Islam and Biomedical Ethics

with Mohammed Ghaly, "Islamic Bioethics in the Twenty-first Century"; Henk ten Have, "Global Bioethics: Transnational Experiences and Islamic Bioethics"; Amel Alghrani, "Womb Transplantation and the Interplay of Islam and the West"; Shoaib A. Rasheed and Aasim I. Padela, "The Interplay between Religious Leaders and Organ Donation among Muslims"; Aasim I. Padela, "Islamic Verdicts in Health Policy Discourse: Porcine-Based Vaccines as a Case Study"; Mohammed Ghaly, "Collective Religio-Scientific Discussions on Islam and HIV/AIDS: I. Biomedical Scientists"; Ayman Shabana, "Law and Ethics in Islamic Bioethics: Nonmaleficence in Islamic Paternity Regulations"; and Willem B. Drees, "Islam and Bioethics in the Context of 'Religion and Science'."

ISLAM AND BIOETHICS IN THE CONTEXT OF "RELIGION AND SCIENCE"

by Willem B. Drees

Abstract. This paper places "Islam and bioethics" within the framework of "religion and science" discourse. It thus may be seen as a complement to the paper by Henk ten Have (2013) with which this thematic section in Zygon: Journal of Religion and Science opens, which places "Islam and bioethics" in the context of contemporary bioethics. It turns out that in Zygon there have been more submitted articles on Islam and bioethics than on any other Islam-related topic. This may be a consequence of the global nature of the bioethical issues, driven by advancement in science and technology, which allows for conversation across cultural and religious boundaries even when the normative references and argumentative methods are tradition-specific.

Keywords: bioethics; ecology; Islam; medicine; playing God; Zygon: Journal of Religion and Science

This paper intends to place "Islam and bioethics" within the framework of "religion and science" discourse. It thus may be seen as a complement to the paper by Henk ten Have (2013) with which this thematic section in *Zygon: Journal of Religion and Science* opens, which places "Islam and bioethics" in the context of contemporary bioethics.

So far, "Islam and science" has not received much attention within "religion and science." As for the limited attention given to Islam, an

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explanation might be that most of the contemporary literature on "religion and science" has its roots in the Christian, humanist, and naturalist discourses of the West, and *Zygon: Journal of Religion and Science* is no exception to this background. Though the first article on Islam and science, "Science and Traditional Values in Islamic Society" appeared already in *Zygon*'s second year of publication (al Fārūqi 1967), it seems that the topic increasingly has attracted attention in recent years (Al-Hayani 2005; Bigliardi 2011, 2012; Elshakry 2011; Guessoum 2008, 2010; plus the invited papers discussing Nidhal Guessoum's book *Islam's Quantum Question*: Bagir 2012; Brooke 2012; Dajani 2012; Guessoum 2012; Hameed 2012).

Though applied ethics has also received limited attention, topics in "Islam and bioethics" have been discussed in various articles (Aasi 2003; Al-Hayani 2007, 2008; Farimani 2007; Ghaly 2010, 2012; Sekaleshfar 2010; Shabana 2012). The limited attention given to applied ethics in the journal is understandable. The "religion and science" discourse tends to be address scientific understanding (theories, world view) and meta-ethical issues (the evolution of morality, the status of values) more than medicine as a practice in human cultural contexts. However, I find puzzling the observation that there have been more articles on Islam and bioethics than on Islam in any other context.

Bioethics should be an obvious topic for this journal. "Religion and science" regards our understanding and appreciation of nature and "the natural," as well as our view of the human role and responsibility. In the imagination of nature and of human responsibility, bioethics brings together values and knowledge, and hence religion and science. "Religion" in this context need not refer to religious traditions as a whole, such as Christianity or Islam. Such traditions are not homogeneous enough. Within such religious traditions there always is substantial competition between various groups and individuals. What is presented as discussions on religious faith in relation to science is often as much a podium for disagreements within religious traditions (e.g., Drees 2010, 24–29; Olson 2011). Who has the authority to speak on behalf of the tradition? Who decides on legitimate interpretations and developments? In the context of bioethics, one also has to consider the collaboration or competition of various forms of expertise, such as those of the medical professional, of the bioethics experts, and of religious and legal scholars (e.g., Ghaly 2010, 2013).

Below, I will consider briefly "religion and science" when the focus is on *understanding*. Thereafter, we turn to "religion and science" when it comes to technology. I suggest that a major element in most discussions in this area regards the human role and the understanding of nature as creation—a discussion that crystallizes in the question whether "playing God" is permissible. In the third section I reflect upon the contributions to this thematic section on Islam and bioethics, to see whether these articles

reflect the general trend, and to what extent they reveal something specific about the discourse on Islam and bioethics. One major feature is the role of Scripture, rather than of reflection upon nature itself, which might be a clue to the puzzling observation that with respect to Islam in this journal, bioethical issues have been discussed more frequently than all other topics together.

"Religion and Science" as Understanding

Contributions on religion and science appear in various contexts and may serve multiple purposes. Some are *apologetics for religion* in secular setting; others are *apologetics for science* in a religious setting. In Europe the general emphasis is more on apologetics for religion (as science is widely accepted), whereas in the United States of America and in most countries with a Muslim majority the agenda seems determined more by the need for apologetics for science, making clear that practicing science is an appropriate profession for a believer.

Contributions on "religion and science" have also a role within religious traditions and communities. By aligning oneself with science, one may assert that one's religious position is the more reasonable one. Thus, claims about consistency with science may serve in *intra-religious* disputes. Dissenters, advocates of a minority position, as well as established religious authorities may appeal to science for additional legitimacy. "Religion and science" is a major battleground between revisionists and traditionalists in each tradition. I will illustrate this with some examples from Christian, Buddhist, and Islamic contexts.

In 1981 in Arkansas, the United States, there was a dispute on a law that required in biology classes "balanced treatment" of creationist views and standard biology. Opponents to the creationist position were parents and teachers, but also "the resident Arkansas Bishops of the United Methodist, Episcopal, Roman Catholic and African Methodist Episcopal Churches, the principal official of the Presbyterian Churches in Arkansas, other United Methodist, Southern Baptists and Presbyterian clergy," as well as three Jewish organizations (Overton 1988, 308). Hence, Christians stood on both sides of the case. That controversies over evolution are mostly controversies between different understandings of Christianity characterizes the whole history of "creationism" (Numbers 2006). And when one considers the more positive appropriation of Darwinism among Calvinist Protestants, a similar variety can be found (Livingstone 2003, 94). In Belfast, Protestants used Darwinism to criticize Catholics. In Princeton (USA), the theologians sought to read evolutionary natural history as divine design. In Charleston, in the southern United States, racial sensitivities led to opposition to a single human origin, while in New Zealand the settlers used evolution to justify their life at the expense of the Maoris (Livingstone 2003, 112–23).

Even a single issue such as the reception of Darwinian ideas in Protestant Calvinist circles was very much dependent on context and interests. That religious attitudes drawing on a single tradition may be found on both sides in conflicts applies not only to Christianity, but as well to other religions such as Buddhism and Islam.

The compatibility of Buddhism with science was a polemical issue in relation to Christian missionary activities in the colonial period (Lopez 2008, xi; see also Harrison 2010; Jinpa 2010; Lopez 2010). Though the colonial context is gone, claims about Buddhism's compatibility with science are alive and well. The XIVth Dalai Lama is the author of *The Universe in a* Single Atom: The Convergence of Science and Spirituality (2005), and a prime ambassador for Buddhism in a positive relation with science. While the Dalai Lama's engagement with science sells Buddhism in the West, it also makes science acceptable to the Tibetan community. The Dalai Lama engages some younger monks in those meetings, and has initiated a separate program "science for monks." "Buddhism and science" makes a difference within Buddhism. First, one may think which type of Buddhism dominates. Initially the Theravada Buddhism of Sri Lanka and South-East Asia had the lead; Zen Buddhism came into vogue after WW II. "And since the 1990s, Tibetan Buddhism has displaced Zen to become the chief referent of Buddhism in the Buddhism and Science dialogue, largely through the influence of the Fourteenth Dalai Lama" (Lopez 2008, xii). The engagement with science has served not only Tibetan Buddhism in its competition with other types of Buddhism, but it has also been selective among the schools of Tibetan Buddhism. While the Dalai Lama defends teachings of Mahāyāna Buddhism, the tenets of the Hīnayāna Abhidarma are discussed "often as examples of the Buddhist views that must be dismissed in the light of the discoveries of science" (Lopez 2008, 133). In the engagement with science, we may discern a contest about the course for future Buddhism.

Islam may provide additional examples. Even though popular understanding since September 11, 2001 suggests a struggle between Islam and "the West," the fundamental issue is a struggle for authority among Muslims. Who speaks for the true faith? As is to be expected in this context, Islamic appeals to science are quite diverse (Edis 2007; Guessoum 2011). Some Islamic authors claim that the natural sciences confirm insights already present in the Qur'an, and thus confirm its miraculous, divine origin (discussed by Guessoum 2008; Bigliardi 2011). Others such as Seyyed Hossein Nasr demand a richer metaphysics within which science is to be understood, appropriating science and some of Western philosophical criticisms of its "materialist" interpretations. Others reconsider the interpretation of the Qur'an, acknowledging hermeneutical processes, while concentrating on a moral or metaphysical core rather than specific texts (e.g., Taji-Farouki 2004).

Differences regard not only the understanding and interpretation of Qur'an and Hadith, but also the practice of science in Muslim countries. Physicist Pervez Hoodbhoy, in his book *Islam and Science: Religious Ortho*doxy and the Battle for Rationality, highly critical of the appalling state of science in Islamic countries and the role of religious orthodoxy and fundamentalism, which presents itself as advocating "Islamic science." "Instead of the orthodox programme, what is needed is a framework for thought and action, based upon science and reason, but in harmony with the inherited cultures of the Muslim peoples" (Hoodbhoy 1991,135). This may be contrasted, for instance, with the prime editor of the journal *Islam and* Science, Muzaffar Igbal (2002a,b). He seeks to integrate science into an Islamic view, or at least offer an Islamic perspective on science. According to such an approach there is no autonomous sphere addressed by science, nor can science have primacy over religious matters. It may be a programmatic signal that as of 2013 the journal Igbal edits has been renamed *Islamic* Sciences.

"Islam and science" cannot but be a part of the wider struggle as to which Islamic voices will have the upper hand, schematically a traditional and mainly antimodern version or a more liberal one. Who speaks for *the* Church? Who speaks for *the* Muslims, for *the* Hindus, for *the* Jews, or for *the* Buddhists? The definite article in such singulars hides a plurality of voices and opinions. Having science on one's side can be valuable. That is not just the case for liberals and modernizers; quite a few of the orthodox or fundamentalists seek to have science on their side as well. In the controversies over evolution advocates of a creationist understanding of their tradition do not just give up on science; they rather argue that science is misunderstood and dominated by a particular ideology, and that they represent the more genuine scientific spirit, which thus in the long run will be on their side.

Within traditions there are competing ways of understanding reality and the sources of the religious tradition, and also regarding appropriate actions, the domain of ethics. While some consider it morally required to draw on science and technology to serve the sick and needy, others might consider the same actions inappropriate, "playing God."

TECHNOLOGY AND ETHICS: PLAYING GOD?

Sometimes a concern is voiced that we go too far in our technological activities; we are "playing God." Even nonbelievers have found "playing God" a useful metaphor in criticizing new technologies; it associates well with Mary Shelley's nineteenth-century novel *Frankenstein* and other literature (Brooke 2013; Wagner 2012). The American philosopher Ronald Dworkin suggested in 1999 that the metaphor "playing God" arises because those new technologies do not merely raise ethical issues, but create insecurity

by undermining a distinction that is vital to ethics. Underlying our moral experience is a distinction between what has been given and what can be a matter of choice and responsibility. What is given is the stable background of our actions. We cannot change those issues. Traditionally this has been referred to as nature or creation; what happens to us is necessity or fate: these are given by the gods or by God. We assume a clear demarcation between who we are, whether as the product of divine providence or of blind chance, and what we do in the situation we find ourselves in.

When new technologies expand the range of our abilities, and thus shift the boundary between what is given and what is open to our actions, we become insecure and concerned. It is especially in such circumstances that the phrase "playing God" arises. The reference to "God" signals that something that used to be experienced as a given becomes part of the domain of human considerations; something that was beyond our powers to change, has been moved to our side of the boundary. Bioethics deals with issues which are now "in our hands" rather than "given," for example, when it comes to death and life (e.g., organ transplants), and the succession of generations (e.g., in vitro fertilization). If so, the fear of "playing God" may be less about the fear of doing what is wrong (which is an issue on our side of the boundary), but rather about the fear of losing grip on reality through the dissolution of the boundary. Dworkin argues that such fear is not necessary: humans have always played with fire, and we ought to do so. The alternative is, according to Dworkin, an irresponsible cowardice for the unknown, a weak surrender to fate.

In conversations on "religion and science," there is the critical expression: "god-of-the-gaps." This refers to the tendency to focus on gaps in our knowledge, and to assume that such gaps are where God's action might have been. Emphasizing gaps is a risky strategy, such as building upon ice; whenever we become blessed with greater understanding, the role of any god-of-the-gaps will be diminished. Far more satisfactory, in my opinion, would be to appreciate reality as understood by us as God at work. But that is not the point here. My point is that something analogous happens with respect to technology. New technologies imply a different range of human powers, and thus change experiences of that which has been given, whether fate, nature, creation, or God. At least, it diminishes the role of God if God is associated with that which has been given. This God, who is pushed to the margin, is a god-of-the-gaps, not so much the gaps in our knowledge as the gaps in our skills.

In our dealings with technology we humans are tempted to fall back upon a god-of-the-gaps. Without much thought we use the fruits of science and technology, such as antibiotics, electrical light, water drainage, computers, the anticonception pill, and much else. When the doctor fails, when there is no cure yet, we fall back upon God, or on other elements from the rich treasury of religious and pseudo-religious offerings. Humans tend to

look for God when our skills fall still short of what we wish we could do. Praying to God when technology fails results in an instrumental type of religiosity: God is supposed to help us when we need help, but to keep out of our way as long as we do well. Against the tendency to assume that the religious dimension comes into play when the engineers and doctors are no longer able to do anything, it seems to me preferable to appreciate the efforts of such professionals. Reliance upon professionals is not to be seen as an antireligious move, as we may appreciate their knowledge and skills as gifts of God, as possibilities to serve the neighbor and show mercy.

The standard view of technology's place in relation to "religion and science" can be illustrated well with the titles of two books from Ian Barbour: Religion in an Age of Science and Ethics in an Age of Technology. This may seem an obvious pair of titles, but it is nonetheless a particular and consequential way of dividing the field, as was pointed out to me by Ron Cole-Turner some decades ago. Why not also Religion in an Age of Technology—not just for the ethical issues that may arise, but also for the implied views of nature and of humans? Religious traditions often also have an evocative function and a transformative interest, calling people to work for a more just world with less suffering, seeking to liberate humans from bondage. Such theologies certainly should have an interest in the way we humans transform and might transform reality, for better or for worse.

Islam and Bioethics

"Religion and science" has a theoretical concern, about the ways we humans understand reality and ourselves. It also has a practical side, about the ways we live and act. This active side is more explicitly at stake when we reflect upon bioethics, but any religiously inspired bioethics also involves the understanding of social and natural reality, for example, as created and well ordered, alongside its normative and inspirational sources and resources.

The previous section pointed to the diversity of perspectives within a single religious tradition, also when it comes to the engagement with science and technology. This can be found also when one turns to bioethical issues, for instance, when considering Islam in relation to the ecological challenges of our time (e.g., Foltz et al. 2003). In a survey of "globalized eco-Islam," Anne Marieke Schwencke found a great variety of religious approaches with respect to Islam and ecology. While she showed that some thinkers focus on "Qur'anic ethics" and an Islamic legal approach, others are more explicitly politically oriented. Again others go for a mystical, philosophical approach to nature that should support a different view and appreciation of nature, while one also comes across more pragmatic guidelines for a "Green Islam" (Schwencke 2012). When considering a "Green Islam" a wide variety of assumptions regarding the Muslim religion are involved,

and these are assumptions on which people and groups within the tradition have different views.

Before turning to medical bioethics, as the main topic of this thematic section of *Zygon*, let us consider briefly some of the differences between the domains of ecology and medicine. A difference may be that with respect to the environment, "progressives" may be happy with an emphasis on conservation, respect for nature, and restoring "the balance," whereas in the medical domain they might be driven by a more activist attitude, to relieve people from suffering and undesired limitations. With such a difference between the environmental and the medical domain may come also a more ambivalent relation to Western knowledge. In the context of the ecological crisis, blaming the West and presenting oneself as eco-friendly is relatively easy, whereas in the medical domain it is harder to deny the great successes of Western medicine and still be favoring the best available medicine.

When we consider the contributions in this issue of *Zygon*, I will discuss first ways in which these fit with the general picture of "religion and science," as I have come to see the discourse. Thereafter, I will signal some of the elements that seem to be more specific to this discourse.

The general observation that conversations on science and a particular religion are often shaped by disputes internal to that particular religious community can be pointed out in relation to each of these articles (Alghrani 2013; Ghaly 2013; Padela 2013; Rasheed and Padela 2013; Shabana 2013). This is to some extent trivial, as these articles report on internal debates. To what extent the various individuals mentioned in these articles may be understood as representatives of distinct theological orientations or particular interest groups cannot be concluded on the basis of the articles.

Differences regard not only ideas, but also attitudes about technological possibilities. Quite a few of our authors are explicitly welcoming new technological possibilities as means to help people and reduce suffering. Thus, in her discussion of the possibilities of womb transplants, Amel Alghrani seems positive without restraint, as it might be a good instrument to help couples that suffer from infertility, while other modern options such as surrogacy are considered religiously inappropriate. Rasheed and Padela (2013) discuss the resistance to organ donation as a problem that should be overcome. Padela (2013) appreciates vaccines, even when made with products derived from pigs. The resistance against modern technology and medicine, equally argued for on moral grounds, is not explicit among the authors in this thematic section, but it is there in the thinkers discussed.

These contributions also show the interplay of global developments and local issues. Contexts do matter. That pigs have been involved in the development of certain vaccines can be overcome when Indonesia pilgrims need vaccines in order to be allowed by the Saudis to enter the country for

the Hajji (Padela 2013). Of course, the most dominant geographical distinctions are not global versus local, but "Western" (Europe and USA) and Muslim majority countries, and within the Muslim world the distinction between the Arab countries and the Islamic countries outside the Middle East. As Ghaly (2013) describes, some would like to see AIDS as a problem of "the West," but this was challenged straightforwardly by the biomedical specialists who pointed out the rising prevalence in Muslim circles. The global-local dynamic regards also moral principles, as the biomedical experts brought to the conversations principles of medical ethics developed in the United States, such as the four principles of Tom Beauchamp and James Childress, and in UNESCO (Ghaly 2013; Shabana 2013; ten Have 2013).

The article by Rasheed and Padela addresses the uncertainty among ordinary Muslims about the permissibility of organ donation, despite explicit endorsement of organ donation by major religious authorities. They argue that effective policy pronouncements need two elements, namely a normative principle and a motivational message. Too often the theoretical discourse has come to particular legal or theological conclusions, without effective acceptance among the general public. I do think that this corresponds with a widespread feature of "religion and science" discussions. Subtle analysis and authoritative conclusions may be found in learned books and official declarations, but these do not reach people "in the churches" easily. Many individuals inside and outside those faith communities would be surprised if they knew that major Protestant denominations and also the leadership of the Roman Catholic Church have accepted evolution, given that the public image is dominated by particular subgroups that attract media attention, often with effective slogans and fancy television shows. Besides, it might be much easier to argue that a Christian needs to take the Bible as literal truth, than to argue that even Augustine did not do so (McMullin 2011).

With respect to the specific case Rasheed and Padela consider, organ donation, the case in the USA has been the opposite—organ donation has been hailed positively as an opportunity for Christian neighborly love, agape. Since the mid-1960s, the time of the first heart transplant, popular theological thinking has been shaped by this notion of agape, especially through a book titled Eros and Agape by Anders Nygren which had appeared in English translation in 1957 (see LaFleur 2002). As a minor illustration of the way this is communicated more widely, one might consider the text on an automobile bumper sticker: "Please don't take your organs up to heaven. Heaven knows we need them here" (LaFleur 2002, 627). LaFleur contrasted this with Japanese culture, where organ donation met with more resistance, as it didn't fit so easily in the more customary spirituality with its respect for ancestors. So too for the case considered by Rasheed and Padela: even if the religious and scientific elite comes to a particular

conclusion, further conditions may be decisive in the reception of new possibilities.

Some features of the articles on Islam and bioethics in this issue of *Zygon* may be more specific for Islam and bioethics. To an outsider such as myself, the extensive role of references to the Qur'an and the almost complete absence of explicit hermeneutical considerations and a more or less self-standing philosophical discourse seems typical to Islam. Some such features might also be present in some of the more evangelical literature on religion and science, but in as far as contributions to this journal refer to the Bible in a Christian context, this is often far more embedded in a philosophical or hermeneutical reflection.

What strikes me is that there is not much explicit "theology of nature" in the discussion on bioethics, either with our authors or as a major element in the discussions they analyze. Most of the articles describe how people relate more or less directly to normative verses from the Qur'an, the tradition about the prophet, and the views of the subsequent legal schools. The bioethical visions don't seem to be shaped by a philosophical "natural law" ethics, for example, with an appeal to "orders of creation," though implicitly it is there, for instance, in the antihomosexuality rhetoric of some of the religious scholars on the conferences about AIDS (see Ghaly 2013).

The role of the scientists is also remarkable. As most explicit in the conferences analyzed by Ghaly (2013), they bring not only scientific expertise to the table, but also the internal moral discourse of human rights and other moral principles. This may reflect their training and work, often for some time also in Western institutions. Whatever individual religious convictions, the peer group for the scientists qua science is formed by other scientists, worldwide. Apparently, this carries over to the normative domain, where this adds the global to the tradition specific. Ten Have (2013) already noticed this trend in his introductory article on the development of global bioethics.

In the introductory paragraphs of this article, I considered it a puzzle that *Zygon: Journal of Religion and Science* has seen more articles on Islam and bioethics than on other contexts in which Islam and science relate. This may be accidental, of course, without any systematic significance. However, it may be that this particular subfield of "Islam and science" is one were connections to the general "religion and science" discourse are made most easily. The bioethical issues themselves are global. They arise due to developments in science, technology, and medicine. Thus discussions may be accessible by others who are not standing in the same tradition, and both insiders and outsiders may find these issues relevant and of interest. The topics allow for conversation across cultural and religious boundaries even when the normative references and argumentative methods are tradition-specific.

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