SCIENTISTS AND RELIGIOUS COMMUNITIES:
INVESTIGATING PERCEPTIONS, BUILDING UNDERSTANDING

by Jennifer Wiseman and Paul Arveson

Abstract. The American Association for the Advancement of Science (AAAS) Dialogue on Science, Ethics, and Religion (DoSER) program has embarked on an exciting project, “Scientists and Religious Communities: Investigating Perceptions to Build Understanding.” The project will provide the first quantitative data on the underlying assumptions and concerns that shape national attitudes on science. A nationally representative survey conducted in collaboration with sociologists at Rice University has reached 10,000 people, including evangelical Christians, mainline Protestants, Catholics, and Jews. The survey probed how a broad range of religious people, particularly evangelical Christians, understands and thinks about science, and what they perceive about scientists. Scientists, broadly defined, were likewise surveyed to gauge their perceptions of how religious people regard science. The goal for AAAS is to increase understanding between the scientific and evangelical Christian communities and redefine this critical relationship. DoSER will bring together leaders from scientific and evangelical communities to discuss the implications of survey results and to use them for building better understanding and communication strategies. Building relationships between scientists and religious communities has the potential to create a new paradigm of understanding. Finding out what each group actually thinks, through a survey, is only the beginning.

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Science and religious faith are arguably two of the biggest sociological influences on the lives of people today, whether through direct engagement or with the indirect but pervasive impact of both on societal pursuits, norms, boundaries, and expectations. Much has been said and studied regarding the varying frameworks for understanding the relationship between the two.

Yet, when it comes to public understanding and support for science from the large and varied sector of religious communities, it is the perception of the role of science and of scientists themselves—for example, their motives, expertise, and influence—that often carries the most weight. Likewise, the impressions scientists hold, right or wrong, regarding the beliefs and concerns of religious people can impact their effectiveness in public discourse regarding issues critical for the health of the nation and the world. Misperceptions between scientific and religious communities can have measurable impacts on national attitudes toward science, and ultimately on national science policy.

Attaining a deeper understanding of these sometimes deeply nuanced perceptions presents a strong yet critically important challenge for the science community. To that end, the American Association for the Advancement of Science (AAAS) and Rice University are collaborating to conduct a major survey of several religious communities regarding their beliefs about science and their perceptions of scientists. A second component of the survey will investigate the views held by scientific professionals from a wide swath of applied science and research careers regarding the attitudes they think religious people hold toward science. The project, funded by the John Templeton Foundation, will provide the first quantitative data on the underlying assumptions and concerns that shape national attitudes on issues ranging from basic science education to environmental stewardship.

**GETTING TO THE HEART: BUILDING A SURVEY**

The need for better understanding between religious groups and scientists stems not from a requirement that both agree on all fundamental principles (though the groups can and do overlap in membership), but rather from their shared interest and input into public discourse on the importance and ethical uses of, and support for, science and technology. Indeed, with the AAAS motto of “Advancing Science, Serving Society,” understanding the interests and concerns of a largely religious public regarding science is key to effective engagement.

Many scientific and technological issues are of fervent interest to religious communities. While “evolution” often takes the media spotlight, other issues are at least as provocative in both positive and negative ways. Knowledge of advancing medical treatments, water management technology, and humane agricultural production are of great interest as part of their
service to the developing world, and understanding the effects of climate change is being seen more and more as critical for religious communities called to environmental stewardship and concern for the world’s poor.\footnote{1} On a more fundamental level, embryonic stem cell research, the nature of the mind and free will, the blurring of distinction between humans and machines, genetic determinism, and even the march toward finding extrasolar life are keen examples of where science touches fundamental beliefs regarding the nature and responsibility of human life.

In fact, a deeper probe shows that it is actually the underlying basic philosophical concerns of religious citizens toward science that can lead to responses of either enthusiastic support for science or else rejection of scientific data in ways that can be sometimes baffling to scientists.

One evangelical leader who advises the project points out that people within his constituency are often more concerned with the “package” that they perceive may be coming along with science, rather than any particular result. For example, it may not be “the fossil record” or the age of the universe that troubles, but rather the perception that “evolutionary science implies godlessness” or the concern that “if my child is taught evolution in school, will it come wrapped in a package of atheism?”

Understanding the role of authority figures is paramount to reaching the goals of this survey. All people look to trusted authority figures to find guidance in unfamiliar areas. But if a perceived conflict arises between a religious view and a scientific announcement or a problematic choice regarding technology, to whom does one turn for help? A trusted religious leader may play a bigger role than an unfamiliar scientist in guiding the thoughts of many people. For some, the perceived motives of scientists can affect the level of trust afforded to them. If scientists are thought to be arrogant or driven by special interests, political bias, or an antireligious agenda, any message they seek to convey may be suspect.

On the other hand, the degree to which “official statements” regarding religion and science as developed by religious leaders of various denominations are actually appropriated to the conversations and beliefs within local congregations is open to question. MIT researchers discovered a significant disparity between the personal beliefs of people within several faith communities regarding science, particularly evolution and Big Bang cosmology, and the official views of the faith community to which they belong (Tegmark and Tegmark 2013). Their findings prod further investigation into whether members of these communities are either unaware of the views of their own denominational positions (which fall in between their awareness of science and their religious tenets), or rather are in personal disagreement or discomfort with those positions, looking to other authorities for guidance.

Under the guidance of an expert advisory panel of scientists, religious leaders, and survey research specialists, this major survey project for uncovering underlying perceptions is under way. The nationally representative
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The survey has already reached 10,000 people, including evangelical Christians, mainline Protestants, Catholics, and Jews, and initial analysis is already in progress. Respondents are asked questions ranging from their perceptions of the nature of science and scientists to the personal interactions the respondent has had (or may have never had) with someone in a technical field.

Likewise, representatives of the scientific community have been surveyed to investigate questions such as the following: How sensitive are scientists to differences among religious traditions and their stances on science? On what issues do scientists and religious people often agree? What issues are most polarizing? Where do scientists get their information about religion, and on what do they base their impressions of how the religious public views science? To what extent do the views of vocal scientists regarding science, religion, and religious communities reflect or influence the views of others? To what extent do scientists and the general public agree on the limits of science in addressing questions of ultimate meaning?

**AFTER THE SURVEY, THE REAL CONVERSATION BEGINS . . .**

The results from this substantial survey will provide the backbone for more informed and effective national science dialogue. From a scholarly perspective, Dr. Elaine Howard Ecklund, a sociologist and principal investigator for the Rice University component of the project, will examine how spirituality, religion, and science interact at the individual and congregational levels in the various traditions surveyed and how religious leaders address science at the local level. AAAS will use the survey results as the basis for intense public engagement, through the Dialogue on Science, Ethics, and Religion (DoSER) program.

Scientists and representatives from each of the traditions sampled will begin subsequent dialogue aimed at improving the interface between these communities, informed by knowledge of existing perceptions as revealed by the survey.

For years, AAAS advisory groups have recommended a focus in particular on the relationship between science and evangelical Christianity. Constituting nearly 30% of the U.S. population, evangelicals rank among the most religiously conservative communities in the United States (though less so than those described as “fundamentalist”), while also being highly concerned about truth and public policy. Thus, it is with this community that the greatest improvements and impacts could occur in the science and religion dialogue. Additionally, evangelicals are increasingly diverse, and their responses to issues such as climate change indicate that they are becoming more open to dialogue.

The survey results will thus serve as the basis for regional workshops bringing local scientists and evangelicals together to address science-related
issues of mutual concern. Likewise, a national conference will bring together high-profile leaders of the scientific and evangelical communities to discuss the survey results and implications, with the continuing conversations extending deeply into both communities.

Ultimately, it is the building of real relationships between scientists and religious communities that can provide the best bridges of understanding. Finding out what both groups actually think, through a survey, is only the first step.

NOTES

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