

### THREE

## A Qur'anic Environment *Relating Creatures and Resources*

RELIGIOUS READINGS OF the Qur'an form Muslim environmentalism, and with this it should go without saying that the Qur'anic text structures Muslims' thought and action only within the social worlds of various lived contexts. The Qur'an certainly is also not solely determinative of religious environmental norms; Islamic legal guidelines and situated ethics, scientific principles, and community practices all provide examples of ideas deployed by Muslims for environmental commitments and engagements that derive from authority other than the Qur'an. However, the Qur'an shapes how Muslims interact within human and nonhuman, and also secular and religious, worlds. Its traditions saturate global systems, starting with the education of young children in reading Qur'an (which is the basis of all Islamic education and required to some degree to carry out the fundamental obligations for all Muslim men and women, daily *salat*). The fact that only one-fifth of the world's Muslims today are native speakers of Arabic does not prevent Muslims from grasping its fundamental terms, themes, and images.<sup>1</sup>

The Qur'an is also the common authoritative referent to which global Islamic systems ground themselves and interact across boundaries of difference. Islamic institutional authority is fluid, and the tradition is characterized by flexibility, but nevertheless coherent conversations have been occurring for a millennium in centers like Timbuktu, Cairo, Qum, and Melaka, not to mention Medina, and across wide geographic expanses like

overland trade routes across Africa, the Silk Road, and Indian Ocean maritime systems long before the circulations of print media and technologies of jet travel. This renders a basic overview of the Qur'an's own environmental themes a more fruitful place to start to theorize Muslims' religious environmentalisms from a humanistic perspective than does a recent notion from environmental humanities like the Anthropocene.

Standard treatments of Islam *and* the environment do rely heavily on Qur'anic verses, but usually without considering how such Qur'anic authority would be derived or applied—whether socially, historically, textually, ethically, or otherwise. This corresponds to tendencies both in the Eurocentric presentation of environment as well as Islam and world religions overall, such as those that would seek cognates in biblical material or romantic themes like sublime “nature.” With this, the material that is commonly excerpted as standard “environmental verses” of the Qur'an corresponds closely to notions of “environment” that originate outside Islamic tradition. This practice of excerpting of proof-texts usually seeks preselected “key words” from a predetermined system of reference, and does not begin with patterns in the text's own rhetorical presentation, or as it is well studied in tradition. As a result, many of the key environmental words are single Qur'anic instances, rather than terms that appear dozens, even hundreds of times repeated through the text, and all the more in Muslims' daily practices of reading and repetition.

It is not necessary to probe the commentarial tradition deeply in order to understand what actually is the basic content of the text including Arabic meanings. In addition, the exegesis used in madrasah education, such as *Tafsir al-Jalalayn*,<sup>2</sup> highlights such straightforward points of syntax and morphology. The primary interpretive lens here is just the organization of the Qur'an, such as by identifying themes based on relative emphasis of content found in it. This presentation of Qur'anic themes and their contextual meaning is much on the model of nonconfessional works by Toshihiko Izutsu or Fazlur Rahman, which have been standards in religious studies for half a century.<sup>3</sup> Treatments of Islam *and* the environment rarely consult textual tradition even to this extent, such as when identifying a given term to be “environmental” without first considering what the context, *maqam*, of the verse might also indicate. Selection of terms for lists of “environmental verses” from the Qur'an, furthermore, are rarely guided or supplemented by hadith, reports of sayings and actions of the Prophet Muhammad, which

comprise the basis of much of Islamic law and practical ethics. Hadith supports a Muslim environmentalist perspective like that which I saw put in practice in firsthand field study, which resonates across the areas of Islamic theology, law and ethics, science, aesthetics, and activism in Indonesia and elsewhere.

This chapter opens with Qur'anic material commonly presented as the "environmental verses" of the Qur'an, such as might appear on top of a list of results of an English-language Internet search. Standard environmental key words like *stewardship* and *balance* usually resonate with corresponding content from other cited scripturalized world religions. In general, the Qur'an in this context is thus more associated with a bias to forward "sacred texts" to explain others' religion than with an understanding of the Qur'an's role in the context of the practice, performance, and daily life of Muslims.<sup>4</sup> For any type of study of key word correspondences for an English-language treatment of Muslim environmentalism, such as here in environmental humanities (including religious studies), the next step is to recognize and conextualize them in Islamic sources, which means reading some Arabic, no matter what language systems one prefers for translation or communication.

This approach does rely on some hermeneutic apparatus, however analytical or intuitive this may be. Even bullet lists of environmental verses (as found on the World Wide Web) latently, and arbitrarily, pose unspecified terms of comparison by implication, such as with loose nature concepts that target Muslim religious material. Global Muslims and non-Muslims have only fairly recently adopted English-language nomenclature for *environment* in Islamic idioms. These projects are highly creative, and as such must also innovate new structures of authority to occupy the same Islamic space as does the commentarial tradition. The Internet successfully introduces new privileged, and homogenizing, circulations like these. Since the environment itself is such a fluid English-language concept, rarely defined in environmental studies unless circularly (the environment is the environmental and vice versa), an idea of environmental *commitments* cast as "environmentalism" is the basis for discussion here.

Relevant to environmental humanities first is to observe what concepts are now being identified as most significantly environmental across dynamic contexts and conversations, as in various presentations of "environmental verses." Disruption of the Qur'an's own hermeneutical tradition, such as

with the focus on the idea of "stewardship" (*khalifah/khilafah*) in two or three verses in the Qur'an while ignoring apocalyptic and prophetic tradition, which comprise one-fifth of its content, is a productive initial insight for environmental humanities. Based on conversations about Islam in religious studies that persist today, it bears repeating that this is not a question of the secular scholar judging authenticity of environmentalist assertions as good Islam or bad Islam. It actually represents the bolder step of allowing Muslim systems to generate central humanistic theory that does not remain marginalized only as Islamic studies.

Most of this chapter is occupied with basic description of the textual content that would underlie any such conversation as undertaken by those knowledgeable about Muslim Qur'anic study. There is a significant amount of Qur'anic content presented and described here on the assumption that, as would be expected in European-language humanities, much of this book's audience may have never before read through the meanings of the Qur'an in English-language interpretation ("in translation") even once in entirety. Secondary-source material here cites only English-language scholarship (not Arabic, Turkish, Farsi, Urdu and Bangla, Malay, etc.) with an eye to supporting such newly engaged readers. The Qur'an's structure and style, as Muslims scholars attest, is exquisitely self-referential, recursive, and refracting, thus themes (such as those to which the text itself directs its readers) are best introduced in relation to the entire text's presentation as much as possible.

The latter part of the chapter presents systematic theological propositions, illustrated by the Qur'an's unique presentation, that are found in standard treatments of Muslim environmentalism, past and present. Emphasis is on Qur'anically based approaches, such as how traditional as well as modern religious thinkers construe "resources" as relational entities through foundational teachings. For example, the Qur'an holds that humans are always part of "creation" (defined in absolute contrast to the Creator as in Q. 7:172) and are ultimately judged according to this criterion; humanity thus does not, categorically, represent one side of any human-nature dichotomy. This is even as the Qur'an casts the entire natural world innately in a state of being *muslim*. Furthermore, while "the environment" is presented in terms of resources with benefit for humans and other beings, a starkly utilitarian view of nature is negated by the Qur'anic fact that "resources," too—even inanimate ones—are also "creatures"

participating in the Creator-created relation. Coming with this is a theological and ethical proposition that is relevant throughout religious sciences: the environment, if it is taken to be most generally creation and the committed relations that it engenders in Muslim accounts, makes the conditions of Islam. This premise is the departure point for many contemporary environmentalist expressions, including modern legal thought that is to be considered in the chapter to follow.

Discussion in this chapter stays focused on the text to show how the Qur'an represents these themes through interactive moral frames that have ultimate horizons of accounting (*hisab*) in the world to come, a fundamental Qur'anic teaching that recurs across legal, ethical and philosophical, empirical and practical dimensions. This chapter works through these basic environmentalist ideas from the perspective of the Qur'an's own presentations. For example, the text continually emphasizes that the created world is filled with "signs" (*ayat*) of the relational nature of creation, in its divinely authored state, for which there is prescribed human response or action directed by the words of the Qur'an. The Qur'an's frequent invocation of natural signs also puts focus onto these created resources as being varied scientific elements in the biosphere that are subject to processes that are known as well as unknown. Time after time, the Qur'an presents this as evidence upon which humans are continually instructed to study and reflect. The Qur'an affirms the status of such natural phenomena no matter how big (entire "worlds") or small ("specks," "drops," "atoms") to be "creatures," irrespective of apparent sentience, animate nature, or instrumental utility for humans. The Qur'an typically directs such empirical ethical response with respect to recognizing the blessing of life-giving and life-nurturing resources (or their denial) in this world as in the afterlife. Hadith material speaks strongly in this regard as well, with "environment" often constructed with respect to practical management of resources in the state of being "creatures," such as domesticated animals and wildlife, water and vegetation.

Finally, considering closely Qur'anic rhetoric in a mode consistent with Muslim textual scholarship, there is a foundational tenet that must underlie any Qur'anic environmentalism from an Islamic religious perspective. Past and present approaches to Islam and the environment, including those of Muslims that reflect Anglo-environmentalism, fail to emphasize, and often fail even to acknowledge, the prominent eschatological dimensions of

the Qur'an's message. This is emphasized here for the sake of understanding Muslim environmentalisms as much as Islam. No longer to omit or to overlook these teachings of the Qur'an can render Qur'anic justice as consequential accounting and judgment through the lens of distinctly Muslim conceptions of "environmental justice." The apocalyptic dimension that is neglected in standard treatments of Islam *and* the environment nevertheless establishes essential relations for seen and unseen environmental phenomena with respect to creatures and resources that are applied through systematic disciplines like Islamic theology and law. Chapters to follow on law, science, expression, and ritual show diverse religious modes that all connect resources and creatures to accountability, "signs" to science, as well as environment to justice against these ultimate horizons. This renders a theory and practice that may shift across scales of environmental space and time in much the way the theory of the Anthropocene attempts to do in present-day environmental humanities. However, this is a clear ethics that the Qur'an's rhetorical structure and style connects across a phenomenal scale of experience and ontology. Religiously, this is also precisely the kind of recognition that underlies the tradition of scholarship on the text's "inimitable" nature (*i'jaz*) in eloquent form and comprehensive content, and the Qur'an's expression is now also where study begins.

### Key Word Approach and Standard "Environmental Verses"

Popular treatments of the theme of Islam *and* the environment in English typically list key passages of scripture (Qur'an and sometimes hadith) as "environmental verses," such as excerpts on khilafah, "stewardship." These verse citations then are left to stand for themselves as an environmentalism. This kind of translation, a project enabled by expectations of the autonomous authority of uninterpreted scripture, represents an interpretive strategy that is characteristic of many types of hypermodern "fundamentalisms," including those with progressive orientations. In both the history and the present of Islamic religious sciences like exegesis, single-instance terms or those that occur infrequently like *al-mizan* ("balance") may be highly productive.<sup>5</sup> Before their adoption as environmental, terms meaning "steward," "trust," and "balance" have been used for multiple

conversations in contemporary Islamic religious thought from topics ranging from gender to politics.

Their infrequent appearance in the text means precisely that such expressions are especially open to ideational interpretation. These terms are also particularly amenable to the hermeneutic style typical of modern discourses of Islam (Muslim and non-Muslim alike), which is to quote a single verse as authority on a totalizing theme, likely with respect to a nontraditional topic. This listing of citations in this mode is what is frequently essentialized as Islam *and* the environment, or Islamic environmentalism, across Muslim and non-Muslim domains, including much found posted on the Internet.

A representative example of a scholarly key word approach comes from one of the more prolific voices in Islam and the environment, the British author and activist Fazlun Khaled. In one survey on the topic, titled "Islamic Basis for Environmental Protection," Khaled writes about the "Ethical Foundations of the Qur'an," claiming that the Qur'an is the "primary element" of *shari'ah* (defined here as something like ethical guidelines of Islam that set the limits within which to live). He presents four "basic principles" in the form of Qur'anic key words that, he writes, "may collectively be seen as providing the basis for Islamic conservation practice." These are, quoting his words:

- Tawhid*, which embodies the principle of unity of the Creator and His creation and is the basis of the holistic approach which is intrinsically Islamic;
- Fitra*, which imparts an understanding of the creation principle and locates the human species firmly in it;
- Mizan*, which recognizes the principle that every aspect of creation holds together because it is in a state of balance;
- Khalifa* [a variant of *Khilafah*], which identifies the responsibility principle and the role of the human in the grand pattern of creation.<sup>6</sup>

These are then illustrated by Qur'anic verses. In this treatment, Islam *and* the environment is introduced by way of a list of key words on the authority of scriptural citation. It appears without a clear accompanying hermeneutic or references to standard Islamic religious sciences in which the Qur'an is foundational.

Not mentioned in Khaled's treatment is also that several of these terms appear only a few times in the text. Specifically, *fitrah* (humanity's "original

nature") appears once, in Q. 30:30, with a handful of additional verbal mentions of God's own "origination" of creation; *mizan* ("balance") appears just sixteen times, and almost always in terms of the "scales" of good and bad deeds weighed at judgment (and not as a principle of cosmic harmony); and *khalifah* is in nominal form in the Qur'an a mere nine times, with a few more verbal instances. To further illustrate the point that the selection is arbitrary, the list of "principles" makes no reference to what are, in contrast, many hundreds of mentions of *al-ard*, "the earth," in the Qur'an as a physical, spatial, and moral location—how to "walk upon" it, how not to "corrupt" it, how God "revives" it, or contrasting "heavens" and earth.

Most modern approaches of Islam and the environment, such as in an English-language interfaith context, map "the environment" onto an alternative and limited array of decontextualized scriptural terms, with little consideration for the emphasis they receive in the text of the Qur'an itself. Perhaps the infrequent use of the terms selected is actually helpful in this regard, since an acknowledgment of textual embeddedness that is any denser would require attention to the tradition of Muslim readings of the Qur'an that are liable to decenter mainstream environmentalist norms.

Some Muslim thinkers have attempted to systematize ecotheology along the lines of such key words, and especially with *al-ard*, or "the earth." However, the most common choice for the modern term *environment* overall is an Arabic expression that does not appear frequently in the Qur'an, *al-bi'ah* (as in the title of Yusuf Qaradawi's work, where it translates as "environmental [Islamic] jurisprudence," or in the program sponsored by the World Bank to develop "Islamic law of the environment," releasing a report by the same title).

The term *al-bi'ah* has connotations of "habitation," or "place of settlement," and appears a few times in the Qur'an with respect to God "lodging" a community in a place (such as the Israelites and the Exodus, the Prophet Joseph being "established in the land," and the righteous granted a "dwelling" in Paradise). Yusuf Qaradawi, a leading Muslim intellectual of the late twentieth century, known throughout the Arabic-speaking world but originally from Egypt, defines this term rigorously in this sense, in the Arabic opening of his lengthy modern work on "Environmental Perspectives in Islamic Law," as being "the area in which humans live" or visit or travel. In the next line, following standard environmental sciences, he distinguishes between the two major categories of physical, abiotic ("inanimate," *al-jamid*)



environment, which is the creation of God that humans utilize (*san'a*) as well as environments of the earth and atmosphere, and biotic ("living," *al-hayya*) environments of "humans, animals and plants."

Beginning with this orientation, there are practically countless verses of the Qur'an that could be "about the environment," including any and all of the many that mention conditions in the natural world or abstract ideas like "knowledge" or "oppression." There are hundreds that are explicitly about justice, responsibility, and limits, for example, which are also environmental themes from a humanistic perspective. In the era called the Anthropocene, defined here as the present period in which human activity dominates planetary conditions, all content about humans' history affecting this world and the next, whether the destruction of past communities through "natural" disasters or that which is to come, could also be said to be about the environment. Finally, from the established religious perspective that "the environment" creates the conditions of Islam, it would not be incorrect to approach all the Qur'an's teaching as being environmental in nature.

However, since the 1970s when the environment emerged as a concept along with environmental studies as a field, there have been certain verses in the Qur'an that have been favorites for widespread citation as "environmental verses" in English. (Qaradawi cites these too in his work, *Fiqh al-Bi'ah*.) Sometimes treatments of Islam and the environment consist only of a string of such citations, corresponding in genre to searchable listings of "Sufi verses" or the Qur'an's "verses on women." To cite these passages, as by affirming them to be cognate to biblical ideas (for example, stewardship) or equivalent to other modern environmentalist notions like sustainability, may sometimes represent a total treatment of the topic, Islam and the environment.<sup>8</sup> When consideration of Islam and the environment is comprised of such verses of the Qur'an in Muslim-majority settings, it may also include reports (hadith) about the exemplary prophetic model, or the *sunnah* of the Prophet Muhammad as well.

Any contemporary presentation of Islam and the environment will likely draw on some of the following popular verses, grouped here according to themes as developed by the present author. To begin, there are verses about humanity and responsibility and related limits. These appear to apply in particular to humans as one subclass of God's creatures, not as a general responsibility incumbent on all creation to Him, such as to worship. The

most well-known of these passages, representing the basis of most treatments of Islamic environmental ethics, are nine verses on the designation of humanity as being God's vicegerent, or a *khalifah*. This is a term that can also be translated as the political title of caliph, but here has the connotation of "following" or being a designated "successor." Five out of these nine Qur'anic verses specifically mention being a *khalifah* of al-ard, "the earth," as in the repeated expression translated as, "[God] appointed you successors on the earth." The term appears in connection to the Prophet Noah (Nuh) and Prophet David (Dawud) prominently.

The biblical verses in Genesis establishing a "dominion" for humanity (which Qur'anic material on *khalifah* supplements in an "interfaith" context) are an unambiguous presentation of bestowal, whereas the Qur'an presents humanity's "stewardship" as an ambivalent role and responsibility, as in this verse: "Behold, the Lord said to the angels: 'I will create a vicegerent [*khalifah*] on earth.' They said, 'Will you put in it one who will cause corruption [*yufsidu*, verbal form of *fasad*] in it and shed blood?—While we celebrate Your praises and glorify Your holiness [*wanuqaddisu*]?'—He [God] said, 'I know what you know not'" (Q. 2:30).

The angels' retort to God is attention grabbing: obedient angels do not question their Lord, except for this instance (in a statement, ironically, affirming their very obedience). Also, they are sure that humanity will fail the test and "corrupt the earth." The Qur'an calls the designation of *khalifah* a "test" elsewhere, as in the verse that ends the Qur'an's chapter 6: "And it is He Who made you successors of the earth (*khala'ifal-ard*), and raised some of you above the others in rank, so as to test you (*liyabluakum*) regarding what He has given you. Your Lord is indeed swift in recompense, and He is indeed All-Forgiving (*Ghafur*), Merciful (*Rahim*)" (Q. 6:165). Elsewhere in tradition, the idea of environmental *khalifah* (as in a "green earth") is supported by what is considered sound hadith: "The earth is green and beautiful and Allah has appointed you, his stewards, over it."

Also unlike the presentation in the Hebrew Bible's Genesis, however, the Qur'anic idea of "dominion" (*mulk*, a term that appears frequently and is related to "kingship"), is said to be God's. It is never bestowed on humanity, as the Qur'an emphasizes in more than a dozen instances, and even as a repeated phrase in surah 5 and surah 57 with an expression that means, "To God belongs the kingdom (*mulk*) of the heavens and the earth"; and, in sura 4, a phrase meaning, "To God belongs all that is in the heavens and in the

earth" (which expresses the same idea, but without the exact word *mulk*) appears six times within fifty consecutive verses (126-71).

Related to its treatment of environmental "stewardship," both in Qur'anic themes and ambivalence expressed further in the text, there is also the scriptural notion of the "trust" (*al-amanah*), some sort of responsibility that the Qur'an shows humanity voluntarily to have taken on. This is in the title of the book edited by Richard C. Foltz, Frederick M. Denny, and Azizan Baharuddin, *Islam and Ecology: A Bestowed Trust*. In Muslim theology *al-amanah* ("the trust") is a highly productive modern concept, used for many contemporary theological ideas, precisely because its meaning is openly multivalent in the Arabic Qur'an. The semantic root of *amana*, in the sense of a "trust placed," comes up a handful of times in the Qur'an and appears only once in the unspecified or universal sense, which is exactly the "environmental" verse that is so often quoted (Q. 33:72). Usually in the Qur'an, the word means the trusts (or "covenants") that encumber a specified person. The verbal root of this noun, also meaning "trust," carries connotations of safety and feeling secure. In a derived form, the same root produces the Qur'anic verb "to believe" and the related nouns "belief" (*iman*) and "believer" (*mu'min*), which appear many hundreds of times in the text. Needless to say, these terms and related verses are foundational to Islamic theology and ethics of all types.

The *locus classicus* of the "trust" as it is used "environmentally" is the following single verse: "We did indeed offer the trust [*al-amanah*] to the heavens and the earth and the mountains. But they refused to undertake it, being afraid thereof, but humanity undertook it. They were indeed unjust and foolish" (Q. 33:72). Just as in citations above about *khilafah*, this verse of the Qur'an implies a question as to whether humanity is able to care for the God's creation—and it states positively that humans are "foolish" even to think that they ever could. Usually such nuanced reflections are not highlighted, however, in treatments of the Qur'an's environmental verses, in which the trust is conveyed as a straightforward variant of stewardship in the biblical register, implied to afford to humans God's own unique "dominion" to His creation.

The Qur'an, however, expresses creation's own ambivalence about humans taking on *al-amanah* with their innate foolishness, and when mountains thought this was too much to uphold (Q. 33:72). And even angels, who

practically never talk back to God, question Him disparagingly in Q. 2:30-31 about the decision to afford humanity the imperative of responsibility not to "corrupt" the earth. Repeatedly, the Qur'an evidences the nature of people to be forgetful, wasteful, complacent, ungrateful, hypocritical, and "corrupt," even in the face of the presentation of the consequences of these dispositions. This applies also to apocalyptic scenarios in which humans and *jinn* in the present come in confrontation with future generations, shouting to "sort out" accountability across the altered substantive landscape of the life to come.

There are a few other key terms in the Qur'an that are often taken to be universal environmental principles and thus to comprise a basis of Islamic environmental ethics in an interfaith context. For example, it is rare to find any treatment of Islam *and* the environment that does not invoke *al-mizan*, "the balance," and its single mention in the surah (chapter) of the Qur'an known as Al-Rahman: "And the firmament He [God] raised high, and He set up the balance [*mizan*], in order that you would not transgress [due] balance. So establish weight with justice, and do not fall short in the balance" (Q. 55:7-9). The verse presents *mizan* as a "balance" that humans might transgress. Both terms, *al-mizan* and *al-amanah*, are significant in pluralistic context, while nevertheless they do not appear very often in the Qur'an, and this is a point missed by those who are not accustomed to reading this text in its entirety.

While humanity has taken on particular responsibility to care for God's creation on earth, the Qur'an emphasizes that humans must accept relational limits for the sake of God. In fact, it states categorically the imperative to maintain explicit "limits (*hudud*) set by God," such as that expressed in the command not to "corrupt the earth." Commonly cited verses of this type in the Qur'an include those that express clearly the divine command not to sacrifice a "she-camel," relayed to the community of the Prophet Salih in the book's account of the sacred past. This command was disobeyed by his people, called Thamud, according to the story, which the Qur'an recounts more than once. The consequence of Thamud's disobedience is one of the many "punishment narratives" of the Qur'an, which in themselves provide a great depth of material for contemplating "natural" disaster in the environment as the consequential effect of human actions transgressing limits.

The example of the Prophet Salih and the "she-camel" is usually brought up as a part of a discussion of Islam and the environment with respect to its subfield of Islam and animals.<sup>9</sup> Despite the relatively frequent mention of the term *hudud* in the Qur'an (fourteen times, as in the repeated phrase, "these are God's bounds," with half of the total mentions appearing in the second chapter, Surat al-Baqarah), environmental verses tend to avoid the idea of *hudud*, except to cite verses with environmental terms like the *camel* (which the Prophet Salih's people are commanded not to harm) or the expressed limit to maintain "the earth" free of corruption.

Presentations of Islam and the environment by both Muslims and non-Muslims feature other popular verses that instruct humanity in regard to limits, such as those on the consumption of resources. One that is often cited in English-language sources figuratively instructs humanity to "walk softly (or humbly) on the earth." In context, its English-language meaning in the Qur'an reads as follows: "And the servants of the Compassionate [Al-Rahman, God] are those who walk on the earth in humility [gently], and when the ignorant address them, they say, "Peace [Salam]!" (Q. 25:63).

Muslim advocates of permaculture and organic farming, a subset of Muslim environmentalists, similarly find new meanings in the notion of *tayyibat*, the notion of the "goodness" of what is provided, which they interpret not only as *halal* (licit) but as a command to sustainability. They often cite the following: "O you who believe. Eat of the good things [*tayyibat*] that We have provided for you, and be grateful to Allah, if it is Him that you worship" (Q. 2:172). Contemporary environmentalists quoting from the Qur'an also commonly make reference to verses criticizing overconsumption and being "wasteful." These are backed up in tradition by hadith, as, for example, those on water use, such as those familiar even to young children that would restrict the amount of water for ablutions (*wudu'*), even if water is otherwise in abundant supply. Since there are no Christian-biblical counterparts to this material, which has implications in dietary and ritual law, the verses tend not to be as prominent in interfaith contexts.

Modern Muslim environmental thinkers have also sought in the Qur'an its themes that appear to relate to notions of consumption and sustainability more generally, such as the following:

And eat and drink, but not to excess, for Allah does not love the wasters  
[*al-musrifin*].

(Q. 7:31)

Indeed, the wasteful [*al-mubadhdhirin*] are the brothers of the devils, and Satan has ever been ungrateful to his Lord.

(Q. 17:27)

Terms meaning excessive, unnecessary use (or "waste") are commonly translated into an environmentalist frame of sustainability, meaning something like "overconsumption." (The clear and frequent textual pairing of this with a Qur'anic relational response of "thankfulness" to God is usually not highlighted, however.) The context of the second verse (Q. 17:27), with respect to the verse that precedes it (which is, to paraphrase here, to give rightfully and generously to one's servants and the poor [*miskin*] and not to "waste wastefully" [*wala tubdhdhir tabdhiran*]) as well as the verses that follow, seems to have a more specific meaning of dispensing earned wealth or money fairly and equitably. In this, "squandering" is one extreme to avoid, as is giving out too much at the other extreme ("lest you be reduced to poverty," Q. 17:29). Be this as it may, it is still key words like *stewardship* and *balance* that remain more familiar representations of the standard English-language listing of the Qur'an's environmental verses.

Among the verses that are the most widespread in Muslim-majority religious settings for discussion of environmentalism, such as in non-English-language contexts and especially in connection to law and ethics, are the Qur'an's many exhortations not to cause "corruption" (*fasad*).<sup>10</sup> There are two verbal forms of this Arabic root that appear in the Qur'an, one more intensified than the other, and with both verbs conveying related nominal forms. All of these account for about fifty total instances in the Qur'an, almost always as a prohibition against "destruction," "degradation," or "corruption," expressly as *fasad*. What follows are two examples:

Do not cause corruption on the earth [*wa la tufsidu fi'l-ard*] after it has been set in order [*ba'd islahiha*]; this is better for you, if you are believers.

(Q. 7:85)

And, this is the end of another verse, the words of the Prophet Shu'ayb admonishing his people.

But seek, thanks to what Allah gave you, the Hereafter, and do not forget your portion here below. Be charitable, as Allah has been charitable to you, and do not seek corruption in the land [*wa la tabghi al-fasad fi'l-ard*]; for Allah does not like the seekers of corruption [*al-mufsidin*].

(Q. 28:77)

In context, the first instance (Q. 7:85) is words of the people of the Prophet Musa (Moses) admonishing Karun (Korah). Both verses appear in the context of "fulfilling the measure and the weight" (Q. 7:85), not "forgetting your portion" (Q. 28:77), respectively. Corruption (*fasad*) in these textual instances is generally understood by the Qur'an's readers to be moral corruption, although commentators like Al-Tabari (d. 923) have indicated other meanings. In most instances of *fasad* in the Qur'an, the word for "earth" (*al-ard*) appears in the same phrase.<sup>11</sup> These instances are specific commandments to specific persons or people. Typically in the Qur'an's verses containing *fasad*, and when the term appears in conjunction with the appearance of the word *al-ard*, it is the latter key word that likely triggers it initially as an "environmental verse" on the part of English-speaking compilers.

There are instances in which the addressee of the command not to make *fasad* is general and not specified as a historical person or community. An example is Q. 7:56, which precedes the first textual instance cited earlier from the Qur'an's chapter 7 (this is a chapter containing many lengthy "punishment stories" for corruption). This verse also identifies *fasad* as going against the natural order of the earth. It reads: "Do not do cause corruption on the earth [*wa la tufsidu fi'l-ard*] after it has been set in order [*ba'd islahiha*]," with the verse continuing, "Call on Him [*wad'u hu*] with fear and hope."<sup>12</sup> The next verse recounts natural "signs" of God in creation: wind, clouds, water, fruit, and "revival of the dead," as in the land coming to life after rain, and also implying resurrection on Judgment Day. In the Qur'an's characteristically shifting rhetorical style, verse 7:58 next follows this with a parable of the "good land" (*al-balad al-tayyib*): "The good land [*al-balad al-tayyib*] produces vegetation by the will of its Lord; but that which has gone bad will not produce vegetation except with difficulty. Thus We [God] make plain revelations [*ayat*] to a people who give thanks [*liqaumin yashkurun*]."

Then the Qur'an immediately begins a series of stories of previous prophets, Noah to Moses, whose people, like those of Shu'ayb (Q. 7:85) disobeyed the clear commandment not to spread corruption on the land.

Many key environmental terms of the Qur'an are translated from an ambiguous original meaning into a moralized environmental framework. In contrast, *fasad* can connote nothing other than a normative judgment from the start, as in "degradation," "destruction," or "corruption." It is also a legal idea as well as an ethical principle, and as such *fasad* represents one of the specified boundary-transgressive (*hudud*) crimes for which the Qur'an prescribes unenforced punishment (Q. 5:33). There is very little positive law in the Qur'an overall; if norms draw on a textual source, they are usually based on hadith. Traditionally, these exceptional acts mentioned in the Qur'an are stealing (sometimes "highway robbery" is included as a separate category), illicit sex, and some instances of slander; drinking alcohol is usually also included, but is a special case in the Qur'an, and one for which there is no punishment indicated. Other offenses are added to these by some jurists, and there has been little attempt at enforcement on the part of the state before the European-colonial era. It is on this legal-textual basis that some religious scholars have ruled environmental degradation (as *fasad*) categorically forbidden, or *haram*, and it is a common reasoning for contemporary environmental fatwas.

Besides the modern term *bi'ah*, expressions that are commonly used for environment in Modern Standard Arabic often convey a sense of a "landscape," such as *muhit* ("surroundings," like the "ocean" in the Qur'an) and *wasat* ("expanse"), but these appear only in a few instances in the Qur'an. By far, the word most frequently found in Qur'an of these is the Arabic term for earth, *al-ard*. Muslim ecotheologians often use this key word from the Qur'an, which occurs over four hundred fifty times in the text (the total verses of the Qur'an, recall, number somewhat over six thousand). These include the references not to "corrupt the earth," since the term for *earth* commonly appears in conjunction with *fasad*. While not as often developed as a theme in contexts of "interfaith dialogue," it nevertheless does translate readily to the English-language environmentalist expressions like "Earth Charter," "earth ethics," "Mother Earth," "spaceship Earth" (after the famous photograph, NASA's *Earthrise*). Some Muslim theologians have attempted to construct an original and systematic ecotheology based on this term, not because of the popularity of the English-language cognate but because it is



so robust in Qur'anic discourse; an example comes from Muhammadiyah in Jogjakarta, Indonesia, the same group that promoted "charity" recycling.<sup>13</sup>

When "environmental verses" are sought from the Qur'an for popular presentation, they often focus on a particular key word like *khilafah*, *amanah*, *mizan*, *fasad*, or *al-ard*. In English-language settings, the frequency of occurrence or emphasis in the Qur'an does not seem to be a factor, and such context is likely of little interest to those who are not concerned with the complete text. If relevance to the Qur'an's "major themes" were more significant to this hermeneutical project as an integral part of environmental humanities, instead of producing scriptural cognates or identifying key words, it could be that a robust concept like *fasad* might be selected as an "environmental" principle, rather than a more rare term such as *balance*.

Frequent Qur'anic expression that would highlight social and environmental justice is coming to be developed in modern Muslim formulations. For example, "oppression" (*dhulm*), is extremely common in the Qur'an, appearing about three hundred times in its nominal and verbal variants, and is a powerful expression of justice, environmental and otherwise. Moreover, the term *jihad*, once popular in postcolonial modernist social rhetoric, is still used for environmental effort in Muslim settings; however, its meanings, invented since the mid-twentieth century as a concept of struggle against "non-Islam" (whether directed to non-Muslims or to other Muslims), make it less appealing for an environmental connotation, compounded by reactionary orientalism. The Quranic material on "standing for justice," as in the verses "stand up for God as witnesses to justice" (Q. 5:8) and "stand up for justice as witnesses to God" (Q. 4:135) are significant in terms of present trends in the environmental humanities.<sup>14</sup>

A straightforward reading of the text itself, without index or lexicon, identifies environmental content like this directly, compounded by the sort of pattern-matching attention to structure and style that typifies the traditional study of the Qur'an's rhetoric (*balaghah*). A typical Qur'anic statement on deluded greed, materialism, and poor relationships with others, for example, including a vivid description of their ultimate consequences, are the meanings of the short chapter, 104 Al-Humazah. The key word in Arabic (*humazah*) sounds much like the word to which it is apposite in the first *ayah* (verse), *lumazah*, and commentators have noted that each term carries connotations of both slandering and calamity associated with the Qur'an's phrase "eating the flesh of others" (cf. Q. 49:12). Al-Humazah reads:

## A QUR'ANIC ENVIRONMENT

1. Woe to every slandering backbiter [*humazah lumazah*]
2. Who amasses wealth and tallies it
3. Supposing his wealth makes him immortal.
4. No! He shall surely be cast in the crushing Fire [*al-hutamah*].
5. And what shall explain to you, "the crushing Fire?"
6. The Fire of God, ignited
7. Which engulfs hearts [*af'idah*].
8. Truly it encloses upon them
9. In pillars outstretched.

The structure in which the Qur'an introduces an idea (*al-hutamah*), then "explains itself" through a rhetorical question, is typical of shorter suras in the Qur'an, found at the end of the book. These reflect a strongly apocalyptic attitude, said to have been revealed in the period during which the Qur'an was first believed to have been revealed when the Prophet Muhammad was in Mecca.

Emerging environmentalist approaches draw on core ideas in Islamic faith and practice and display the same creativity as Islam and the environment in their selection. In his handbook on Islam and the environment, *Green Deen*, for example, Ibrahim Abdul-Matin starts with a survey of key words, but then moves on to a praxis and cosmology grounded in Muslims' lifeworlds, such as with his book's main theme, based on hadith, "The Earth Is a Mosque." In another example, a contemporary scholar of Qur'an and lecturer in Arabic in North America, when discussing environmental ethics in the Qur'an "beyond key words" once remarked that *kufr* (unbelief) is a key concept for Muslim environmental ethics in her view, since Qur'anic *kufr* means to willingly cover up what one knows to be true. For an example, she suggested, continuing to eat meat when it is already clear that it is harmful from an environmental standpoint is a case of "covering" or denial of the truth. As will be illustrated in chapter 6, in fieldwork in Indonesia I observed a widespread pattern in which environmental leaders have been similarly developing other ideas that express the first two names of God, al-Rahman (the Merciful) and al-Rahim (the Mercy-giving), featured in many hadith. This represents a prominent lived environmental teaching and practice across Muslim Southeast Asia, informed by traditions of piety that are shared worldwide.

Qur'anic Themes of Resources as "Creatures":  
Earth, Water, and Trees

The environment as foundationally expressed in terms of resources is standard in Islamic tradition, reflecting the ethos of much of the material now recognized as "environmental" in Qur'an and hadith. The consequential theology of accounting that connects such phenomena in this world to the next, such as with the Qur'an's expression of ontologies of "creatures," includes more than the human and even sentience. In addition, the Qur'an emphasizes the environment as life-sustaining resources that are also signs. Although this is typically not the kind of material first to appear in search results on Islam and the environment, its preponderance in tradition means that Muslims would turn to these orientations when there is a question of "the environment" in real-world terms for which Qur'anic guidance is sought. While phenomena like water, plants, or even "the earth" have utility, in terms of Qur'anic rhetoric their instrumentality or use-value is secondary to their principal environmental (ontological) constitution. As evidenced by the material that will follow in the course of this discussion, environmental significance continually comes from these resources being both signs and creatures.

Resources defined in terms of "life" (giving life, sustaining life, and so forth) are a fundamental expression in the Qur'an. These are foundational to a Qur'anic environmental conception. Such resources constructed as the landscape, the very space humanity and other creatures need to survive, is a core idea of environment supported by Qur'an and developed in classical sources. In his book *The Environmental Dimensions of Islam*, scholar Mawil Izzi Dien opens up his own discussion of "the concept of the environment in the Qur'an" with the ideas of *ma'ayish* and *masakin*, which refer to "a place where food and life exist" (the root of the first word means "life") and a place of stillness (the root of the second term) and habitation, respectively.<sup>15</sup> He provides the following scriptural support: "It is We [Allah] who have placed you with authority on earth [*al-ard*], and provided you therein with means for the fulfillment of your life [*ma'ayish*]. Little you give thanks!" (Q. 7:10). The Qur'an elsewhere describes the biosphere similarly as *dhalul* (manageable) and also *bisat* (extended, expansive).<sup>16</sup>

Mentioned already in this regard is the connotation of the Arabic word for "earth," *al-ard*. It is the substance of creation, the place of origination and return, as in Q. 20:55, "From [it] did We create you, and unto it shall We

return you, and from it We shall bring you out again." Izzi Dien writes that there are other terms to describe earth, which, according to him, emphasize "its value and importance as humanity's only refuge." For example, he notes, the Qur'an sometimes uses the same root as that for "cradle" (*mahd*) and for "settling down" (*qarar*). Izzi Dien also makes a distinction between God's acts of "creating" (*khalaqa*) and "making" (*ja'ala*), commenting that in the Qur'an much in the phenomenal world is said to be "made" from something else, which seems to be a paradigmatic divine act of resource use.<sup>17</sup>

In his book *The Environmental Dimensions of Islam*, Izzi Dien expands on this to propose that the notion of environment in Islamic tradition might be viewed to be like that found in the following explanation of Hanbali jurist Ibn Qayyim Al-Jawziyya (d. 1310), a follower of Ibn Taymiyya. Al-Jawziyya develops the Qur'anic idea of "the earth" as a collection of biodiverse habitats in his work *Miftah Dar al-Sa'ada*, writing:

The earth was spread out and made large enough to give space for habitations, *masakin*, of humans and animals that includes cultivatable land, pasture land, orchards, and vegetable gardens. If someone asked what was the wisdom of making empty desert and barren land [points of categorical concern of Islamic environmental law], he should be made aware that it contains the environments, *ma'ayish*, for a number of beasts and animals that cannot be counted save by God. Their livelihood depends on this land, in it they run, and they live there in homes and cities like humans. In it there is the ample space [*majal*] they need, and where they can spend their summers and winters.<sup>18</sup>

Continuing in this vein, according to Izzi Dien, Al-Jawziyya explains that the notion of "environment" is further defined now in gendered terms by the quality of ample provision of resources within the system of connected habitats: "The wisdom of God made the earth like a mother that carries inside its womb different kinds of children. It acts for them as a container, *kifatah*, that supports the living and hides the dead.<sup>19</sup> . . . Observe the great wisdom of God who has made plenty of what His creatures need. The more they need a thing, the more was made available by God. . . . The best examples are the four basic elements, *al-usul al-arba'a* [dust, water, fire, and air]."<sup>20</sup>

At this point, and consistent with fields of natural history and sciences that Muslims first developed from Greek paradigms over a millennium ago, Al-Jawziyya discusses each of these elements within the framework of

environment (*ma'ayish*) as a place to live and thrive. Each is depicted in terms of being a kind of a natural resource in turn, with fire being somewhat exceptional in that it is a discovered (and not readily apparent or available) element that provides utility, as well as a potential danger, to humanity.

Resources are provided to all creatures, and specifically for humans to use and to share, and in that are signs (*ayat*), as the Qur'an continually points out to its readers. This framework highlights the utility of material resources and their function as signs. The Qur'anic environmental message in this regard is more than avoiding exploitation and exceeds "sustainable" or responsible use on the part of humans. Resources, even when not allegorized (as in, cases of *real* trees and forests that can be planted, cut, and burned), also point to sophisticated and nonanthropocentric environmental principles because of their dual existence as "creatures" with whom humans have relations. This is presented in richly emotive language. Creations like livestock for example are presented in the Qur'an not only as instruments to satisfy human physical needs but also for more intangible benefit such as to experience feelings of happiness or pride (such as with Q. 16:6, to which we will return). The earth is not just a landscape to inhabit or to traverse and which sustains life, but provides unseen "tent pegs" (*rawasi*) to meet a need for stability, which humans take for granted or of which they are not aware. Such subtlety in the function of signs, including affect and sentiment, relates also to the awareness of how these "resources," being creatures themselves, themselves have relations too with Allah.

Besides water, one resource treated in detail in the Qur'an, and especially in hadith material, is trees. There is a great deal in the corpus of hadith on trees that is seldom included as part of what are now nearly canonical environmental verses in English. Nevertheless, and based also on data from years of field-based research in Indonesia, these are also probably the statements that Muslims have known and cited far more frequently with respect to environmental resources. Furthermore, as will also be discussed in chapter 6, they establish a clear basis for an Islamically based practical theology of environmentalism today.

Here trees illustrate the designation of environment as both "creatures" and "resources." In the Qur'an, trees, like all creation, are beings who worship Allah, as given in the following verse from the well-known chapter Al-Rahman, "And the shrubs (or, stars) and trees bow down (in worship, *yasjudan*)" (Q. 55:6). There is also much in the *sunnah* (model of the Prophet

Muhammad, conveyed by hadith) that is about trees in their aspect as resources, such as a prohibition on cutting down trees in times of war. There are many hadith from canonical collections about the obedience of trees, especially to the Prophet, such as coming to him when believers are summoned (then moving back), even easing his way. Trees are not just to be utilized or appreciated emotionally as "resources," but are to be appreciated relationally by humans as having their own feelings, too, as creatures (*makhluq*), as in the example given in chapter 6, the date palm tree that loved the Prophet.

The conservation and preservation of this resource is a meritorious action, and the planting of trees is an act explicitly rewarded by God according to prominent material in Islamic tradition. Just as providing water to others is a meritorious action, to support forestation is also a rewarded act. A hadith that I often heard quoted in Indonesia in connection to tree planting was, "Those who plant a tree and patiently tend to it until it bears fruit will have the reward of charity from God." It is similar to the following canonical variant, which I also heard: "Narrated Anas b. Malik: 'Allah's Apostle said, "There is none amongst the Muslims who plants a tree or sows seeds, and then a bird or an animal or a person eats from it, but it is regarded as a charitable gift for him"' (Bukhari)."

Cited in context, this indicates a core idea that runs deeply, perhaps even definitionally, through applied Muslim environmentalism in contemporary Indonesia, that the best way to a religious goal (reward of Allah) is through the proper and compassionate care and management of natural resources. For example, deforestation on Java has led to a prominent focus on tree planting in Indonesian Islamic environmental action. Already a part of Javanese tradition (newlywed couples will customarily plant a tree together), as well as part of the colonial legacy of plantations in Indonesia, it has a major symbolic and ecological significance, supported as it is by the great number of hadith that call to plant and preserve trees and to protect areas around them.

When it comes specifically to reforestation, in Muslim Indonesia, these injunctions may become fused with national policy, including the official implementation of programs such as REDD and REDD+ (the United Nations schemes for carbon conservation). The designation of conservation areas known as *hima* and *harim*, discussed further in chapter 5 and extending in tradition back to the time of the Prophet Muhammad (thus considered to be like *sunnah*), is based on protected wildlife areas or the conservation

perimeter drawn around trees and water. In the case of forests, Indonesian rainforests no less than any, Islamic religious significance is matched by environmental urgency in the twenty-first century. The catastrophic burning of rain forest across Indonesia, especially in Sumatra and Kalimantan, in the past decade reached unprecedented levels at the time of the completion of this book. The regional issue has global impact, not only in terms of the immediate health effects of transboundary haze smoke, but with the climate impacts of the burning; greenhouse gas emissions from the fires in 2015 exceeded that of industrialized nations like Germany in an entire year; the smoke and fire elicited religious response in Indonesia in recent years.<sup>21</sup>

In Qur'anic readings of the past and present, it is the habitation itself, as a "resource," and with the characteristic of sustaining and protecting life, that is a core environmental concept. Identifying the idea of a "habitat with resources" as "the environment" contrasts somewhat with the genesis of the modern use of the concept of the environment in English insofar as nonsentient phenomena (as in "nature") are also "creatures." In addition, to the extent that the modern notion of "the environment" comes out of notions of problem and crisis, there are theoretical differences. The Qur'an, however, already expresses an idea of environmental crisis in the past, present, and future in its apocalyptic themes. These are encompassed by the ethical notion of the "test" of living on this earth as a creature in relation to the rest of sentient and nonsentient creation, including resource use. This is echoed in the Qur'an's parable of "blighted gardens" (Q. 18:32-44), for example, which stresses awareness of the contingency of the environment and its resources on Allah's care. Other "punishment narratives" of destroyed cities and societies in the Qur'an present the ultimate worldly calamity to be catastrophic environmental destruction (flood, fire, rains of stones, and so forth). As a religious system, the ethical horizons of Muslim environmentalisms also naturally incorporate the limit point of today's humanistic environmental theory, the inevitable end of this world.

### God's *Sunnah* and Accountable Relations

When preaching about the environment (*lingkungan hidup*), preachers in Indonesia and elsewhere frequently structured environmental teachings around the idea of intersecting vertical (*hablun min Allah*) and horizontal

(*hablun min al-nas*) connections. This is a dichotomy used for elucidating many Islamic religious subjects, especially prominent in Muslim Southeast Asia. The vertical dimension of the connection of humans to God is emphasized Qur'anically in Q. 3:103, which is the famous verse of "the rope of God": "And hold fast, all of you together, to the rope [*hablun*] of Allah, and do not separate. And remember Allah's favor unto you: how you were enemies and He made friendship between your hearts so that you became as brothers by His grace; and [how] you were upon the brink of an abyss of fire, and He saved you from it. Thus Allah makes clear His signs [*ayatih*] to you, so that maybe you will be guided." Another of the Qur'an's verses appearing soon after the quoted verse is Q. 3:112, "bound by a rope from Allah and a rope from the people" (*bihablin min Allah wahaiblin min al-nas*). In these verses, holding to the bond of Allah also ties together the community. (This meaning is even clearer when the verse's text is read in the context of its chapter, Al 'Imran.) In Indonesia, Muslim religious environmental theory and practice also cite the horizontal connection among humans and vertical connection to God, *hablun min al-nas* and *hablun min Allah*.

Muslim environmentalist preachers in Indonesia commonly add to this bipartite division a third Qur'anic concept, *rahmatan lil-'alamin* (alternatively expressed as a *hablun min al-'alamin*), sometimes also an expression relating to the Prophet (who is known as a "mercy for the worlds," *rahmatan lil-'alamin*, in reading of the Qur'an, Q. 21:107). In this context, however, the phrase is intended to indicate a relational dimension of "the environment." That the word *'alam* means "natural" or "wild" in Indonesian, as well as sounding like the word meaning "world" in Arabic (as in "Lord of and sustainer of worlds" in 1 Al-Fatihah), makes for an easy extension to environmental ideas. The word *rahmah*, as "mercy," also is the basis for much environmental teaching in Southeast Asia that emphasizes compassion for God's creation, just as the Prophet Muhammad was known to practice it, in order to receive the mercy of God in this life and the next.

In my own interviews with dozens of *kiai* (religious teachers and scholars) in Indonesia, the Islamic teachings they would give on the environment would invariably include this third term, *rahmatan lil 'alamin*, "mercy to the worlds." Their own explanations for this, when asked why, were often expressed by the idea that the whole universe (Ind. *alam semesta*) is the *sun-nah* of Allah.<sup>22</sup> Thus human beings are responsible for maintaining connections across three dimensions: with God, with other humans, and with



Allah's *sunnah*, here meaning something like "participating within creation." Unlike another fundamental idea of human "nature" from the Qur'an (*fitrah*), which is a stative idea (as in the common aphorism that the natural state, *fitrah*, of all beings is "Islam"), *sunnat* Allah is an active paradigm. For the environmental humanities, this expresses a key distinction between "Creator and creation" as an inclusive and verbal relation, not a subject-object binary like "Man and Nature," which is a famously anthropocentric premise.

For some preachers like K. H. Fuad Affandi of Pondok Pesantren "Al-Ittifaq" in West Java, Muslim environmentalism may be comprised by the dynamism of these relations in Islam, which the Qur'an emphasizes are measured on scales of "justice" for all human and nonhuman beings. K. H. Affandi once asked a rhetorical question in an interview, "Which of these four things can you take away: the tiger, the deer, humanity or wood [trees]?" He answered, "None of them!" He explained that they are all connected, all within the "sunnah" of Allah. "What's dangerous," he added, "is if any one of them were ever to disappear." In the Qur'an, the primary dimension, and that upon which contemporary Muslim ecotheologies tend also to focus, is the correct relation of created to Creator, or between worshiper to Him who is worshiped. In this, humans are instructed to learn relationally from the example of God's other creatures (like trees, for example) which, unlike people, will never fail to worship intrinsically by nature.

All creation, the Qur'an continually points out, praises God, as in the following verse about Creation making prostration (*sajdah*) to Him in prayer: "See you not that to Allah prostrate (*yasjudu*) all things that are in the heavens and the earth: the sun, the moon, the stars, the hills, the trees, the animals, and a great number among humankind" (Q. 22:18). And, as mentioned above, there are the well-known rhyming verses that open 55 Al-Rahman, which appear right before the appearance of the "balance" (*mizan*, mentioned earlier), that invoke a similar act of nature's worship, including the verse about praying shrubs (or stars, *al-najm*) and trees that was previously cited: "(1) Al-Rahman [a Name of Allah] (2) Has made known the Qur'an (3) Has created humanity (4) He has taught him utterance (5) The sun and the moon run their course (6) The stars (shrubs) and the trees prostrate in worship (*yasjudan*)." Humans, then, worship like and as creatures, just as do the trees in verse 6.

In line with contemporary Islamic ecotheory, such as that of Sarra Tlili, animals and other apparently nonsentient creatures act as a model for how to be in constant state of worship—their ultimate function of “utility” as a resource for humanity, as it were. The contemplation of signs that the Qur'an calls for, many hundreds of times, is to learn how to respond to Allah (as in prescribed emotions of thankfulness, *shukr*, and pious apprehension, *taqwa*). In addition, the signs instruct on how to be a creature among other creations in a horizontal dimension.

Following this, to place humanity at the center of this system is a matter of perspective, not one of ontological privilege. In her book *Animals in the Qur'an*, Sarra Tlili claims that the Qur'an depicts humans as *mukallaf* (in jurisprudential tradition, this means an “accountable person”: adult, sane, and having received the Islamic message); as such, they bear responsibility that other creatures do not. Humans celebrate and worship God out of choice through His will, whereas “nature” has no autonomous freedom or choice in this respect. Nevertheless, humans only partially understand God's creation and do not ever stand in as “minigods,” even as designated *khalifah*. Humans are a part of a creation charged with *tasbih*, the worship of Allah. Muslim humans (and presumably also Muslim jinn), pray as a ritual, but creation worships naturally as *sunan*, Tlili explains, for example: “Have you not seen that Allah is glorified by [*yusabbihu lahu*] whatever is in the heavens and the earth, and by the birds in flight. He knows the prayer of each [*salatahu*] and its glorification [*tasbihahu*]. Allah knows well what they do” (Q. 24:41). Even as the Qur'an makes statements such as this, Tlili also observes, it adds in the text immediate reminders of what humans do not “know well,” with their limited and willfully mistaken comprehension of creation. That animals have perfected the worship of Allah (*tasbih*) in the Qur'an is one of the foundational points on which Tlili grounds her brilliant, “nonanthropocentric” reading of the Qur'an.<sup>23</sup>

Today's ecological teachings by international scholars emphasize something similar to a “deep ecology” or even ecofeminism, based in a Qur'anic system like the “signs” of God. Besides Tlili, others emphasize that humans are instructed to worship by nature itself, and that the very resources from which humans benefit in other ways are also creatures more adept at worship than is humanity. The Qur'an's verse Q. 33:72, that the heavens and the earth might have taken on God's “trust” (*al-amanah*), could now be read not only as affirmation of designated “stewardship” (as do Foltz,

Denny, and others in the volume *Islam and Ecology*) but also in light of indicating the Qur'anic presentation of humanity as remaining on the same side of the Creator-created divide as the rest of creation. From this it also follows that humanity bears a singular responsibility to act like the rest of creation (as mukallaf, as Tlili shows); and, as stated earlier, humanity is expected to fall short in their charge except for the relational mercy of God.

The verse Q. 33:72 further implies and that the trust (al-amanah) could have been the mountains', to whom it was offered, but who declined it; humans therefore also share a commonality with sentient creatures as well as nonsentient ones in this regard in the Qur'an. An "environmental verse" of the Qur'an that is fundamental for clarifying the equivalence of humanity to other creatures is the following, which implies that nonhuman beings also have a "community" (*ummah*), just like people do: "There is not an animal that lives on the earth, nor a being that flies on its wings, but [forms part of] communities like you [*umamun amthalukum*]. Nothing have We [Allah] omitted from the Book [the Qur'an], and they [all] shall be gathered to their Lord in the end" (Q. 6:38).<sup>24</sup> This meaning appears to many like a "deep ecology" of the interspecies ontology of creatures. Furthermore, and as will be discussed in chapters to follow, this famous verse conveys an additional environmental epistemology of the imperceptible but "not omitted" (like insects), another key point of Muslim environmentalism and its ecotheology of empiricism.

To be mukallaf in Tlili's sense means more than a legal status; it is to have met a level of challenge, to be tested with respect to clear and certain criteria of the Qur'an that are affective, intellectual, and active. Islam expresses an ethics of responsibility that other cosmological models in environmental humanities do not present on the surface, except through more vague moral sentiment, such as a return to "nature" as the alternative to or refuge from the modern. Through its signs, the Qur'an's rhetoric painstakingly explains the relation of the natural world to ethical consequence in this world and the next.

### Qur'anic Rhetoric: Signs in This World

Although it does mention the audition of the jinn, the teaching of the Arabic Qur'an is aimed at the humans who teach, read, and hear it, however, not

other kinds of creatures (who may be otherwise "inspired"). Other creatures become the very signs (*ayat*) that point to conduct and response with respect to Allah as well as the creation of His authorship.<sup>25</sup> The Qur'an does not show a truncated human-world relation to be subject to judgment, but really an entire Creator-created system, for which processes and reactions are continually described across all the humanistic dimensions: with God (*hablun min Allah*), with other people (*hablun min al-nas*), and across all creation (*hablun min al-alam* or *sunnat Allah*). All creatures, even inanimate ones, are bound together in their life-supporting systems (*ma'aysh*) in worship of Allah, and with all the expanse of earth defined in a hadith as a *masjid*, a place of prostration.

In a rhetoric so sophisticated that classical scholars prove the text's "inimitability" through its semantic and syntactical analysis, the Qur'an also invokes numerous natural forms and their properties (as the very stability of the ground itself) as signs, from faraway celestial objects to the smallest of insects, and even natural and environmental processes such as biological reproduction and the water cycle through rain. Furthermore, these environmental signs on this earth may also have palpable counterparts in the transformed landscapes of unseen worlds to come, such as in the rivers that the Qur'an describes many times that flow in Heaven and the boiling water of Hell.

Like trees, another key example of a resource as a sign is water: water appears as rivers, as rain from the sky that revives the dead earth (just as the dead themselves will be revived judgment),<sup>26</sup> as seas both salty and fresh that are a means of transportation as well as a source of bounty, and as the very substance in which life materializes. In the Qur'an, signs like the properties of water come in sections listing natural phenomena, such as Q. 2:164: "Indeed, in the creation of the heavens and earth, and the alternation of the night and the day, and the [great] ships which sail through the sea with that which benefits people, and what Allah has sent down from the heavens of rain, giving life thereby to the earth after its lifelessness and dispersing therein every [kind of] moving creature, and [His] directing of the winds and the clouds controlled between the heaven and the earth are signs [*ayat*] for a people who use reason." In the Qur'an the phenomenal world shows signs of God (as "creatures," *ayat Allah*), pointing to His creation, and, as such, they act as "mercies" for humankind.

Although such signs are often presented in terms of their benefit or utility, as in the previous discussion of the ontology of "resources," the Qur'an does not always present signs of God in a positive affective environmental register. Qur'anic rhetoric of *iltifat* (changing frame of reference) shocks and surprises Qur'anic readers out of benign instrumentalism.<sup>27</sup> When considered as the processes that they are revealed to be, the signs can be viewed in terms of the Qur'an's constant and immediate prescription of an internal response, a process of reflection, worship, sentiment, or moral change or commitment. Signs come actively to prophets through petition, as when the Prophet Yahya (John the Baptist) asks for a sign (which came in the form of silence, a contrast to the "word" of the Prophet 'Isa [Jesus] himself, also a sign). Prophets also enact signs, as in many events also surrounding the Prophet Jesus. Signs may be past events, such as the destruction of past communities, the evidence of which the Qur'an's readers are instructed to seek out and to reflect upon, even in their own lived landscapes. The Qur'an, in its uniquely self-reflexive and self-referencing style, presents even itself as a sign, a "proof," as well as a "miracle" (*mu'ijizah*), and *ayat* is also the Qur'an's own term for its embodied, recited, and rehearsed textual verses.

An example of the Qur'an's rhetorical depiction of the interrelated aspects of its environmental signs follows. Chapter 16 of the Qur'an, *Al-Nahl* (called "The Bees"), opens with a section on the natural world as God's creation, starting in verses 3-4, which pair the origin of the universe and the creation of human life:

3. He created the heavens and the earth in truth. Exalted is He above the partners they ascribe.

4. He created man from a drop, and behold, he is a manifest adversary.

The chapter continues, listing the tangible gifts of creation to humans in the form of livestock. The benefits are immediate and palpable (warmth, food), aesthetic (beauty), as well as potential (making it possible to travel "to a land you would never reach"). The surah continues in verse 8 to mention the domesticated animals that humans ride (horses, mules, donkeys), and includes not only the benefit of transportation but other benefits such as "adornment." This is typical Qur'anic rhetorical presentation, a sort of

proof by amazement, by which one idea—benefits of livestock—is shown to have multiple dimensions that exhaust what the human mind can grasp. Al-Nahl continues next with signs (ayat) on which the Qur'an instructs readers that they should now "reflect" (verse 11), such as water for people, plants, and animals (verses 10–11); plants in and of themselves (verse 11); night and day (verse 12); and even the spectrum of color (verse 14). These are mentioned along with the sea, mountains, and so forth (verses 14–16), which people may inhabit, traverse, and navigate. The section ends in verse 17 with a striking rhetorical shift to a question addressed directly to the reader, indicating the uniqueness of divinity as Creator and echoing the themes of the previous verses 3–4, "Is He Who creates like one who creates not?" Next, a textual confrontation challenges the reader to active participation, "Will you not, then, reflect?" And, the section concludes in Q. 16:18 with the idea that there is more than could ever be said about these "blessings": "Were you to count Allah's blessings you would not exhaust them. Allah is All-Forgiving, Merciful (*laghafurun rahim*)."

The next section emphasizes the all-knowingness of the deity, especially His knowledge about what humans are trying to cover up ("what they conceal and what they reveal").

No matter what the Qur'an prescribes as response (such as to "think" or "reflect," to be "thankful," or to "pray" and "pay *zakat*," and so on), signs of various kinds in the natural world point to Allah as Creator. Al-Khaliq (the Creator) is one of the names of God, commonly used several times for divinity in the Qur'an. Signs in the natural world (including celestial objects, and often even the "heavens" themselves) are proof of the point that Allah alone is the Creator. Besides through signs (ayat), parables and similes demonstrate these environmental themes as well, such as verse Q. 22:73: "O people, a parable [*mathal*] is set forth: pay attention to it. Those who call upon anything other than Allah shall never be able to create even a fly, even if all of them were to come together to do that. And if the fly were to snatch away anything from them, they would not be able to recover that from it. Powerless is the supplicant; and powerless is that to which he supplicates."

The phenomenal world—here just a tiny fly—indicates the power of Allah to create, a power that humans do not possess. Furthermore, the verse indicates that no other divine reality exists; there are no other "gods" because there is no power and no strength (*la hawla wa la quwwatah*) for creation

other than with Allah, as in a common pious expression based on hadith of the utterances of the Prophet Muhammad. In this context, the parable of a tiny creature (of which there are many in the text, as with various insects) conveys power and protection to be fundamental to the committed relations that constitute "the environment."

Signs, ayat, even those as small as insects, invite a kind of "natural contemplation" in the Qur'an, or a *theoria physike*, to borrow a phrase from Orthodox Christian theology. In this way, ayat are typically accompanied in the Qur'an with a verbal directive for how to think, feel, or act. In some cases these are cognate to the European treatment of the sublime, in affective encounter with a "wholly other" (apocalypticism, words of the Qur'an, etc.) But they are also more. These are keys to guidance and action, in this world as well as in the world to come. Considering the horizontal and vertical relations to the natural world as environmental response, the Qur'an's expression of the natural world as created, sustained, and destroyed are processes that constitute intellectual, affective, and moral states. Cognitively, the Qur'an directs this as if it is a scientific investigation, as the Qur'an calls on its readers to verify its signs, to "ponder" and "reflect," engaging an aesthetic faculty critical to these perceptions as well. Rhetorically, the Qur'an also "explains itself" in this way frequently by concluding sections of its copious descriptions of the natural world with exhortations to particular emotional and moral states, such as to be "thankful," to "think," and even to "understand." In addition, the Qur'an continually reminds readers of the limits of human comprehension, as in the frequently occurring Qur'anic phrases that refer to "that which you do not even know," and others that convey meanings like "God knows what you do not."

Besides demanding environmental response, the Qur'an's signs represent environmental principles in and of themselves. For example, diversity as a "sign" is emphasized throughout the Qur'an, as in diversity of the spectrum of color, or human diversity (for example, Q. 30:22), and biodiversity, as in the abundance of plants and animals. In this the Qur'an points to the multifarious majesty of the Author through a divine meaning, but this is also ontologically meaningful in terms of the environment's diversity as well. Not just the diversity of peoples (Q. 49:13) but the diversity of all phenomena—whether colors, feelings, or natural species—is continually emphasized through signs in the Qur'an as intrinsically valuable. As Izzi

Dien points out in his book *The Environmental Dimensions of Islam*, "uses" for resources can be variable in the Qur'an, but the Islamic religious truth of biodiversity is not.<sup>28</sup> It to be valued, even preserved, for its own sake and as signs in reflection of the multifaceted dimensions and majesty of the Creator.

Signs point to other environmental principles and processes through the Qur'an's continual reminders about creation's regularity (as in the motion of planetary objects, also the alternation of day and night) as well as its potential to undergo sudden catastrophe. Signs show not only that humans respond with respect to the Creator for what He has made on earth, including thankfulness for resources; also, the Qur'an's signs point the way for humans to act ethically *as creatures* among others, including nonsentient ones. An example of the rhetorical intertwining of the Qur'an's environmental signs and direct and directive address to the Qur'an's readers and listeners come in the chapter 55, Al-Rahman, as a repeated phrase that recurs throughout the surah in alternating verses. This takes the form of a challenging rhetorical question, "Then which of your Lord's favors would you deny?" The Qur'an's rhetoric and presentation, in Al-Rahman and throughout the text, renders signs in the present in terms of the consequential future, evidencing to believers that what is often called "the promise and warning" of the Qur'an is true. The vivid and detailed depiction of the future transformation of the environment in the Qur'an is essential to understanding Islamic environmentalist teaching among committed Muslims today, as well as the ontological perspective that Islam contributes to environmental humanities. Creation is shown to be moving processually into the state of a new creation in the Qur'an, whether imperceptibly and gradually (such as in biological reproduction), as the result of past or immanent future catastrophe, or as the inevitable and ultimate "calamity," at which time responsibility is revealed.

While the Qur'an directs active, affective, and intellectual responses to natural signs and the principles they indicate to be immediate, environmental connections are not just in the present. Rather, signs always embed the phenomenological present into expanded frames, from the moments of creation (e.g., the "primordial covenant" or "day of 'alast'" of Q. 7:172) to the ample material that describes the ultimate destruction of the world. Much of the Qur'an shows the state of the world not to be undergoing creation or continuing in the course of regular duration or constant periodicity, but



creation's reaction to the unexpected yet inevitable unfolding of the future events of the Day of Reckoning (with many names, like *Yawm al-Hisab* or "Day of Accounting" in Q. 38:16).

The significance of human's relationship with other creatures, the results of the ultimate "test," are to be known when "the environment" is radically transformed out of humans' control. In addition to prescribing response to signs in "nature," the Qur'an thus provides rich material for Muslim environmentalism in the Qur'an's depiction of human beings confronting a transformed natural world, within environmental states and landscapes that are the direct consequences of their own actions. They are able to turn only to Allah's power as protection, which may mirror His mercy in relation to their own care of His creation. This is a realization of environmental justice as well as Islamic piety, since at Judgment actions in this life are known in terms of their impact on the realities of generations to come, who are shown in the Qur'an to call all who came before them to account.

### Consequential Landscapes: Attesting to the World to Come

Approaches to Islam and the environment consistently fail to recognize the eschatological dimensions of the Qur'anic system of signs. The relative emphasis within the text as well as my own research findings in modern social contexts indicate that these orientations nevertheless shape Muslim environmentalisms with respect to some of the central themes of environmental humanities today, including the Anthropocene. There is much writing on cosmology in the literature on Islam and nature, such that by Seyyed Hossen Nasr (discussed in chapter 6); little of this, however, represents the message that comprises a large portion of the Qur'an's content: apocalypticism. This fundamental idea is also missing from just about every Anglophone treatment of Islam and the environment. This is surprising given not just the centrality of the Last Things (*al-akhirat*) in the Qur'an, but also in core Islamic religious practice and writings such as Al-Ghazali's (d. 1111) *Ihya' 'Ulum al-Din* (specifically, book 40), especially prominent in Southeast Asia.

The signs of God that the Qur'an presents as coming at the end-times are a prognostication of the end of the world. In context, they are emphasized rhetorically as a predictive reminder to those in the present about inevitable

consequences to be faced in the future as the result of immanent choices being made in the moment (*al-waqt*, to borrow a Sufi expression for the "right-now"). Rhetorically, these are scenarios of immediate, rather than delayed, individual and community response to "the promise and the warning" of environmental futures by way of the landscapes they depict. Communal and individual responsibility for the state of the world is clear in the portrayal of the Qur'an's destructive signs, which God effects. This connection of future worlds to come and the present moment makes eschatology a powerful theme that actually mobilizes environmental thought and activism.

Much of the last thirtieth of the Qur'an, chapters numbering 78 to 114, is heavily apocalyptic material, surahs understood to have been among the first to have been revealed to the Prophet Muhammad. That section is most commonly read, memorized, and recited in obligatory daily worship. The section, and much of the Qur'an (like chapters numbering in the forties, for example), contains rich, detailed, and unique imagery of the natural world under transformation to new environmental conditions: not only the sudden trumpet blast and chaos of the Last Day and "sun darkening," "stars falling," "mountains unmoored" (these images all come from *Al-Takwir*, Q. 81:1-3) but the eerie, incremental changes that precede it to mark the start of the chain of inevitable events, such as pregnant camels left standing in the pasture, "beats gathering" (the meaning of this is said to be ambiguous in tradition), water in the seas catching on fire, and a buried infant coming to life and calling out to the living from within the earth (these images all come from the next, consecutive verses of *Al-Takwir*, Q. 81:4-9). In practically countless Qur'anic examples of this type, the primary human activity of judgment is discursive, as in talking, a relational "sorting out" that includes testifying and confirming that God's promise and warning are true. The Qur'an shows humans even to shout across an altered environment as individuals and groups are consigned to what will be their destinations and habitations (future landscapes called "*abodes*," *dar*, *mihad*, *mustaqarr*, *maqam*) in the world to come.

A great deal of the Qur'an's content describes the moment of judgment in terms of affective shock, when humans realize that the scales of justice have been weighed on their account and it is too late to alter what will be the landscape of their destination in the world to come (garden or fire). With dramatic and dynamic rhetoric, they engage in active and noisy

dialogue across the topography of apocalyptic space (for example, in surah 7, Al-A'raf), confirming that God's promises and warnings are indeed coming to pass. Even in the midst of chaos, the consequential landscape has relational coherence, as when denizens of the fire plead with those in the garden to send down some water (Q. 7:50); or when a person entering heaven is shocked to look down to see a friend in hell below and exclaims, "But for my Lord's grace (*ni'matu*, lit. 'pleasure'), I would have been there with them" (Q. 37:50-57). The Qur'an describes a wide range of responses to the inevitable events: from bickering and blaming, even when traveling en route along the highway to hell (Q. 7:38); to gratitude and satisfaction in discovering paradise; even to the extent of depicting a mutual satisfaction between God and creature in heaven (the phrase, "Allah is pleased, *radi*, with them, and they with Him" appears numerous times, in Q. 5:119, 9:100, 58:22, 98:8).

The Qur'an vividly depicts humans confronting the altered world of creation, heaven and hell, as transformed extensions of present life on earth. The ethical and affective dispositions of people in the life of this world, seemingly, will naturally carry on into future environments. The morality of this world also maps directly onto the environments of the altered world to come, as landscapes that are illustrated in detail as the garden (*al-jannah*) of Heaven and the fire (*al-nar*) of Hell. Heaven, for example, is presented in terms of formulaic expressions of a lush landscape of environmental abundance ("Gardens underneath which rivers flow" appears almost fifty times describing heaven in the text of the Qur'an). Hell, on the other hand, has its own vivid depiction as a dynamic space of talking. Much of the dialogue there is intergenerational, indicating the responsibility of generations for the ones who subsequently "follow" them and thereby reap the consequences of their prior moral tendencies.

Humans, while part of creation, also stand out from it by virtue of being called to account for their care of the world (*sunnat Allah*) and of others (*hablun min al-nas*), including what was left as a legacy for generations to come as shown in the Qur'an's judgment scenarios. In Qur'anic rhetorical terms, the world is a test, as in recurring and often-cited verses that show humans being tested as individuals and communities, also implied in the Qur'an's imperative to Muslims to "compete in good works," *fastabiqu bi'l-khairat* (Q. 2:148 and Q. 5:48). As prophets in the Qur'an deliver their messages, the Qur'an's numerous accounts (such as surah 7) show their communities being "tested" and, as a result, split into groups of those who accept

the "reality" (also the "warning") and those who fail the "criterion," and the test of their ability to respond to the "call" (*da'wah*) and not to "cover up" (*kufr*) religious and evident truth.

The notion of being "inheritors of the earth" (*khala'if al-ard*, plural of *khali-fah*) is presented by the Qur'an as also being just such a test. This is indicated by the following verse, the test regarding "what [the gifts are that] He has given you": "It is He Who has made you the inheritors of the Earth [*khala'if al-ard*], and He has raised you in ranks, some above the others that He may test you what he has given you [*liyablukum fi ma'atakum*]: For your Lord is quick in retribution [*al-'iqab*, lit. "consequences"]; yet He is indeed Oft-forgiving, Most Merciful" (Q. 6:165). This verse suggests how "testing" may represent a more Qur'anically aligned register for environmental responsibility (*khila-fah*), in terms of the text's own emphasis on eschatology, implying consequence more even than the translated key word *stewardship*.

Theologically, the theme of testing can explain apparent Qur'anic human centeredness or speciesism, without recourse to anthropocentrism, as consistent with Islamic sources from the classical period to the present-day that portray the ethics of human-world relations. In the academic field of environmental humanities overall, anthropocentrism has been a problem, if not an anxiety, of contemporary ecotheologians in the field of religion and ecology. Since Lynn White Jr., anthropocentrism is often blamed as the harmful ideological culprit underlying environmental crisis.<sup>29</sup> The Qur'anic system of environmental justice is anthropocentric, insofar as it is humans (and jinn) who are tested; however, it is they who may be the only ones who need to take the test by virtue of an exceptional deficiency, compared to the rest of creation, which worships Allah as its essential character. Participatory creation for the sake of Allah and the world to come is a criterion of "being tested," a condition humans took upon themselves apparently somewhat rashly, and the Qur'an supports a "nonanthropocentric" reading of this on its own terms. Examples from fieldwork, presented in chapter 6, show that eschatological awareness of the consequences of this status as "tested" creatures is actually a motivating rationale for environmentalism among pious Indonesians.

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A hadith of the Prophet Muhammad (on the authority of Anas b. Malik) instructs believers to plant trees (to "hold on to the sapling in your hand"),

even "as Judgment Day irrupts," and presumably they too will be destroyed. Qur'anically, this teaching is sensible insofar as the rationale to plant the tree would not even be in spite of the impending coming of Judgment Day, not "hoping" in its denial, but for the sake of that very determination itself. Drawing further on Qur'an and hadith as commitments of Muslim environmentalism, one could expect that the accounted merit of the deed (reward for planting) would endure, although the tree itself will not last forever—or even for very long. In this way, the embrace of apocalypticism does not inevitably lead to escape from either "hope" or from "hopelessness," to use the preferred sentimental terms in the mainstream ethics of climate crisis. There is no flight from rationality when prayers are for a future in the garden by the river instead of the scorching heat of the fire; it is to imagine the unseen environmental reality of the future in both a real and metaphorical sense. Grounding Muslim environmental ethics in Qur'anic themes of relations of accountability, power, and protection, rather than romantic sentiment of feeling such as that inspired by colonizing "the land" (as in Aldo Leopold) or other frontiers is more realistic with respect to what religious Muslims actually express in light of the ethics of environmental change, seen and unseen.

Directing to anthropocentrism as a concern, Muslim notions of the environment affirming God as its Creator and Sustainer determine the human location as participating in the biosphere, as creatures (*makhluq*) within creation. In the Qur'an's apocalyptic framework of "signs," changing signs in the phenomenal world, certain and unknowable, point to ethical and environmental relationships and practices in the present moment that extend across space, time, and species.

Secular environmental humanities does not have the tools to verify (nor to invalidate) the truth claims of the Qur'an and Islam, nor does it need to order to appreciate theoretical insights of Muslim environmentalism, Qur'anic viewpoints that shape the lifeworlds of nearly two billion people today. By virtue of striving for theory on an ultimate conceptual ethical scale (e.g., through the "ontological turn" in humanistic study), it is obligated to take seriously such accounts due to their commensurate registers, including apocalypticism. A notion of crisis might even demand it, as is becoming clear from the literature on the Anthropocene that currently dominates if not defines the field of environmental humanities. Such an

arbitrary assignment of an era of the Anthropocene as a marker of environmental humanities frequently stands in as theory, ethics, and explanation, much as periodization of the modern and the postmodern had done previously, and this is how it may appear when translated across religious systems. Muslim environmentalism, from the perspective of the academic study of religion, in fact challenges present-day frameworks of crisis that correspond to a popular humanistic concept like the Anthropocene.

The idea of the Anthropocene has come to mean the epoch in which human activities determine planetary conditions. Although the Anthropocene draws scientific legitimacy from the idea of arbitrary periodization in geology,<sup>30</sup> it is a highly imaginal concept expected to carry a heavy ethical and symbolic load in humanistic analysis. Despite the emphasis on determinative anthropogenic processes, it lacks an ethical frame in the twentieth and twenty-first centuries except for what remains of an inspirational register reminiscent of Victorian sentiment or the American religious revival of the second Great Awakening. These, while consistent in self-presentation grounded in earth sciences, nevertheless still share much in affect and analysis with the late-twentieth-century anxiety of the nuclear age.

The concept now sweeps up many issues that formerly constituted the idea of an environmental crisis in the 1960s and 1970s, pollution to atmospheric change to species loss, together as one great notion while focusing on humanity's power and potential in having shaped these circumstances. Its scaling dehumanizes mythic "deep time," suppressing the significance of agency and thus responsibility,<sup>31</sup> whereas, as if by definition, it simultaneously focuses on the phenomenology of anthropogenic causes and effects with no other ethical or relational referent. It does little to resolve the paradox that popular and even best-selling treatments of environmental ethics simultaneously condemn the viewpoints associated with "anthropocentric" social processes, even as they cast this as the conditions under which planetary and even apocalyptic crises have arisen, as in projected effects like climate change and mass species extinction. Alternative or indigenous perspectives on "the ends of the world" still remain peripheral to this.

Muslim environmentalisms, as in this chapter, diverse but grounded with respect to sound Qur'anic referents, recast such humanistic assumptions about philosophical anthropocentrism, what a crisis means, and also potentially the idea of the Anthropocene itself. As Marion Katz, a scholar of

Islam, wrote, "In a very different sense than we would understand today, traditional interpretations . . . suggest that, for Muslim thinkers, it was always the Anthropocene—environmental disaster was pervasively assumed to be the result of human wrongdoing."<sup>32</sup> In addition, Muslim worldviews have had a notion of crisis embedded in their eschatological reality from the start as an ongoing ethical calculus, not the projection of an ultimate collapse into oblivion. While human impact is critical to this moral system, it is not deferred up to the limit point; the idea of final "accounting" (*hisab*) instead continually rescales the ultimate human consequences into its factors in the moral present. Measuring responsibility against horizons of the unthinkable in one sense, the Qur'anic ontology of processes of creation, destruction, and recreation, on which the Qur'an instructs humans constantly to "reflect" even with their limited capacity to understand, orients humans' ethical action clearly and temporally *via-à-vis* other creatures. These creatures (*makhluq*) include even resources that are used instrumentally, with this relational use doubling as a sign of God. Even when expressed apocalyptically, this is always a measured calculation of consequence, never chaos.

Islamic activists like those I encountered during research in the ethnographic field express a religiously oriented Muslim environmentalism that is built on an ethical foundation engaging crisis as natural consequence, which includes apocalyptic futures, while simultaneously affirming care of "the earth" as a criterion for the success of the state of the world to come. Muslim religious systems thereby confront the hard facts of unseen and unpredictable futures that are the results of human action in eschatological scenarios. Illustrations to follow from religious law and politics, science, aesthetics, and activism, all based on Qur'an, reveal such connections of ontology and responsibility, which a secular focus in environmental humanities has been at pains to recognize and express. The ethical aspect at the root of Muslim environmentalism is a dimension with which academic humanities also now grapples on its own terms: standing for justice, in communities, enduring together the reality faced by creatures of the world. For this articulation, theory in environmental humanities needs a more robust statement of the ethical problem than geological positivism or naive phenomenology can provide. New metaphors commensurate with Qur'anic expression could accommodate the proportions of present environmental apocalypticism to keep apace with the implications of a radical justice, as is

#### A QUR'ANIC ENVIRONMENT

also to be found at the root of Muslim environmentalisms. To accept this scale of humanistic demand made on a former tradition of moral sentiment, representing ethics in environmental humanities, would likewise support anchoring affect in empirical and experiential realism, which has long been a highly developed feature within the Islamic humanities.