ISLAMIC LAW AND ENVIRONMENTAL ETHICS: HOW JURISPRUDENCE (*USUL AL-FIQH*) MOBILIZES PRACTICAL REFORM

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Abstract
Where some religious environmentalisms deploy traditional concepts according to the practical needs of cosmology, *usul al-fiqh* (jurisprudence) envisions an alternative practical strategy for Islamic environmental ethics. Jurisprudence governs religious adaptations according to guiding principles designed to conform practical reason to the ongoing discovery of divine will. This article shows how those principles can function as mechanisms for normative change, and reviews their diagnostic capacity for evaluating various uses of Islamic resources.

Keywords: Islam, jurisprudence, cosmology, practical reason

Religious environmentalisms often must develop two projects at once: one displaying a tradition's normative resources, and a second vindicating their novel use in the face of environmental challenges.[1] The second project shows how a practical ethic utilizes religious resources so that they maintain or acquire normative significance in a new context. Environmentalist appeal to Buddhist *dharma* concepts, for example, must not only highlight their environmental relevance, but also demonstrate how their new significance might be justified within the tradition (cf. Swearer 2003). Showing why the novel use is fitting often demonstrates how appropriation of a religious resource mobilizes a tradition's normative authority for a contemporary problem.

Environmental ethics sometimes appropriates the traditional resources of Islam with only implicit reference to that second project. Sometimes environmental ethics deploys Islamic themes and concepts in service of a practical ethic tacitly shaped after a standard western model. Yet Islam possesses unique internal functions for deploying its normative concepts in novel and challenging contexts. In the conventions of its jurisprudence, the tradition offers terms for intelligible appropriation of its resources. As tools to guide the way in which moral authority assimilates unforeseen social challenges, methods of legal justification might offer potential principles for a successful Islamic environmental ethic. At the very least jurisprudence presents a system of diagnostic questions that allows readers to test an Islamic environmental ethic

for the way it frames environmental problems, discloses practical solutions, and sets the terms for appropriate policy justifications.

Jurisprudence as Source of Values and Change

Seyyed Hossein Nasr writes that while "classical Islamic civilization created a society and especially an urban setting in harmony with nature" many Muslims today do not live in that harmony because of disturbances created by western economic and technocratic pressures (Nasr 2003: 87). In order to reclaim "a perspective mostly lost in the West today," Nasr appeals to "[t]he Islamic view of the natural order of the environment, [which] as everything else that is Islamic, has its roots in the Qur'an, the very Word of Allah, which is the central theophany of Islam" (Nasr 1998: 119). Nasr thus recommends responding to environmental problems through modes of reappropriation that intensify commitments to revelational sources and revive the cultural genius of those historical periods in which Islam flourished.

On the other hand, Richard C. Foltz worries that wholesale reclamation may be impractical:

> ever since Lynn White's critique more than three decades ago, practitioners of all the world's religions seem to have dominated the discussion with claims that the 'true' interpretation of their own tradition is eco-friendly, if only it would be practiced right, or if others would stop interfering with their traditional systems.

Appealing to a bygone golden age or to the roots of revelation, contends Foltz, sets ethicists to contentious interpretive work when we already know what resources we need from religions: "going back to some imagined past seems impossible, and its unfulfillable promise misleading, if not dangerous . . . rather, we should acknowledge that among all the possible interpretations available to us, it is the eco-friendly, nonhierarchical ones that we desperately need to articulate" (Foltz 2003a: 250). In contrast to Nasr, Foltz valorizes just those religious resources supportive of a generally extrinsic environmentalism.

Foltz and Nasr disclose two differing stances toward utilizing Islam for environmental ethics, one traditionalist and one reformist. Much discussion turns on defending some variation on one of these stances. But notice a tacit assumption that, however one approaches the tradition, its resources engage cosmology; that ethicists need to know

how Islamic resources might reshape perceptions of the status of nature. Historically, however, Islamic ethics has been less interested in shaping theological worldviews than in establishing how specific moral acts follow the intention of God's will.[2] That means "Islamic values are delineated by Islamic legal principles"; and consequently, examining Islamic values within cosmology represents a dramatic shift (Abdal-Haqq 2002: 30). Recruiting Islamic resources for reconstructing worldviews removes them from their original normative habitat, and asks them to function for ethics in unprecedented ways.

Jurisprudence rather than cosmology, therefore, seems a more fitting starting point for religious research into the Islamic grounds of nature's value. At least, we should examine the traditionary context of Islam's moral resources in order to understand how they adapt to their new cosmological functions. One might even investigate a suspicion that leaving Islamic resources to cosmology conforms the task of Islamic environmental ethics to White's critique of Christianity. Christian ethics may well require a "theology of nature" in order to develop a practical environmental ethics from a revised worldview; it is not clear Islamic ethics requires the same. Perhaps the mechanisms for producing Shari'a law are better suited to develop those resources into "treasures of an Islamic environmental strategy and politics not yet discovered and lifted up" (Kohler 1990: 69).[3]

In any case, normative resources in Islam have not traditionally licensed a particular picture of creation so much as prescribed forms of personal action and social organization. We should think of Islamic law, says one jurist, as "revelation in praxis," a kind of "divine blueprint that awaits implementation to realize God's will on earth" (Sachedina 1999: 15-6). That implies that however legal resources are used, "Islamic environmental ethics is based on clear-cut legal foundations which Muslims hold to be formulated by God" (Izzi Deen 1996: 164). Those foundations may still require "reconstruction of the cosmology of the Qur'an", as we will see, but cosmology arrives on the scene from within jurisprudential practical reason (Haq 2003: 126).

Wael Hallaq mentions a second pragmatic reason for environmental ethicists to investigate jurisprudence: "In Islamic law, authority . . . has always encompassed the power to set in motion the processes of continuity and change" (Hallaq 2001: ix). Historically, jurisprudence has initiated reforms responsible at once to contextual pressures and religious integrity. Legal principles preserved the moral force of Islamic

concepts by assuring that "legal change did not occur only in an *ad hoc* manner . . . but was rather embedded in processes built into the very structure of the law" (Hallaq 2001: 240). The laws (*fiqh*, or sometimes technically, *faru al-fiqh*) thus embody an historical record of the way Islamic jurists engaged emergent problems in dialogue with traditional authority.[4] The methods by which laws are derived (*usul al-fiqh*) are a living school in successfully adapted modes of practical reason and may still offer norms for expanding Islam's normative competence to new social challenges.

Jurisprudence offers pragmatic resources, therefore, precisely because existing Shari'a law inadequately addresses environmental issues. For it shows how religious leaders can develop new moral precepts while maintaining the continuity of authority that makes them intelligible to communities organized around revelation (cf. Kohler 1990). The science of jurisprudence animates social change from within the Qur'an's assurance: "Nothing have we omitted from the Book" (6.38). There may be global warming, and it may require dramatic legal change, but "you shall certainly not find any change in God's practice" (33.62). Jurisprudence can adapt Islamic practices to a world of climate change in continuity with the tradition's integrity. A practical Islamic environmental ethics, therefore, may not first require a theology of nature, but an environmental jurisprudence.

Discovering and Deploying Islamic Sources

Because "the link that Islamic law maintains with its traditional sources offers a unifying platform for Muslim communities", *usul al-fiqh* may offer politically and religiously significant clues for addressing ancient problems like water pollution as well as new ones like biodiversity loss (Ahmad and Bruch 2002: 10022). It may offer the grammar of a practical Islamic environmental ethics. But jurisprudence also deploys its resources according to an internal conception of the practical. Rather than exhibiting its resources "by way of response to Lynn White, Jr's 1967 critique of Western Christianity", jurisprudence scrutinizes emergent social problems for the attributes that make them susceptible to revelational authority (Foltz 2003b: 359). Practical jurisprudence seeks responses from traditional resources adequately proportional to discrete questions about behaviour and policy. We will elaborate that notion of the practical from use of

the Qur'an and Sunna, and then from four tools used to uncover new resources in the law: *qiyas* (analogy), *maslahah* (public good), *maqasid* (purposes of the law), and *ijtihad* (exercise of personal reason).

1. *Qur'an and Sunna as Environmental Texts*

Some essays in Islamic environmental texts are almost as much Qur'anic quotation as authorial commentary. Yet Foltz observes that litanies of verse fall flat if they do not give way to careful contemporary engagement (Foltz 2000). Mere citation cannot suffice as an ethical strategy; indeed it may perversely undermine the text's relevance. Because the Qur'an is the primary and perfect source of Allah's will, careful interpretive canons preserve its divine claim against presumptuous readers. Whereas wanton quotation may communicate only anemic normative force, tools provided in *usul al-fiqh* guide reference from the Qur'an, allowing it to redress legal shortcomings vigorously.

The Qur'an surely and directly reveals Allah's will, and for that at once grounds moral deliberation and yet sometimes confounds human reason. "It is through his appreciation of the Qur'anic miracle that the jurist knows the Qur'an to be a foundational text", for he confronts "the actual words of God" (Weiss 1998: 44). Faced with a non-topical series of revelations given to the Prophet, jurisprudence provides rules for correctly interpreting the miracle. Where there are apparent contradictions or lacunae, jurisprudence derives interpretive principles from revelation itself, according to the maxim "exegesis of the Qur'an by the Qur'an" (Abdul-Haqq 2002: 51). Those rules then guide citations towards at once clarifying and preserving the Qur'an's authority for daily life (cf. Hallaq 1997: 42-58).

Many of those rules, or the cases from which they derive, come from the second source of the law, the Sunna. The Sunna, made up of *ahadith*, sayings and deeds of the Prophet or His Companions, often either displays lived instantiations of Qur'anic sayings or addresses a unique situation not explicitly addressed by the Qur'an. A *hadith* cannot abrogate a saying from the Qur'an, nor justify a legal argument if there is any evidence from the Qur'an to the contrary. But it may be authoritative concerning issues the Qur'an does not address, can indicate whether an interpretation of the Qur'an is certain or merely probable, or might indicate an appropriate analogy (cf. Hallaq 1997: 58-74).

For the environmental ethicist, that means she must demonstrate how she understands revelational texts to authorize her argument. For example, if she cites *mizan* (balance) as a salient Qur'anic concept, can she show how other texts specify the meaning or rationale of *mizan*? Are there contextual indicators for *mizan* rightly performed? Stories which embody the concept? Does *mizan* have to do primarily with duties to one's own person, or to others, or is it a religious duty owed to God? Is it obligatory or merely recommended?

Such questions illustrate that the moral authority of the Qur'an and Sunna cannot be invoked simply by a quantity of apposite quotations. Their practical impact derives from the care with which they are deployed. The mode of that care also indicates the way an interpreter situates a Qur'anic concept in relation to the public good or natural law. For example, when Fazlun Khalid appeals to the Qur'an's exhortation "exceed not the balance", does Khalid suppose the state of this balance is discerned by symptoms from the earth or the Qur'an (Khalid 2003b: 316)?[5] Is *mizan* enjoined because it appears to be a quality of healthy ecosystems, or because balance is aesthetically valued by God? Or are they complementary, one perhaps the perfection of the other?

Those theoretical questions guide how the ethicist would respond if ecologists were to begin thinking that flux is a more important phenomenon in nature than harmony or balance. If the Qur'an or Sunna legitimates an earthly specification for *mizan*, then flux might qualify our understanding of it.[6] But if the texts clearly specify *mizan* as ecological stasis, then they could not justify policies inviting natural succession.

Asking such diagnostic questions may also yield insight into the criteria an ethicist uses to describe environmental degradation. Has the spectacle of clear-cutting sent her to the texts to discover the counteractive concept of *mizan*, or has her reading of *mizan* framed her perception of the logging? When Mohammed Parvaiz says "[t]he concept of measure, or balance (*al-mizan*), among the various components of our environment, dawned on us when we noticed some very disturbing phenomena in nature", he at first seems to exemplify the former view. But he might mean that modern environmental degradations shed new light on the significance of a Qur'anic concept; or that a hitherto obscure Qur'anic concept has found its definition in contemporary science; or that imbalanced practices involved in global warming or genetically modified organisms (his examples) fall

afoul of prohibitions against disturbing order (Parvaiz 2003: 394-402). Legal classifications of the problem indicate how religious and ecological concepts should configure policy alleviations, and what sort of justifications will be required to repeal or adapt those provisions.

2. *Ecology of the Divine Will: Mu'tazilite/Ash'arite Debate*

Although working from a different approach, Kaveh Afrasiabi agrees that "it is not enough to show that pro-ecology insights can be found in Islam. Before the ecological criticism can be dismissed what is needed is a convincing presentation of the ecological parameters *sui generis* to Islam" (Afrasiabi 2003: 285). Aside from occasional happy resemblances, how are we to think of the tradition of divine command in relation to imperative environmental indicators? For Afrasiabi, Islamic environmental ethics must prove its practical viability by defending (or reconstructing) theological conditions for ecological responsiveness within the tradition.

Here we find the first place theological cosmology resurfaces for environmental jurisprudence. Making use of environmentally-relevant citations raises questions about the status of nature and reason for proper moral action. Those interpretive questions about how an ethicist uses the Qur'an and Sunna implicitly involve environmental ethics in a medieval theological debate. Usually its issues remain invisibly subterranean, but we catch a glimpse of their importance when Nawal Ammar opens a reformist environmental article by approving a seventh century party of rationalists called Mu'tazilites (Ammar 2000: 131). Ammar thereby signals an entire theological world, and in it, conditions for a successful environmental ethic.

Part of the Mu'tazilite/Ash'arite controversy debates whether actions prescribed in the Qur'an are finally justified by some natural good or by Allah's will.[7] The Ash'arite says, "ethical valuations of actions are grounded neither in the acts themselves nor in their properties; they are grounded simply in what God says" (Frank 2001: 207). Mu'tazilites, on the other hand, contend "it is only by virtue of the intrinsic goodness or badness of the action that it becomes a fitting object of God's command or prohibition" (Fakhry 1997: 33). By the "rationalistic objectivism" of the Mu'tazilites, ethically relevant values inhere in the created world, revelational authority supervening upon and perhaps illuminating them; but the "theistic subjectivism" of the

Ash'arites locates both value and authority entirely in the transcendent will of Allah (Hourani 1971: 9-12).

Recalling the frustrating logic of Plato's Euthyphro dilemma, the debate's significance for environmental ethics concerns what we might call an ecology of the divine will (cf. Weiss 1998: 35-6). It tests how closely nature or reason intrinsically conforms to Allah's will, and therefore how reliably the cosmos guides right human action. In other words, the medieval debate entertains the problem of creation's moral considerability and intricately experiments with the possibility of natural values in a divine command tradition.[8]

The Mu'tazilite/Asharite questions perform two sets of diagnostic tests about the use of revelational sources in Islamic environmental ethics. First, they ask whether natural principles are legally relevant. If an ethicist favors Mu'tazilite thinking, then reasonable interpretation of ecological indicators can determine correct specifications of Allah's will for human action. Ecological science may qualify the meaning of a concept like *mizan*, perhaps including characteristics scarcely discernible from the Qur'an, such as evolutionary complexity and ecological succession. If, however, an ethicist follows a strict Ash'arite privileging of divine will, then she disqualifies both natural law thinking and easy correlation of ecological and Qur'anic concepts. In this case, if *mizan* is legally relevant, its meaning for environmental health must be determined by revealed criteria (cf. Weiss 1990: 54).

Use of revelational sources for environmental ethics must therefore navigate a dilemma. If one uses revelation to justify policy proposals independently developed, or to correlate Qur'anic concepts with ecological features, then an implicitly low view of revelation may undermine the efficient point of such appeals. On the other hand, within a very high view of revelation, environmental descriptions may seem irrelevant to doing Allah's will, for a theocentric voluntarism makes contextual description seem normatively superfluous.[9] Again, attentive regard for the jurisprudential tradition may help, for, while tending in an Ash'arite direction, it has avoided either horn of the dilemma by articulating theological conditions for realizing God's intentions within conditions of creatureliness (cf. Hallaq 1997: 162-206).

A second set of issues from the Mu'tazilite-Ash'arite debate tests interpretive principles for their cosmological tendencies toward anthropocentrism, theocentrism, or ecocentrism. Mu'tazilites argued that revelation agrees with the benefit of rationally-known human goods.

Even if one were to argue that revelation agrees broadly with creaturely goods, not specifically human ones, a kind of anthropomorphism still follows. Since its goods are rationally apprehensible, divine will conforms itself to the finite capacities of reason (cf. Fakhry 1997: 42-5). Consequently, one would expect, so do creation's internal laws. "He created for you everything that is on this earth" (2.29) may for the Mu'tazilite mean not only that revelation affirms human dominion, but that nature yields itself to rational control. Environmental ethicists who privilege reason for understanding divine law may then imply nature's subordination to rationalist ends (cf. Dutton 1998: 57-8). This coincidence of priority for reason and nature's subordination may partly explain why Islamic environmental ethics often prefers an ecologically-extended anthropocentrism to biocentrism: introducing a new independent moral source could disrupt a fragile agreement between reason and revelation.

One can develop a Mu'tazilite alternative to anthropocentrism, however, by ecologically expanding the rationally-known goods with which revelation agrees. This way the ethicist may determine legal injunctions according to the benefit of all creation. Othman Llewellyn, for instance, begins with the familiar Mu'tazilite formula, "The ultimate objective of the shari'a is defined as the welfare of God's creatures", but immediately expands it beyond humanity: "The ultimate purpose of the shari'a is the universal common good, the welfare of the entire creation . . . no species or generation may be excluded from consideration" (Llewellyn 2003: 193). Ecologically expanding reason thus overcomes the problem of coordinating law and nature by making vizerial humans representative of creaturely goods as well as divine law.

An ethics closer to the Ash'arite position yields an environmental theocentrism, asking not what befits creaturely interests but rather what Allah wills for creation. For example, in regard to Qur'anic prohibitions against unnecessary animal suffering, one would locate the moral imperative in God's rejection of certain kinds of acts, not in the sentience or value of the animal. However, the divine will might disclose itself in such a way that creaturely indices become relevant. In this case, one argues that the Qur'an includes a rationale for the divine prohibition, and that rationale specifically refers to the quality of sentient life, thereby requiring attentiveness to animal comfort in right observation of God's will (cf. Haq 2003: 149-50; Frank 2001: 210). Within the strategy of an environmental theocentrism,

nature itself does not bear the moral value, except as it participates in divine instruction for human acts.

3. *Qiyas: Extending the Law*

Environmental ethicists rarely engage the third traditional source of the law, consensus (*ijma*), because conditions for its contemporary use seem unlikely. While nearly all legal schools accept the consensus of the early community, they disagree on criteria determining how it might generate new rulings.[10] The fourth traditional source, however, offers one of the most important tools for addressing new ethical challenges with traditional resources.[11] *Qiyas*, or analogical reasoning from an established ruling to a new case, allows exercise of legal resources in situations inadequately covered by policies developed from the first three sources. It can do this in two ways: first, by applying the rule (*hukm*) in authoritative cases to new ones sharing the same primary attributes; and, second, by transferring the legal justification (*'illa*) from an original case to one relevantly isomorphic. The paradigmatic example here explains how jurists licensed a general prohibition against drinking alcohol from the limited Qur'anic prohibition against drinking date-wine. Faced with a question about drinking wine from grapes, the early jurists needed to extend the rule in the Qur'an to an unforeseen but similar situation, yet without undermining the Qur'an's authority by arbitrarily revising its counsel. The jurists observed that the two cases shared an identical attribute, the presence of alcohol, and that the rationale (*'illa*) in the original case—to prevent intoxication—had to do with that attribute. Hence, the specific prohibition (*hukm*) is valid for both cases (cf. Hallaq 1997: 83-110).

Consequently, through carefully developed casuistic procedures of "parataxis and association", *qiyas* may show how environmental problems, otherwise outside the moral imagination of the early community, may share common attributes with problems that are addressed in the Qur'an or Sunna (Schacht 1964: 208). For example, while massive offshore sewage releases were unknown, Mustafa Abu-Sway reports a *hadith* in which the Prophet forbids urinating into waterways (Abu-Sway 1998; cf. Foltz 2003a: 254-5). Since the two cases share an attribute (human waste released directly into water), extending the prohibition seems justified, even *a fortiori* given the greater amount of waste in offshore sewage release.

But the case is not so perspicuous: the original *hadith* does not mention the *'illa* (rationale) for the prohibition, so we can only infer what precisely is wrong with urinating in water. It could plausibly be the threat to human health, or the introduction of ritual impurity to a communal area, or the vice of wastefulness, or the polluting of an ecologically vital resource. Only the last *'illa* would necessarily require the prohibition (the *hukm*) to apply to offshore sewage releases. If there exists any doubt as to the original legal rationale, the extension cannot be certain. A *qiyas* established by a merely probable *'illa* wields greatly reduced normative force (Hallaq 1997: 101-7).

Moreover, if a legal injunction were issued against the sewage release on grounds of public health, then public health must always remain the *'illa* identified in this *hadith*. Were the same *hadith* used to legitimate a ruling based on the rationale of wastefulness, it would render an entire line of practical reasoning uncertain, and any future legal development from the *hadith* merely arbitrary (Moghul 1999). Requiring the precise *'illa* prevents *qiyas* from loosely associative casuistry, making it part of the ongoing discovery of Allah's will. By establishing "the substantive relationship that exists between a linguistic proposition in the original texts and the new case or problem confronting the believer", *qiyas* also maintains both dynamism and continuity in processes of reform (Hallaq 1997: 101, 84-5).

For cases in which the *'illa* is explicit, however, the original case can generate extensions surprising in both scope and consequence. For example, while anthropogenic acidification of waterways was unknown to the early community, the importance of maintaining a protected zone (*harim*) around vulnerable water sources was, and specific rules were developed: e.g., a *harim* half the river's width away from both banks (Izzi Deen 2000: 35-7). A contemporary jurist could therefore point to a shared attribute, running water vulnerable to human disturbance, and to an explicit *'illa* addressing the attribute: maintaining public accessibility to safe water (cf. Ahmad 2000: 178-84). The *hukm* in the original case required a safe zone around the water, but it might look dramatically different for the second. For *qiyas* requires the same proportional adequacy between the *'illa* and *hukm* in the new case as in the first. Here that might mean requiring scrubbers on industrial smokestacks. Hence, *qiyas* may license alleviation of an unforeseen environmental problem through an unimaginable rule, on the grounds of a shared attribute and known *'illa*.

Yet again, however, a caveat: if the environmental benefits in the original case are only accidental to the normative intent of its rule, they remain disanalogous. Consider the promise of *hima*, protected areas of land whose warrant goes back to the first community in Medina. Othman Llewellyn argues, "As the accelerating loss of species and ecosystems diminishes the fertility and productivity of the earth, the *hima* has emerged as potentially, perhaps, the most important legal instrument in the *shari'a* for conservation of biological diversity" (Llewellyn 2003: 216). Yet, as Llewellyn recognizes, the tradition consistently explains *hima* as a matter of social justice, intended to allow fair access to open lands (reforming arrangements which allowed powerful individuals to set aside protected areas for their own use). The original rationale for designating a *hima*, therefore, does not justify setting aside reserves for the sake of endangered species.

On the other hand, some ethicists argue that the rationale for creating a *hima* is best rendered as *maslahah*, denoting broad consideration for "public welfare" (cf. Izzi Deen 2000: 44, 148). Biodiversity could then legitimately deserve a *hima* designation, in two ways. First, if biodiversity may be considered a public resource sufficiently similar in material attribute to grazing land or forested areas, then it requires protection for the equal "use" of all. Secondly, were "public" widened to connote the ecological community, *maslahah* might then consider the good of species, and justify designating a *hima* for their own sake.[12]

By now, however, the *qiyas* mechanism has been stretched toward another form of reasoning altogether (cf. Hallaq 1997: 220-1). In the absence of textual evidence that the Prophet had in mind an ecologically-expanded view of public welfare when He was reforming the practice of *hima* (it does no good to point to other biocentric sayings, for it must be the very *'illa* attached to the material case at hand), the justification cannot stand by appeal to *qiyas*. If protecting species was not the justification then, it cannot become so now. If one appeals to another instance in which the Prophet displays specific concern for an animal or species, then the Prophet's specific practical response in that case becomes regulatory, be it non-interference or care or provision. Justifying a legal provision for setting aside land specifically in order to preserve biodiversity therefore seems difficult to accomplish from *qiyas* alone.

4. *Istislah: for the common good*

So far it appears that environmental problems of novel scale and contemporary complexity still elude the competency of the legal tradition, for it is difficult to find sufficiently similar cases from which to draw analogical justifications. This may explain why Islamic environmental ethics tends to focus on issues of preservation and conservation, which have their ancient dynamic equivalents, while usually finding little to say about global warming, ozone depletion, genetically modified organisms, and biodiversity.[13] We now turn to more controversial sources of the law, which allow the normative tradition of Islam to reform social issues with less explicit textual justification.[14]

Of these, appeal to *maslahah*, public benefit, has become for many contemporary jurists "a main axis around which legal reform revolves" (Hallaq 1997: 153). Reasoning according to public benefit (as an activity: *istislah*) generalizes specific case-related justifications as instances of a broader justification running throughout all the law: Allah's concern for the welfare of His community. *Istislah* is therefore an alternate form of analogical reasoning, prescinding from specific rationales to a universal rationale. For the example of *hima* as biodiversity reserves, *maslahah* could justify protection of species by arguing that the good of the community is the general intent of social justice provisions (e.g., Ahman and Bruch 2002: 10028). *Istislah* may thereby impress the authority of tradition on difficult problems like global warming by appealing to the ultimate goals of revelation.[15]

The goods of the community remain tied to the parameters of revelation; a purely rational justification based on public benefit (*al-masalih al-mursala*) would not validate a legal adaptation (cf. Hallaq 1997: 112; Llewellyn 2003: 192-3). The final referent of "*maslaha* is not governed by people's views of what is beneficial: rather it is valued according to that which Islam recognises as an interest" (Izzi Deen 2000: 135). Therefore, in order to prevent the generalizing inherent to *istislah* from bending toward a broad social utilitarianism, only nominally connected to revelational sources, jurisprudence must defend those universal intentions (cf. Hallaq 1997: 214-224, 231). Contemporary Islamic environmental ethics exhibits great variety here.

5. *Legal Cosmology: Ultimate Goals of the Law*

How an ethicist understands the scope and objectives of the law (*maqasid al-Shari'a*) shapes how she conducts *istislah*.[16] Here we encounter the second place in which religious cosmology shapes jurisprudence. Does the law finally intend to rectify an individual's spiritual standing with God, realize a holy society, mitigate creaturely harm, or animate the cosmos? How an ethicist envisions its final goals guides how she sees the law accommodating environmental issues (cf. Westcoat 1997). Only a few environmental ethicists explicitly discuss final goals of the law, but many rely on a particular concept of them.[17] Yusuf DeLorenzo suggests the *maqasid* represent an especially critical jurisprudential arena for considering how Islamic law applies in novel situations (DeLorenzo 1998: 196).

Consider Fakhry: "The predominant moral motif of the Koran is undoubtedly the stipulation that the human agent ought to place himself in an appropriate relationship to God or His commandments if he is to satisfy the conditions of uprightness (*birr*) or piety (*taqwa*) to earn his rightful position in Paradise" (Fakhry 1997: 22). On this view the law preeminently concerns faithfulness, presenting each of its requirements as concrete occasions to obey God's will. Jurisprudence aids this exercise by assigning actions performable by individuals to one of five categories: required, recommended, optional, discouraged, or prohibited. It spheres of action include religious and private duties, family relations and public offices, but in each case the law appears concerned foremost with discrete actions performable by individuals—and only derivatively with forms of cooperative action, or the standards and principles of a just society. Some environmental ethicists may then worry that "the private and individualistic character of Islamic law" prevents it from reaching ecological relations (Schacht 1963: 209).

On the other hand, some environmental ethicists see in *birr* and *taqwa* opportunity both to underscore the spiritual importance of observing environmental protections and justification for new environmental legislation. If the Shari'a primarily directs hearts and minds to Allah, while protecting the material and interpersonal conditions necessary for this, then the traditional *maqasid al-Shari'a* already covers much that concerns environmentalists. Abu-Sway, for example, argues from the material base of faithfulness, claiming that environmental deterioration undermines the Shari'a's concern for life, property, and

even religious observance (Abu-Sway 1998). Moreover, as occasions for personal holiness, Shari'a environmental laws may induce unrivaled personal motivation, resulting in environmental practices perhaps more appropriate. Says Isma'il Hobson, "any pretension to care for the 'environment' is bound to be either false, selfish, or fragmentary and thus short-term and short-sighted, unless it is grounded in awareness and love of Allah" (Hobson 1998: 37). While motivation to care remains extrinsic, because moved by divine love, it claims the full register of human personhood.

Even the extrinsicism may be mitigated; for while the aim of the Shari'a is right relationship with Allah, one of the Qur'anic tropes qualifying right relationship is *khilafa* (vice-regency). As representative guardians for the divine will, human spirituality is set squarely in the material, political world. Therefore, the law evaluates uprightness and piety in observing environmental injunctions according to their beneficial results for nature. There is a mediating environmental aspect to observing the law, a secondary, but nonetheless unavoidable, earthly attentiveness to performing the duties of obedience (Zaidi 1981; Nasr 2003: 95; Haq 2003: 130). In fact, the Shi'ite jurist might say, "human beings, having assumed the trust, have the potential to . . . perfect their environment" (Sachedina 1988: 94). Virtues of justice and knowledge may only be predicated of the *khalifa* who mediates God's beneficent intention for creatures. One may even derive regulations for protecting biodiversity from this mandated care (Ahman and Bruch 2002: 10026). For environmental degradation threatens the practice of obeying the command to caretake: "[t]he destruction of the environment prevents human being from fulfilling the concept of vice-regency on earth," and that means "the very existence of humanity is at stake", both materially and spiritually (Abu-Sway 1998).

A second view of the *maqasid* elaborates the social implications left only derivative and implicit in the first view of the law's aims. Sachedina, for example, argues that the "ideal of justice in a divinely ordained community is a natural outcome of the belief in an ethical God who insists on justice and equality in interpersonal relations as part of the believer's spiritual perfection" (Sachedina 2001a: 239-40). In other words, the Shari'a is more than a set of inward spiritual exercises, externally manifest in specifications unrelated to earthly goals; it expresses God's will for a holistically just society. More than *'ibadat*, matters of service to God, the Shari'a is objectively concerned

with matters of interpersonal justice, *mu'amalat*. Indeed, *mu'amalat* make up the greater proportion of legal provisions.[18]

Islamic environmentalists often note the number of environment-related provisions included under *mu'amalat*. They concern protected lands, water use, hunting rules, and property rights (Dockrat 2003: 345-65; Llewellyn 2003: 197-200). From the first communities in Medina and Mecca, Islam recognized environmental dimensions integral to the realization of a just society. The task of contemporary jurists, therefore, differs only in specific situation: as the law invigilates its enduring concern for a just society through changing historical situations it must attend to changed ecological circumstances.

The interpersonal justice concerns of *mu'amalat* demonstrate the importance of reasonably empowered humans to the success of rooting environmental responsibilities in the *khilafa* (vice-regency) concept. "The reality today is that the citizens of Muslim countries are among the least empowered people on the planet. The average citizen is not a man—or woman—but a mouse! How can he or she be a *khalifa*?" (Llewellyn 2003: 222) "The *mu'amalat* provides the necessary ingredients for the recreation of autonomous and integrative communal and social units", where a healthy environment relates to authentic human participation in religious, economic, and political life (Dockrat 2003: 365). On this view, human dignity and environmental quality are held together in a reflexive relationship between earthly justice and religious obedience. The otherwise surprising number of essays devoted to Islamic principles of the built environment testify to this importance: Islamic architecture and city planning image the glories of life according to the law.[19]

Two kinds of questions demonstrate potential limits to *mu'amalat* for environmental issues. First, does its justice reach only as far as an enlightened anthropocentrism, or can it include the entire ecological community? Within *mu'amalat* provisions, is nature a unit of moral concern or simply the arena of strictly interpersonal justice? Second, how extensive is the community of justice? How can the law bear on negotiations extending beyond a local Muslim community, beyond the *dar al-Islam* (realm of Muslim faith)? How can authentically Islamic urban planning proceed amidst diverse and competing visions of the law? The questions suggest interpersonal justice on its own may not be competent to address regional and global environmental problems.

A third view of the *maqasid* envisions the entire cosmos as the relevant legal community, thus orienting obedience to a justice embracing

all creation. "[T]he Qur'an addresses not only men and women but the whole of the cosmos", says Nasr; it "does not draw a clear line of demarcation between the natural and the supernatural, nor between the world of man and that of nature" (Nasr 1998: 119-20). Allah requires obedience from all creatures; there is no final legal separation between humanity and nature. "The Qur'an . . . calls all nature *muslim* ('submissive')" (Ozdemir 2003: 16). Consequently the law must reflect God's will for response from the entire created order.

Many ethicists writing from this third view also point out that the word "*aya*" designates both a phrase in the Qur'an as well as a creature.[20] The implication is clear: as *ayat*, creatures are signs of divine revelation, in some way analogous to, or participant in, the Qur'an as revelation. As animate signs of Allah's will, all creatures possess a dignity humans must recognize. The law, then, reflects how the divine will addresses creatures in the unity of their fundamental relation to Allah. Including all creatures before the law witnesses to Allah's own unity (*tawhid*) (cf. Ammar 2003).

Precisely how the law comes to express Allah's will for the whole creation, however, may take different forms. It might mean that "[t]he ultimate objective of Islamic law is the universal common good of all created beings" (Bagader et al. 1994: 17). Justice reaches beyond human boundaries, taking into account the good of a wider ecological community. "It means that no species or generation may be excluded from consideration in the course of planning and administration, but that each individual Muslim as well as the Muslim community must honestly strive toward the welfare of the whole" (Bagader et al. 1994: 17). This strategy points existing anthropocentric legal provisions toward their perfection in an original divine will more ecocentric than previously imagined, but more befitting the law's ultimate aim for all creation.

A separate view of the cosmic goals of the law develops the human ecological vocation through mystical interplay between law and cosmos, drawing from the Sufi tradition.[21] If the law addresses all creation, disclosing each creature as already animated by the divine will, then human participation in the ultimate law relates to nature's own "animation," "praise," or "ascent" (cf. Clark 2003; Said and Funk 2003). Human responsibility thus takes on cosmic dimensions: if "there is no demarcation between what the Qur'an reveals and what nature manifests", then "[t]o infuse the natural world with transcendent (revealed) ethics is the main purpose of man" (Ozdemir

2003: 8, 10). Human obedience completes the created harmony, realizing *tawhid* (here, the unity of creatures in the unity of Allah), thus imaging the final form of law, which claims each individual creature. From a spiritual cosmology such as Rumi's we see how nature's responsiveness reveals the law's cosmic intentions, and how human faithfulness accepts the harmony Allah establishes (cf. Clark 2003: 39-66). Here, "Islam is the process of submission to God, through which the part—the human microcosm—becomes reconciled to the Whole, to the universe or the macrocosm" (Said and Funk 2003: 156).

In sum, we have seen three general legal cosmologies, three respective views of the law's ultimate aims, and three alternate frameworks for environmental ethics. The first, theocentric in its concern for spiritual holiness, includes environmental aspects within spiritual obedience. The second, anthropocentric in its respect of human dignity, addresses environmental problems as they bear on just communities. The third, ecocentric in its scope of legal address, ties human obedience to the good of other creatures and of the whole. Thus contemporary debates over religious cosmologies, while not originary, shape Islamic environmental ethics by directing the orientation of jurisprudence.

Ijtihad: Legal Reasoning and Globalization

The diversity regarding the law's orientation (seen in *maqasid* and *istislah*) and the limitations of strict analogy (*qiyas*), point to a final, controversial mode of deriving the law: *ijtihad*, or the exercise of personal reason. In contemporary debates, *ijtihad* sometimes appears as watchword for parties advocating rationalist or modern reforms. Within jurisprudence, however, scholars often refer to *ijtihad* as an interpretive activity necessary to each stage of jurisprudence, and at the end, if the ethical context remains inadequately addressed by existing laws, a stage of investigation in itself. Nowhere does "reason alone" become one of the sources (*usul*) of the law, but it is one of the tools which jurisprudence (*usul al-fiqh*) deploys in order to discover how the tradition already has resources to accommodate a problem. Only in this case, the tool is the *mujtahid* himself (the advanced jurist), who, disciplined by a lifetime's submission to the law, exhausts all available evidence to offer a qualified opinion on

its particular application. *Ijtihad* does not produce law according to personal intuition, but refers to "the interpreter as one who *discovers* the law. The theory of *ijtihad* presupposes that the process of producing rules is a process of elucidating that which is *present* but not yet self-evident" (Weiss 1978: 200).

In respect of environmental problems, so much of the law is not yet self-evident that resort to *ijtihad* appears urgent.

> The problem is that environmental law requires not only legal rulings and precedents from centuries gone by or ideal statements of general principle, but creative, practical, detailed application of these precedents and principles to specific environmental, socioeconomic, and technological problems. In other words, it requires *ijtihad* (Lewellyn 2003: 237).

Unfortunately, the very necessity of *ijtihad* may incite conservative resistance to environmental issues. Because sometimes championed by those suspicious of traditional authority, conservatives may worry that exercise of *ijtihad* signals the ascending importance of independent reason. They may therefore downplay or ignore problems of scope and complexity, such as climate change, which seem to require generalizing forms of legal reasoning in order to harness traditional resources. Those concerned to maintain traditional authority may therefore perceive environmental reforms to invite ethical appeals which impoverish rather than intensify the tradition's normative resources. If subjective opinion establishes environmental policies, then it links those policies to the law's sources by uncertain or merely convenient speculations—implying Islam's traditional resources are insufficient.

At the same time, however, scholars see *ijtihad* functioning at every step of traditional jurisprudence. "The science of *usul al-fiqh* is largely a statement of the rules which govern *ijtihad*, of what would have been called the rules of interpretation in Western jurisprudence" (Weiss 1978: 208). Personal reason is the strenuous practice by which jurists uncover and internalize divine law; it becomes controversial when it arrogates to itself power to constitute divine law itself.[22] As Hallaq shows, independent reasoning has always been necessary even for meaningful submission to the law. *Taqlid* (submission to authoritative ruling), argues Hallaq, has been a surprisingly adaptive activity, because it amounts to "a reenactment of *ijtihad*", requiring disciplined and creative reasoning (Hallaq 2001: 103). One might venture that, when thoroughly formed within traditional Islamic practical reasoning,

the exercise of *ijtihad* in fact refutes the modernist versions of "independent reasoning" current in market societies. *Ijtihad* is not the operation of autonomous reason itself, but enactment of the practical wisdom peculiar to its tradition.

A contemporary gulf between jurists (*ulema*) and public intellectuals exacerbates equivocation in talk about Islamic reasoning and reason in Islam (cf. Sachedina 2004). Often the technical specialists and public figures working through contextual problems do not have traditional training in jurisprudence; while the most advanced jurists who do too often fail to engage with particular environmental problems. "The greatest single obstacle to establishing the discipline of Islamic environmental law," says Llewellyn, "is the wide gulf that separates the conservation professions from those of Islamic law" (Llewellyn 2003: 236). For that alienation represents the disruption of contemporary practical reason from *ijtihad*, of environmental challenges from traditional resources.

In other words, changes wrought in Islamic modernity, especially more radical dissociation of religious reasoning from practical policy-making, have created conditions which tend to undermine the capacity of jurisprudence to engage revelation with practical social concerns. Deracinated by scholastic amalgamations and colonial reforms, jurisprudence struggles to renovate traditional resources resistant both to fundamentalism and vacuous secularisms. Reinvigorating *ijtihad* seems its best hope for refusing a breach between revelation and the world.[23]

Both the breach between specialists and jurists and the concomitant one between the practical world and the sphere of revelation, sometimes relate to Islam's difficult relations with the west, or at least with western market secularism. Many essays in Islamic environmental ethics concern themselves with globalizing interferences in traditional Islamic societies (e.g., Baker 1998, Hobson 1998, Ammar 2000, Abu-Rabi 2001, Khalid 2003a, Nasr 2003, Dien 2003, Haq 2003, Lewellyn 2003, Dutton 2003, Parvaiz 2003). They see traditional religious resources strained by a global finance system undermining Islamic economic principles, or technologies whose aegis exceeds the scope of extant law, or nation-states pressing for western-style secularities, or diffuse authority structures mitigating the relevance of traditional law, or complex ecological and economic problems attributable to originally European practices.

How an environmental ethicist refers to the causal relations amidst globalization, religious strains, and environmental problems often anticipates the way she conceives appropriate normative reasoning in response. References to the west may absolve Islam of the cosmological complaints leveled at Christianity, as well as of Muslim resistance to western-sponsored environmental reforms (Khalid 2003b: 31-4). Or second, they may play to Muslim identification against globalizing western culture, rallying energy toward environmental redress as one mode of resisting the deterioration of Islamic society by outside forces (Manzoor 1984; Abu-Rabi 2001). This in turn can, third, legitimate careful ecological reform of Islamic law precisely in order to bring authentically Islamic solutions to bear on a crisis brought about by western forms of reasoning, rather than inviting still further deterioration by accepting solutions based on the same kind of reasoning (Llewellyn 2003: 186). Alternatively, they can justify accelerating modernist overhaul of Islamic law by arguing that pragmatic responses to such strange challenges require recourse to the ultimate sense of the law, rather than its peculiar, outdated instantiations (Afrasiabi 2003: 281-96). Still others might point to outside responsibility for environmental problems in order to recommend importing outside environmental codes, on the notion that western problems require western solutions. Finally, one might criticize mention of the west as a distraction from truly global environmental problems (Afrasiabi 2003: 286-7).

Each stance toward the complex of Islam/west relations gestures toward a view of appropriate religious reasoning, and each implies that environmental problems require more adequate modes of appropriating Islamic resources. Without assuming any one interpretation of "Islam and the West", jurisprudence offers a practical domain within which to consider modes of adequacy. Emerging from and presumed by the entire range of tools in *usul al-fiqh*, some reclamation of *ijtihad* may be able to address environmental problems by effectively deploying the normative resources of revelation.

Conclusion

This article has outlined, only very generally, how the jurisprudential tradition at once complicates the task of Islamic environmental ethics and intensifies its practical effectiveness. A practical Islamic approach

to environmental problems offers and demands more than reconsidered cosmologies, and it must refuse haphazard appropriation of its normative resources. Environmental problems, says Lewellyn, require more than concerned recitation of relevant citations and precedents, and more than Muslim environmental specialists.[24] They require jurists who understand environmental problems, and specialists who appreciate the methodical care by which traditional jurisprudence approaches new challenges (Lewellyn 2003: 236-40). Hope for an authentic, pragmatic Islamic environmental ethic rests in this kind of collaboration:

> How biodiversity and other values will stand up under Islamic law when confronted by other apparently competing Islamic values will depend to a large extent on how well Muslim jurists have developed environmental aspects of Islamic law. Such development would not only establish the importance of environmental principles under Islam, but also determine their scope and how they interact with other principles. Consequently, the more jurists develop environmental principles, the more likely it is that potential conflicts will be resolved in a way that preserves ecological integrity (Ahman and Bruch 2002: 10036).

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Notes

1. The author thanks Aziz Sachedina, Adam Gaiser, Khalial Withen and Albert Kowun for helpful guidance.

2. J.N.D. Anderson put the contrast with Christian theology this way: "In the religion of Islam everything rests on divine revelation . . . But in the orthodox view, God has not revealed Himself and His nature [as Christians might expect of revelation], but rather His law . . . It is partly for this reason that law has normally taken precedence over theology in the Muslim world, for it is far more profitable and seemly to concentrate on the study of what may be known or deduced of God's commands regarding how man should behave, than to speculate on the essentially inscrutable mystery of His nature and attributes" (Anderson 1957: 13).

3. All quotations from Kohler (1991) are my own translation.

4. Bernard Weiss explains the difference between *faru al-fiqh* and *usul al-fiqh* as that between "practical jurisprudence," actual articulation of laws, and "theoretical jurisprudence", principles governing the formulation of laws (Weiss 1998: xi-xiv).

5. Khalid refers to *sura* 55.8; I use an alternate translation from Khalid's slightly more confusing, "transgress not in the balance" (Cf. Khalid 2002).

6. Ahman and Bruch, for example, interpret the Qur'anic description of *mizan* to intend the "natural regeneration of the diverse life forms on earth" (Ahman and Bruch 2002: 10025).

7. Although the Mu'tazilite school died out in the tenth century, its debate points

remained an ongoing argument within the development of the jurisprudential tradition, shaping the formation of the legal schools. One can now find reconsiderations of Mu'tazilite theology, and even a few self-identified Mu'tazilites (cf. Martin 1997).

8. Kevin Reinhart has shown how historical controversy over the ethical status of actions before revelation, which generally followed Mu'tazilite-Ash'arite lines, discussed by proxy the ethical significance of the created world. If one holds that actions were reliably assessable before the temporal arrival of revelation, then one's high view of the natural law qualities of the world may entail a correspondingly lower view of revelation itself. Conversely, entirely to privilege revelation for assessing pre-revelational acts entails a lower view of creation's sign-character (Reinhart 1997: esp. 50-1).

9. An interesting case within this tension is the Qur'anic description of nature as *ayat*, or revealed sign. So an Ash'arite might say Allah's utterly singular will is for creatures to display Allah's will—allowing a kind of natural theology. So Nomanul Haq: "Recall that the term *ayat* designates both the verses of the Qur'an as well as the phenomena and the objects of the natural world. Thus the natural world is a bona fide source for the understanding (*fiqh*) of *shari'a*, and therefore cannot be considered subservient to human whims" (Haq 2003: 130).

10. For one view on *ijma* as a pragmatic response to legal issues, and its possible contemporary revision see Hourani (1964). Lisa Wersal and Anwar Ibrahim have suggestions that *ijma* could in fact have relevance to environmental concerns (Wersal 1995, Ibrahim 1989).

11. *Qiyas* is typically rejected as a valid source by Shi'i (cf. Fyzee 1995: 120-5).

12. This is close to the argument of Ahman and Bruch, who consider *hima* "the most promising Islamic mechanism for maintaining biodiversity" (Ahman and Bruch 2002: 10028-29). Subsequent pages offer excellent examples of analogical reasoning in relation to marine creatures and plants, which do not enjoy Qur'anic regulation.

13. None of these issues are dealt with by the IUCN's *Environmental Protection in Islam*; ozone depletion and global warming are each mentioned only once in the whole Harvard collection of *Islam and Ecology*.

14. I will not explore sources usually ignored by Islamic environmental ethics, such as *istishab* (presumption of continuity) or *urf* (custom).

15. Richard Foltz reports from Iran on policies that seem to use *istislah* to maintain continuity between traditional authority and contemporary problems (Foltz 2001).

16. I treat here only the most general and primary goals of *Shari'a*, not the five traditional *maqasid* of al-Ghazali (protection of religion (*din*), life, reason, posterity, and property). How jurists understand even these traditional *maqasid* is shaped by a still more general understanding of the law's ordination—its meta-*maqasid*, if you will.

17. For four essays that do, see Llewellyn (2003), Ahman and Bruch (2002), Abu-Sway (1998), and Ozdemir (2003).

18. Hashim Ismail Dockrat supposes it is two-thirds of *al-fiqh*, and much of this focused upon regulating economic relations (Dockrat 2003: 347). Sachedina refers to a *hadith* making interpersonal relationships the predominate occupation of the Shari'a: "While on the whole, faith in Islam constituted ten parts, only one part was related to the God-human relationship and claimed the status of a common universal obligation. The remaining nine parts were related to human relationship, and determined by contractual responsibilities and specific social and cultural experience" (Sachedina, 2001b: 329).

19. Charles Le Gai Eaton: "at a very early stage and with astonishing speed and effectiveness, the Muslims constructed around themselves a human environment which was in accordance with their religious needs and in accordance with their

inner faith . . . The traditional Islamic city was so constructed that it facilitated adherence to the Shari'a. It encouraged worship and, by its structure and lay-out it provided the ideal setting for the Muslim's daily life. Moreover, it blended perfectly into the surrounding natural environment . . . a human habitation as much in accordance with Allah's creation as the spider's web or the bird's nest, yet with an extra dimension in that it was designed as a home for those who choose consciously to worship and praise their Creator" (Eaton 1998: 44-5). Foltz, however, thinks comments on architecture may distract from more pressing normative questions (Foltz 2000: 66).

20. In fact, none of the writers mentioned in conjunction with this third view fail to make something of creatures as *ayat* (Badager et al. 1994: 5; Nasr 1998: 120; Nasr 2003: 95-6; Clark 2003: 74-5; Ozdemir 2003: 11, 21-3; Said and Funk 2003: 158; Haq 2003: 130).

21. There is no space here to comment on the often contentious relationship between Sufism and the legal traditions, but the context at least begs mention that at heart of that conflict was just this question about the ultimate aim of the law. Should devout Muslims view the law as akin to a set of spiritual exercises aimed at shaping and perfecting the faithful heart? Or, for the practiced mystic, might the laws articulated actually impede one from communion with Allah's ultimate law? After al-Ghazali the predominant opinion has been the first: the law authoritatively shapes any authentically Muslim spirituality.

22. The use of *qiyas* dramatizes this, for here the jurist must isolate the justificatory reason of revelational text, preserving its contemporary normativity by repeating it proportionally in another situation. In other words, *ijtihad* is the activity by which humans receive the eternal law; "*ijtihad* may be regarded as constituting from beginning to end a process wherein something beyond the individual scholar is becoming manifest to him . . . until finally, if ever, the eternal law considered as the ultimate object of the entire search arises within his mind" (Weiss 1990: 71). Hallaq therefore refers to the "deified involvement" of the *mujtahid* with divine word (Hallaq 2001: 24).

23. It is outside the competence of this essay to consider whether legal mechanisms for reform are still sufficiently vital and robust, or whether environmental problems are so discontinuous with previous challenges that *usul al-fiqh* cannot redeploy the moral authority adequately. Wael Hallaq himself believes that the law, once an agent for reform and change, has now become static: "law has been so successfully developed in Islam that it would not be an exaggeration to characterize Islamic culture as a legal culture. But this very blessing of the pre-modern culture turned out to be an obstacle in the face of modernization. The system that had served Muslims so well in the past now stood in the way of change—a change that proved to be so needed in a twentieth-century culture so vulnerable to an endless variety of western influences and pressures" (Hallaq 1999: 209).

24. "No matter how sincere and well-intentioned, attempts at *ijtihad* by environmental specialists without qualifications in Islamic jurisprudence are invalid, and attempts at *ijtihad* by jurists without practical experience in environmental issues are irrelevant" (Llewellyn 2003: 237).

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