the Qur'an, making pilgrimage to the Sacred House is incumbent on everyone who has the means to do so. Tradition specifies that this obligation is once in a lifetime, but those Muslims who can afford it may go multiple times. Hajj takes place over the first ten days of the lunar month of Dhul-Hijjah. In earlier times, for most people, the pilgrimage was a long and difficult journey. However, the prosperity brought by oil wealth and advances in transportation have made the journey easier. Today, millions of

people from all over the world travel to Mecca for these ten days. According to the Saudi Arabian embassy (Hajj 2009):

Over the past four decades, [the government] has spent billions of dollars to expand the Holy Mosque in Makkah and the Prophet's Mosque in Madinah, as well as establishing modern airports, seaports, roads, lodg- ing, and other amenities and services for the pilgrims.

The establishment of these facilities by itself does not ensure a success- ful Hajj. To do so, the Kingdom has put into place a vast organization supervised by the Supreme Hajj Committee.

If RLE were to lead to a dramatic increase in population, demands on the infrastructure required for a successful pilgrimage would also increase. How might such an increase change the current experience of the already crowded pilgrimage? Would the additional burden on infrastructure make the jour- ney longer and more difficult? Might it require limiting those who have the means to make Hajj multiple times to making Hajj only once in a lifetime, or would more people be encouraged to make the lesser pilgrimage, known as *'Umra*, which can be done at other periods throughout the year? Such practical questions may seem less important than the challenges to eschato- logical doctrines discussed above, but if extreme longevity were to become a reality and in turn lead to dramatic increase in population, such issues would need to be addressed much more readily and directly than the doc- trinal concerns because these issues have a much more immediate impact on the individual and the society.

Conclusion

While Muslims have yet to begin a discussion of the question of RLE and its implications, examining the issue from the perspective of scripture and doc- trine reveals no conflict with Islamic norms and ideals. Indeed, we find clear examples that offer both scriptural and exegetical legitimacy to the possibil- ity of living for centuries. Because RLE does not necessarily imply immor- tality, it does not necessarily conflict with the Quranic teaching that every person will experience death. Even when the means to extend life beyond that attributed to Noah become a reality, other means of death remain pos- sible. Moreover, alternative understandings of death and the hereafter that could accommodate extreme longevity and even practical immortality are possible.

Such longevity would, however, doubtless present a variety of social, eth- ical, and economic challenges to the families and communities in which it

may eventually occur. Many of those issues would be of a practical nature that transcends religious identity and ideology. Moreover, just as the Qur'an and its exegetes throughout history offer a means for accepting the possi- bility of extreme longevity, they also offer perspectives for appreciating the benefits that will accrue and addressing the needs that will arise when such longevity becomes a reality.