Depression (in Japanese), in Komai Hiroshi ed. Materials on the Problems of Foreigners Settlement, Akashi Shoten, pp. 459-479

10. Sugimoto, Hitoshi. 2002. The Sociocultural Spheres and Education Problems of Islamic Believers (in Japanese), in Miyajima Takashi and Hiromasa Kano ed. Changing

Japanese Society and Culture. Tokyo University Press. Wang, Jianxin. 2001. The Formation and Present Conditions of Muslim Society in Japan (in Chinese), in Huizu Studies, No. 2, pp. 64-71.

11. Wang, Jianxin. 2002. Foreign Muslims in Japan (in Japanese), in Intriguing Asia, No.39, pp. 137-147.

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SCIENCE AND RELIGION: COMPETING WAYS OF KNOWING?

It is a commonplace in contemporary theory of knowledge that human beings avail themselves of many different ways to acquire knowledge. Our senses provide one avenue, memory another, reasoning yet another, and so on. Most of these avenues of knowledge are windows on the world; that is, they all provide information about the spatio-temporal world we all inhabit. As a result, they provide a generally consistent picture. When the deliverances of one sense contradict those of another, we see this as a problem that requires resolution, and usually, further application of the senses provides that resolution.

What is more controversial is the claim that there are ways of knowing that provide insights into aspects of reality other than the physical world. Moral sense and aesthetic judgment, if they are avenues of knowledge at all, are examples of this. There is no concern that either our moral sense or our aesthetic judgment will ever give us grounds for beliefs that contradict the deliverances of our senses. This is the normal situation, what is to be expected. Our sources of knowledge either agree with one another (in the long run), or give us information about completely different realms.

Suppose that, as some have said, religion provides a way of knowing. What are we to make of apparent contradictions between religious belief and science? This is a live issue in much of the world today, where fundamentalist interpretations of scriptures tell one story about the origin of life, and science tells another, and different people respond differently. If revelation, or scripture, or prophecy, tells us something that is contradicted by science, historically, religion has yielded to science, but that is not the only possible response to apparent conflict. In what follows, I hope to lay out the different logically possible positions people can take on the relation between science and religion, and show how this analysis makes trouble for the idea of religion as an avenue of knowledge.

To begin with, we can divide the possible positions into two kinds: you can think either that science and religion are incompatible, that is, that

the claims the two systems make cannot all be true, or that they are compatible. If you think they are incompatible—call this view Pessimism—you have a decision to make. If they can't both be right, you know one of them is wrong, but the incompatibility alone doesn't tell you which one. So, some people, having great faith in the ability of science to get at the truth about the world, have decided that religion is intellectually disreputable, and so abandon all religious claims. Daniel Dennett, [1] Richard Dawkins, [2] and virtually every enlightenment atheist that ever was take this view. They believe science is by its nature directed toward truth, and there is no reason to suppose that religious traditions have that same truth-directed quality. If this view is right, then religion, to remain viable, must revise its doctrinal commitments.

But not all pessimists are scientific pessimists. Some, reasoning that science admits it is fallible, but that God (or the Vedas, or the Buddha) cannot be wrong, decide to jettison science instead. In this camp we find creationists, and Intelligent Design theorists like William Dembski. [3] It's important to understand that it is not only Christianity that harbors religious pessimists of this kind. In the late eleventh and early twelfth centuries, a Muslim philosopher named Al-Ghazzali applied rigorous logical reasoning to matters of cosmology and philosophy, and decided that the whole enterprise was self-refuting. He then gave up philosophy, became a Sufi mystic, and wrote a book called The Incoherence of the Philosophers [4]. He would say that if reason contradicts God, then so much the worse for reason. He would surely make the same judgment about science, which is, after all, just a regimented form of common sense, a way of reasoning about the world. Moreover there are Hindus and Buddhists who take their scriptures' claims about the origin of the universe and humankind as literally true, and therefore reject the claims of modern science. It used to be part of Hindu and Buddhist orthodoxy that there is a huge mountain, Mount Meru, at the center of the earth, which is flat and disk-shaped, and the continents are banana-shaped land masses arranged around the central hub [5]. To this day, many Hindu fundamentalists take issue with the theory of evolution, not because it makes the earth too old, but rather too young. They claim that human beings have inhabited the earth for millions of years [6].

Actually, there is a third kind of pessimist position one can take, but it isn't very popular: You can think, like Tertullian, the second and third century Christian thinker, that science and religion are incompatible, and that is perfectly OK. It's a little funny to talk about second century "science," since science is really a modern idea, but there certainly was an idea of knowledge of the natural world then. Tertullian is famous for having said "Credo quia absurdum est," [7] which means "I believe it because it doesn't make any sense." He thought that the very inconsistency of Christian doctrine with common sense was a mark in its favor. For him, incoherence is not a problem. That's an odd position, not shared by many, but it is—in some sense—a possible view.

But one can also be an optimist, and think that science and religion do not ultimately contradict one another. Optimists come in two kinds, that I will call Cowardly and Brave. The cowardly optimist believes that science and religion are compatible because they are not talking about the same thing. Just as quantum physics and literary theory are compatible, because they are not even addressing the same subject, religion talks about one thing, and science another, so there is no occasion for incompatibility. Setphen J. Gould, in his Rocks of Ages [8], argues for a position like this. He calls this idea Non-Overlapping Magisteria (borrowing the idea of magisterium, or teaching authority, from Catholic doctrine). Of course, as I have pointed out earlier, religions do make claims about some of the same things science talks about, including cosmology, geography, psychology, and more. So Gould has to modify his claim; he has to say that science and religion *ought* not to talk about the same things. It's a noble idea, I suppose, but it's not likely to make converts of either scientific or religious pessimists. That's why it's cowardly: it buys compatibility at the price of forbidding discussion.

Finally, one can be a brave optimist. This is the view that science and religion are compatible because they are both avenues of knowledge about the one reality we all inhabit. Truth has nothing to fear from truth, so scientific truth and religious truth will converge on the same picture of the universe. It does require courage, though, because there will be cases in which the claims of science and the claims of religion seem to conflict, and then the brave optimist has a decision to make. In some

ways, it is an inherently unstable position. The fact that religious belief and science seem to come into conflict over and over again suggests that they are not both avenues of knowledge about the same spatio-temporal world. One of the reasons to think that our senses are an adequate guide to the nature of the world is that they tend, in the long run, to confirm one another. The appearance of fire is accompanied by the sensation of heat, and so on. As we noted in the beginning, when there is conflict, further investigation with the senses tends to resolve it. Historically, what has happened with science and religion is somewhat different; when they come into conflict, there is no mutually agreed-on method of inquiry that can be used to resolve the conflict. What has always happened (so far) is that when science has asserted something inconsistent with religious doctrine, eventually the doctrine has changed. It does not happen that some method of religious inquiry is undertaken that resolves the problem; instead, there is a process of reinterpretation. Whereas the early Catholic church believed that geocentrism was essential to Christian doctrine, no the church has found a way to interpret its scriptures less literally. It is to be hoped that the idea of a literal six-day creation is similarly on its way out (as most branches of Christianity have already decided).

Assuming that conflicts have been resolved in a rational way thus far, a troubling picture for religion results. Since religious knowledge doesn't seem to converge with scientific knowledge without being forced, it looks like religion is not really a source of knowledge after all. So brave optimism turns out not be an option after all. If truth has nothing to fear from truth, and religion has something to fear from science, then religion is not truth. The only ways to avoid this conclusion are to adopt cowardly optimism—like Gould's Non-overlapping Magisteria idea—or settle for one or another kind of pessimism.

^{1.} Breaking the Spell, New York: Penguin, 2006.

^{2.} The God Delusion, New York: Bantam Books, 2006.

^{3.} The Design Revolution: Answering the Toughest Questions about Intelligent Design, Downer's Grove, IL: Intervarsity Press, 2004.

^{4.} Michael E. Marmura, trans., Salt Lake City: Brigham Young University Press, 2002.

Akira Sadakata and Hajime Nakamura, Buddhist Cosmology, Tokyo: Kosei Publishing Company, 1997.

^{6.} See sources cited in Michael Cremo and Richard L. Thompson, Forbidden Archeology, Bakhtivedanta Books Publishing, 1998.

^{7.} Tertullian, On the Flesh of Christ, Kessinger Publishing, 2010.

^{8.} New York: Ballantine Books, 1999.