

The Academic Analysts of the Relationship Between Religion and Science

In addition to scientists and theologians in the academic debate, there are a number of other academics who are analysts or observers of the relationship between science and religion who, I will show, are also teaching the public the systemic knowledge perspective. In this chapter I will focus on the two most active groups, the historians and the sociologists. Historians show, for example, that Victorian era scientists often thought they were investigating the details of God's creation, and thus there was harmony in religious and scientific knowledge. Sociologists assume that the spread of scientific knowledge is a cause of the loss of religious belief. As in the previous chapter, I will also offer an explanation of why these fields see the relationship in this way. I will particularly focus upon explaining this view within the field of sociology, given that it often focuses on the general public, and I am claiming that the public does not use systemic knowledge to understand science and religion.

HISTORIANS OF RELIGION AND SCIENCE

In recent decades, historians have been on a quest to debunk the claim of the inevitable conflict between religion and science over knowledge about the world. They want to replace the universal knowledge conflict narrative with descriptions of the limited times and places such conflict has occurred, and emphasize the other times and places where there was no conflict over knowledge.¹ While debunking the simplistic view of universal conflict, the historians nonetheless inadvertently reinforce the idea that the relationship, and any conflict, is by definition about systemic knowledge.

It is difficult to generalize about the complexity that historians see in the relationship between religion and science. Metaphorically, imagine two stages facing

each other. On one is a cast of one hundred characters, each representing a different religion in a different time and place. On the other is a cast of one hundred characters, each representing a different conception of science in a different time and place. As the numerous combinations of characters stand one at a time at the front of each stage and face the other, historians may write about that relationship. For example, the character representing mid-eighteenth-century American science looks little like the science character today. That character could face a mid-nineteenth-century Catholic religion character, an evangelical Protestant religion character, a Jewish religion character and so on—each of which would have a different relationship with that particular version of science. Only some would be in conflict, and others would be in perfect harmony. Given these historical particularities, we can see that there was not a universal conflict in the Middle Ages, for example, because Isaac Newton was religious. Similarly, in the late Victorian era there was not universal knowledge conflict because many Anglicans agreed with Darwin about evolution. And, in early twentieth-century America, there *was* conflict between Darwinism and many conservative Protestants.

Again, this link across the stages is almost always about knowledge claims about nature, thus reinforcing the knowledge conflict narrative. There are also social, political, personality, disciplinary, and other conflicts described, but these are usually part of explaining a knowledge conflict. There are sometimes instances of moral conflict identified, particularly for the twentieth-century debates, but these are not separately theorized, and I will focus on discussing these in Chapter 4.

I start with the extremely influential late twentieth-century summary statement of historical work in this area, John Hedley Brooke's encyclopedic history *Science and Religion: Some Historical Perspectives*. The book starts in the sixteenth century and generally proceeds chronologically. As we go through Galileo to Darwin and so forth, it is quite clear that the relationship between science and religion—be it supportive, conflictual, subsuming, or anything else—is about systemic knowledge. To take but one of the innumerable possible examples, he discusses Isaac Newton's "apprehension lest a fully mechanized universe might cripple divine activity." We can almost see Newton trying to make consistent and systematize all of the knowledge in his pyramid when Brooke describes Newton's dilemma:

His disenchantment with the cosmology of Descartes was partly due to the boldness with which the French philosopher had presumed to show how an organized solar system could develop from a disorganized distribution of matter. Newton insisted that organization could not result from disorganization without the mediation of an intelligent power. As if to defuse the deistic tendencies of Cartesian philosophy, Newton scrutinized the universe for evidence of divine involvement. . . . Because his voluntarist theology allowed events in nature to be explained both as the result of mechanism and of the divine will, there was a difficulty in determining what kind of event would most demonstrate divine involvement.²

Anticipating my claim about late twentieth-century elite moral debates about science, which I will examine in the next chapter, the final 10 of the 347 pages in the book are about “science and human values” in the twentieth century. In that section, portrayed as a very recent development in the long history of religion and science, but prefigured in various ways, Brooke discusses controversies surrounding human reproductive technologies and the moral problems supposedly caused by Darwinism. He is largely not discussing history, but what were at the time of his writing current events. Like other historians who view this development in the current time or very recent history, it is not seen as a change in the relationship between religion and science, and not the imminent decline of debates about knowledge, but more like an additional wrinkle that has emerged in recent decades.³

We could use any other of the histories of science and religion to describe conflict over systemic knowledge. But one of my favorite examples comes from Peter Bowler, who examines debates about religion and science in early twentieth-century Britain, and shows heroic attempts at iron-clad logical consistency in knowledge and belief by the elites of the time. One debate was about whether materialism, a belief high in the scientific knowledge structure, could be changed to make room for religion. Some solutions included the idea that “matter itself was mysterious, and thus offered no suitable foundation for the kind of materialism that sought to eliminate mind and purpose from nature.” Another was that “ether theory” would allow for a worldview “that was still in touch with science, but which transcended materialism and allowed the scientist to believe that the universe as a whole was a divine construct.” The general idea was to take abstract scientific beliefs like materialism and make them compatible with religious belief and vice versa.⁴

Given the voluminous output of historians, it is difficult to easily demonstrate the utter dominance of their assumption that any relationship between science and religion concerns knowledge of the natural world at minimum, and a systemic knowledge relationship at maximum. I will make my case by summarizing the 103-chapter encyclopedia titled the *History of Science and Religion in the Western Tradition*, published in the year two thousand, which contains chapters from most of the prominent historians of religion and science of the time.⁵ The table of contents give us the general story. Part 1 is titled “The Relationship of Science and Religion,” and there is not an entry titled “Morality” or “Moral Debates.” However, there are fourteen entries that all refer to knowledge, such as “Natural Theology” and “Views of Nature.”⁶ These are followed by “Biographical Studies” of Galileo, Pascal, Newton, and Darwin—who we know of because of their roles in major transformations of our understanding of knowledge of the natural world.

The next section is titled “Intellectual Foundations and Philosophical Backgrounds.” These twenty-six chapters are even more clearly focused on knowledge generation, with topics such as “Cartesianism,” “Baconianism,” and “German

Nature Philosophy.”⁷ Part 4 contains twelve chapters concerning “specific religious traditions and chronological periods.”⁸ The encyclopedia then turns for the final forty-seven entries to the history of groups of disciplines making fact-claims about nature. These are grouped under the headings of “Astronomy and Cosmology,” “The Physical Sciences,” “The Earth Sciences,” “The Biological Sciences,” “Medicine and Psychology,” and “The Occult Sciences.”

This is not to say that moral conflict is unmentioned in the over six hundred tightly packed pages of this encyclopedia. Rather, it is not central and not theorized. The first two framing essays are telling. In the first, historian David Wilson examines the historiography of science and religion, and it is clear that the historiography up to that point was about the relationship between science and religion over knowledge about the physical world.⁹ The next chapter is a summary of all historical studies on the conflict with science and religion, and historian Colin Russell outlines the “issues of contention.” The first is purely systemic knowledge, “in the area of epistemology: Could what we know about the world through science be integrated with what we learn about it from religion?” An example involves “the Copernican displacement of the earth from the center of the solar system.” The second issue is also purely systemic, and has been in the realm of methodology, between a “science based on ‘facts’ and a theology derived from ‘faith.’”¹⁰ So far he is describing conflict over ways of knowing facts—a belief far up each pyramid.

Russell identifies another conflict, which he calls “social power.” Here he points to historiography of religion and science that concerns knowledge conflict, but the explanation for the conflict is that the debate is not really about knowledge, but an attempt to undermine the power of institutional religion or science in society. His example is the efforts of the scientific naturalists associated with Thomas Henry Huxley and their attempt to overthrow the hegemony of the English church.¹¹ This is still concerned with knowledge conflict, it is just that the motive for the conflict is not truth itself.

The final conflict he identifies is “in the field of ethics,” and this unintentionally demonstrates that historians have almost exclusively focused on knowledge conflict. The final conflict seems to contradict my claims in this section. However, unlike the other conflicts he identifies, and like Brooke, he turns from the historical literature to contemporary society, saying “most recently this has been realized in questions about genetic engineering, nuclear power, and proliferation of insecticides.” Again, like Brooke, he gestures to the few nineteenth century cases that have been discussed by historians—such as debates about the morality of vaccination and anesthesia and moral reaction to Darwin—but then turns back to the present, writing that these have been replaced by “conflict over abortion and the value of fetal life.” He then distances historians from this version of conflict by writing that “in nearly all of these cases, however, it is not so much science as its application (often by nonscientists) that has been under judgment.”¹² I take this to

be an oblique reference to present-day reality, but also an acknowledgment that historians have largely not focused on this type of conflict. Historians have seen the same social phenomena as I have in the contemporary world, but they have not worked out its implications.

Explaining Historians' Focus On Knowledge Conflict

Historians are not wrong, but their claims need to be restricted to history and not the present day. The first and most important reason the historians are correct is that historians largely study and write about the elites who spent time thinking about religion and/or science, and such persons are more concerned with systemic knowledge. Ronald Numbers writes that historians have had little to say about popular views of religion and science, and even regrets that two of his own edited volumes have neglected the views of the public.¹³ There are good reasons for this neglect. One is, especially for historical studies before the nineteenth century, that what the actual "common folk" thought was irrelevant to what was going to happen in society and to the evolution of debates about religion and science. These societies were not democratic in the same way we think of them today, with no public spheres to provide input from the governed to the governors. Illiteracy was widespread, and the vast majority of the people in a country would have been primarily concerned with their own survival. In fact, most social elites did not even have the time to understand science. An early historian of the Royal Society wrote that Descartes and Newton's mechanistic view of the universe, "could be known but only to those, who would throw away all their whole Lives upon it. . . . It was made too subtle, for the common, and gross conceptions of men of business."¹⁴

Moreover, the historians have focused on elites, and thus on systemic knowledge conflict, because the common folk, in Numbers' explanation, "left little evidence of their thoughts, and much of what we have is filtered through the writings of those who observed them."¹⁵ Of course, historians have tried to get as close to the public's views as possible. Peter Bowler's book is almost exclusively about elites, but he tried to get some information about the public by examining how many books were sold to the public. For example, he examined sales of popular novels by HG Wells, but unfortunately this cannot tell us too much about what ordinary people were thinking.¹⁶ Bernard Lightman has similarly written about the popularizers of science in the Victorian era, and these popularizers, while elites, were one step closer to the public than other elites.¹⁷ James Secord was able to painstakingly compile evidence of readers' responses to the *Vestiges of the Natural History of Creation*, a naturalistic pre-Darwin British account of human origins. Letters, diaries, publicity for events, and even handwritten marginalia were all obtained—but this sort of study is the exception, not the rule, because these data rarely exist, and certainly would be extremely fragmentary before the nineteenth century.¹⁸

The second reason that historians have focused on knowledge conflict, besides their necessary focus on elites, is that it is quite plausible that the farther one goes back in time, the more the debate between religion and science *was* about systemic knowledge for both the elites and the public. As Harrison and other historians have so convincingly shown, what “science” and “religion” have been over time has changed. The rise of our contemporary version of science in the nineteenth century, and its separation from religion, has meant that science is responsible for the vast majority of knowledge about the world. I would argue that while religion used to see one of its tasks as explaining the natural world, religion in the U.S. has moved away from this task, and that this long process has accelerated within the lifetimes of many of the current scholars in the religion and science debate—or so I will argue in Chapter 5. So, the focus of historians on knowledge conflict may not only be due to the focus on elites, but because there *was* knowledge conflict fifty or more years ago.

SOCIOLOGY AND SYSTEMIC KNOWLEDGE CONFLICT

If I am right about the differences in reasoning between elites and the public, we would expect that since social scientists often study the contemporary public, they will *not* describe conflict between religion and science as between two hierarchically organized knowledge systems. However, they have, up until the most recent years, assumed the same conflict that other academics see. In part this is because, at least historically, many of the social science studies of religion and science have been of elite scientists. However, even those who study public opinion surveys have assumed systemic knowledge conflict. As I will explain later in this section, this is a result of the deep assumptions of social science derived from its origins in the nineteenth century. While a variety of social scientists have contributed to these debates, and I will touch upon this variety, the debates about religion and science in the industrialized West have been dominated by sociologists.

Before engaging in my interpretation of the impact of the sociological literature, I should acknowledge the one study that more directly examines the extent to which social scientists believe in, and pass on to students, the idea of a systemic knowledge conflict between religion and science. An empirical examination of the content of contemporary anthropology textbooks shows that they depict a situation where “science and religion have always been, and will continue to be, bitter adversaries.” The author did not design his study to examine knowledge vs. moral conflict, but it is quite clear from his quotations that these anthropology textbooks depict the irredeemable conflict as concerning knowledge. For example, when anthropology textbooks depict religious reaction to Darwin, depictions include “the intense conflict between the new evolution paradigm in science and an outmoded static worldview in religion” and “evolution and the principle of common

descent demolished the scientific plausibility of creation and design for the universe.” This conflict is depicted as continuing to this day, as “evolution remains an active source of debate in many societies due to the fundamental contradictions between religious interpretation and scientific investigation.”¹⁹ The author’s investigation of sociology textbooks reaches a similar conclusion.²⁰ At least these two social sciences directly teach the systemic knowledge conflict to their students.

Sociological Theory

The tendency to depict the relationship between religion and science, and therefore any conflict, as concerning knowledge has been most marked in sociological theory. To be fair, most of this high theory is making historical claims, or was written long ago, and knowledge conflict may well have been the situation in the past. However, without exposure to studies of contemporary religious people, students learning these theories will presume that the depiction of religion and science is accurate today.

Consider as an example the theory of the rationalization of religion. German social theorist Max Weber, writing at the turn of the twentieth century, viewed religion as becoming more rationalized with time, and believed that the Protestantism of the Reformation was a particularly strong example of this process. In the words of Peter Berger, one of the most influential interpreters of Weber’s sociology of religion:

The Catholic lives in a world in which the sacred is mediated to him through a variety of channels—the sacraments of the church, the intercession of the saints, the recurring eruption of the “supernatural” in miracles—a vast continuity of being between the seen and the unseen. Protestantism abolished most of these mediations. . . . This reality then became amenable to the systematic, rational penetration, both in thought and in activity, which we associate with modern science and technology. A sky empty of angels becomes open to the intervention of the astronomer and, eventually of the astronaut. It may be maintained, then, that Protestantism served as a historically decisive prelude to secularization, whatever may have been the importance of other factors.²¹

Rationalization in religion had resulted in a situation where mysterious forces and powers were replaced by the calculation and technical means embodied in modern science. This then leads to religion reducing the number of truth claims about the world that are not compatible with the “systematic, rational penetration” that we “associate with modern science and technology.” This may well be an accurate depiction of how religions have changed in the West over time. Note that in this account religion is resolutely about knowledge, and a religious perspective on how the world operates is in conflict with the scientific perspective.

Studies of the Religiosity of Scientists

Many participants in the historical or theological debate about religion and science will be most familiar with the sociological studies of the religiosity of scientists, which have been the most consistently used research design in the sociology of religion and science over the past fifty years. These studies not only presume that any conflict between science and religion is about knowledge, but are testing for the presence of the strong version of the systemic knowledge relationship between religion and science. They assume that scientists are metaphysical naturalists, holding a rigidly coherent belief system up to first principles—a similar strength of coherence that Dawkins demands where believing in scientific fact-claims means you cannot have one non-scientific belief (such as the existence of God). Thus, this research design is used to determine if scientists have *any* religious belief. Since it is assumed that the most elite scientists are those who have thought the most about how scientific knowledge is justified, the assumption of this research is that they should then be much less religious than the public.

Early twentieth-century studies of the religious beliefs of scientists found that scientists were less religious than were the public, and that higher-status scientists were the least religious of all.²² A study of graduate students in the early 1960s also came to the same conclusion, and found that the students who were better educated and who were doing what was necessary to achieve higher scientific status were less involved with religion.²³

But later studies found that social scientists were even less religious than natural scientists, despite their being less “scientific.”²⁴ While this evidence still supported the knowledge conflict thesis, it subverted the linearity of the model, and being more scientific did not necessarily mean being less religious. Scholars explained this variously as an effect of “scholarly distance from religion,” or as a “boundary posturing mechanism” by social scientists trying to appear more scientific by being less religious.²⁵

Current research suggests that while scientists are less religious than the public, just as in the early twentieth century, religiosity (in varying forms) is persistent among scientists.²⁶ Elite scientists at top research universities remain much less conventionally religious with, for example, 28 percent of the population being evangelical but only 2 percent of elite scientists identifying with this tradition. Similarly, 27 percent of the population but only 9 percent of elite scientists are Catholic. More generally, 16 percent of the public but 53 percent of elite scientists do not have a religious identity.²⁷ (Studies of super-elite scientists, such as members of the National Academy of Sciences, find very few who believe in a personal God.)²⁸ Differences in religiosity across the scientific status hierarchy are lessening, so that being in a more “scientific” discipline is a less useful predictor of the religiosity than many other characteristics of the scientist, such as age, marital status, and childhood religious background.²⁹

Ecklund and Scheitle critique the literature in this tradition by writing that it “supports the perception there is a conflict between the principles of religion and those of science, such that those who pursue science tend to abandon religion, either because of an inherent conflict between knowledge claims or because scientific education exerts a secularizing force.”³⁰ This literature then presumes that religious people will not only avoid areas of science that make contrary claims to religion—as is the case with conservative Protestantism and biology—but all science, because people are assumed to be logically consistent and cannot believe one scientific claim without believing in all of them.³¹ This literature has traditionally been part of the debate about the causes of secularization, because it was thought to be a test of whether scientific belief leads to a decline of religious belief.

The most recent studies of elite scientists have begun to look for reasons beyond the idea that religion and science are conflicting knowledge systems where the conflict is relieved by abandoning religion. For example, more recent studies by Ecklund and her colleagues have shown that religiosity of the home when one is a child is the most important predictor of present religiosity among elite scientists, that science is more like an identity that is threatened by a religious identity, and that most elite scientists do not perceive a conflict between science and religion.³²

Sociological Survey Researchers

In later chapters, I will be showing evidence from surveys about whether contemporary religious people are in different types of conflict with science. However, up until very recently it has not been possible to demarcate types of conflict due to a lack of data on anything beyond the amount of scientific knowledge held by a religious respondent. Moreover, sociological survey researchers have been able to determine whether contemporary religious people *avoid* science in various ways, but do not know why avoidance is occurring. The dominant assumption in this research is that which sociology inherits from its intellectual origins and the broader academic debate—avoidance is due to systemic knowledge conflict, where religious people avoid science because they disagree about some scientific facts and do not want their belief system to be threatened.

When survey researchers generalize, this conflict is often described as the strong version of systemic knowledge conflict, where religion and science are incompatible at the highest level of the pyramid. For example, sociologists Ellison and Musick, before critiquing the view, summarize the dominant academic assumption about the incompatibility of *any* religious belief with science:

Over the years, many observers have asserted that scientific materialism, as the guiding ideology of the scientific community, is ontologically and epistemologically

incompatible with conventional Western religious belief . . . In simplest terms, scientific materialism holds (1) that matter (or matter and energy) is the fundamental reality in the universe, and (2) that the scientific method is the only reliable means to disclose the nature of this reality. . . . In contrast, Western religious traditions generally assume that the universe and its inhabitants have been created by, and often are guided by, a supreme intelligence that transcends the material world. . . . Moreover, religious adherents embrace these tenets despite the lack of (a) public data, (b) experimental testing, and (c) standard evaluative criteria for ascertaining their validity.³³

Empirical sociologists tend to limit their claims to particular religious groups, and have focused on conservative Protestants because the elites in this tradition have had the most public conflict with science. The assumption is that conservative Protestants are in systemic knowledge conflict with science because they reject the very basis of all science and instead look to God's revelation for truth about the natural world. The best place to view this assumption is in the social science literature on educational attainment, where one central question is: why is there a somewhat lower level of obtaining undergraduate and graduate degrees among conservative Protestants?

In general, the exact reason cannot be assessed due to lack of data, so instead scholars determine if people from particular religions really do have different attainment, and then speculate about why, based on what is otherwise known about society. (This is a common approach in social science.) The traditional explanation is that conservative Protestants have less educational attainment because they want to avoid scientific knowledge, which they are in conflict with. For example, sociologist of religion Darren Sherkat, who generally claims that conservative Protestants "view secular knowledge with considerable suspicion and disdain," writes that:

In line with fundamentalist orientations towards knowledge, assessments of validity are most often generated *a priori*—requiring little assessment of the relative fit between events or data and abstract concepts. For many committed fundamentalists the "truth" is known based on understandings and interpretations of fundamentalist Christian sacred texts. . . . The orientation towards knowledge which tends to permeate conservative Christian belief systems precludes a systematic examination of the complexities of human conflict or the natural world. . . . abstract processes like disease, plate tectonics, or the scientific method can have diminished cognitive consequence, since ultimately the gods are responsible for the dynamics of earthly matter.³⁴

Again, this is not propositional belief conflict where religion and science only conflict over a few fact claims. Rather, religious people's lack of belief in scientific claims is due to their different method for justifying claims, which is systemic knowledge conflict.

A slightly different argument is that conservative Protestants are opposed to knowledge acquisition not generated through the method of biblical exegesis, and thus would not want to learn about any science. In explaining what leads people to obtain a graduate degree in science, two economists posit that conservative Protestants will be less likely to obtain such a degree because “to the extent that science is incompatible with a set of core Christian beliefs, and/or is antagonistic to beliefs about the Bible as an inerrant source of truth, differences in belief among individuals about the truth content of the Bible can generate differences in the utility and cost of acquiring a science education.”³⁵ The authors continue by claiming that conservative Protestants will be opposed to obtaining any knowledge itself, and particularly any knowledge based upon materialism.³⁶

Similarly, Sherkat writes that “according to some activists and adherents in conservative Christian communities, the search for knowledge is often equated with a sinful predisposition toward self-love and pridefulness—and juxtaposed with the fundamentalist ideal of faithful and unquestioning servitude.”³⁷ Again, this is a claim of conflicting *systems* of belief, not individual fact-claims, as it is claimed that conservative Protestants are opposed to all secular knowledge, because of how it was generated, not just claims that contradict fact claims conservative Protestants see in the Bible.³⁸

Most of the sociological data cannot distinguish between knowledge and moral conflict, so scholars offer explanations that reflect their assumptions. If what I say in subsequent chapters is correct—that the dominant form of conflict among the religious public is moral—it would be surprising if the sociologists who study contemporary members of the general public did not see moral conflict at all in the data. What we find is that these sociologists, particularly in more recent years, unreflectively combine what I am calling knowledge conflict and moral conflict explanations. My approach in later chapters will be to pull apart these two explanations and test them separately.

As an example of this unreflective and untheorized mixing of explanations for conflict, sociologists Andrew Greeley and Michael Hout imply that knowledge conflict leads to moral conflict. In a survey analysis, they find that conservative Protestants are less likely to agree that “science will solve our social problems,” and more likely to agree that “science makes our way of life change too fast,” “scientists always seem to be prying into things that they really ought to stay out of,” and that “science breaks down people’s ideas of right and wrong.” Each of these statements is not about knowledge or facts about nature, but about the moral effect of science. However, they interpret the responses to these moral questions not as moral conflict, but as indicators of knowledge conflict. They write that “it is hardly unexpected that the conservatives are skeptical about science” and “conservative Protestants take their stands not because they are uneducated but because they hold strong religious beliefs that take precedence over scientific facts.”³⁹ In this

passage, not only do religious beliefs take precedence over scientific facts—the knowledge conflict assumption—but the moral conflict is actually a knowledge conflict.

In another example of such mixing of explanations, Sherkat theorizes that he will find that conservative Protestants are less scientifically literate. The reason is their opposition to scientists' claims about evolution, which are in conflict with biblical claims, and "unscientific views of seismic events" like Pat Robertson claiming that an earthquake hit Haiti because Haiti made a pact with Satan. But in Sherkat's argument for why conservative Protestants have less scientific knowledge, he unreflectingly includes disagreements that have nothing to do with knowledge claims, such as "opposition to embryonic stem cell research," and that the students avoid "not only basic science courses, but also courses in social studies and literature that may question conservative Christian values about tolerance, social relations, sexuality and gender roles, and cultural diversity."⁴⁰

Similarly, a study of religion and wealth, unable to distinguish the mechanism connecting the two phenomena, unreflectively asserts both moral and knowledge conflict in explaining what is seen as a pattern of conservative Protestants attaining less education. The author writes that conservative Protestant "cultural orientations tend to be at odds with the approaches of nonreligious schools and universities that propagate secular humanist values . . . and promote scientific investigation rather than acceptance of divine truths."⁴¹

Sociologist Kraig Beyerlein *does* offer a moral conflict explanation for a lack of educational achievement for conservative Protestants in which the basic conflict is the culture of universities more broadly. Beyerlein, citing Sherkat, says that one possible reason conservative Protestants avoid college is "the scientific method practiced in state colleges and universities threatens such conservative Protestant world views as a creationist understanding of human origins and a literal interpretation of scripture." But, he then adds a moral reason, which is that "the emphasis on emancipation from traditional authority stressed in public institutions of higher learning undercuts a variety of core theological and familial precepts of conservative Protestantism, especially submissiveness of children to God and to their parents."⁴²

Like the others in this research area he lacks the data to determine which conflict is actually keeping conservative Protestants from college, but his conclusion undermines the idea that it is only knowledge conflict. He finds that evangelicals have the same level of educational attainment as mainline Protestants as well as higher attainment than fundamentalists or Pentecostals. This he attributes to the fact that the "the cultural traditions of fundamentalist Protestantism and Pentecostal Protestantism advocate withdrawing from the broader culture," while "the cultural tradition of evangelical Protestantism generally stresses engaging the broader culture."⁴³

THE ORIGINS OF SOCIOLOGICAL BIAS TOWARD SEEING KNOWLEDGE CONFLICT

I will spend more time on explaining sociological bias toward seeing knowledge conflict than I spent on the other academic fields because sociology appears to be such an anomaly. Assuming that the analysis I report in later chapters is correct, and the contemporary religious public is primarily concerned with a moral relationship with science, why have the sociologists who study the public not seen moral conflict?

It is important to recognize that social science thinks of itself as a *science*. Many social scientists do not like that term because it implies they have the same positivist epistemology as natural scientists. However, social science can be interpretivist or positivistic; its analyses quantitative or qualitative; its methods observation, interview, survey, or the summation of records—but social scientists share with the natural scientists the basic Enlightenment ideal of making claims on the basis of observation and reason.

Therefore, it is not just that social scientists observe a relationship between *natural* science and religion—they have their own relationship as a science with religion. Using my pyramid metaphor in Figure 1 in Chapter 1, there would be a social science pyramid and a religion pyramid, and as I will show below, the inherited theories of social science presume that social science is in an extreme form of systemic knowledge conflict with religion. Both social science and religion are seen as systems of justified beliefs about the world, with methods and theories halfway up each pyramid. Therefore, when sociologists see *natural* science in relationship with religion, they presume that religion is a hierarchical system of belief about the *super*-natural, and that empirically observed facts about the world by science will undermine the foundations of this belief. Put simply, both natural and social science see religion as a really inaccurate system of developing fact-claims about the world. How did social science—and sociology in particular—develop this view?

The answer is that sociology was born with the strong version of systemic knowledge conflict in its DNA—akin to that of the scientific atheists—and thus this perspective is built into sociological theories. Like the scientific atheists, sociology depicts religion as a hierarchical system of justified belief that can be shown to be false by (social) science. With this assumption built into sociology, it is hard for sociologists to see any debate involving religion and science that is about morality.

To understand this bias in sociology, we should remind ourselves of the distinction between the strong and weak systemic knowledge conflict—between methodological naturalism (“a disciplinary method that says nothing about God’s existence”) and metaphysical naturalism (which “denies the existence of a transcendent God.”)⁴⁴ Sociology was born in the Enlightenment era, assuming both methodological and metaphysical naturalism.

The social science version of methodological naturalism is that a social scientist cannot invoke the supernatural in explanations of social behavior. For example, a social scientist cannot claim that God causes wars. The social science version of metaphysical naturalism is that if we believe social scientific explanations of social behavior we also cannot believe that God exists. With metaphysical naturalism built into sociology, it is easy to see why sociologists have not seen moral conflict with science. Like other scientists, they define religion as that which makes (false) knowledge claims about the world.

*The Origins of Social Science and Methodological
and Metaphysical Naturalism*

Historically, the *natural* sciences adopted methodological naturalism, and much later a small subgroup of atheist scientists began to promote metaphysical naturalism. In contrast, social science was born as a challenge to religious authority, and thus began by assuming metaphysical naturalism. Metaphysical naturalism presumes or subsumes methodological naturalism. Social scientists, not natural scientists, were the original scientific atheists.

For our purposes, the origin of social science is in the Enlightenment of seventeenth and eighteenth century Europe. One of the central concepts in Enlightenment thought was that people should use their own senses and reason to evaluate the physical and social worlds, and not tradition, faith, or religious authority. The first proto-social scientists were Enlightenment figures such as Montesquieu, Smith, Condorcet, and Herder, whose work was premised on the idea that history was caused by human action. While this seems obvious today, this was a change from earlier conceptions in which humans influenced history but history was ultimately under God's control. By the early nineteenth century all of reality, including what had previously been seen as immutable and unchanging, came to be seen in contextual historical terms.⁴⁵

Building on earlier Enlightenment ideas, the "scientific" aspirations of the first social scientists were the result of the natural science triumphs of the era. Natural scientists had been seen as successful in explaining all sorts of natural phenomena, and the proto-social scientists wanted to transplant those successes to understanding the social world. For example, French philosopher Auguste Comte (1798–1857) is often portrayed as the founder of both sociology and positivism. He looked to natural science as an inspiration for understanding society, and invented "sociology" to "complete the scientific revolution by bringing human phenomena within the orbit of positive study." Moreover, reflecting the metaphysical naturalism of the Enlightenment-era social scientists, he tried to make positivism a "new world-religion to replace Christianity," complete with an ecclesiology—with social scientific experts at the apex of priestly authority. His metaphysical naturalism—which

held that religion is a set of beliefs about the world that are false—was clear in his depiction of the stages of history, stages that reflected standard nineteenth century beliefs about progress. The first stage, infancy, was based in theology that assumed religion is about claims to nature (“the anthropomorphic projection of fictive causes”). The second, adolescence, is based on metaphysics, the rule of abstract ideas. The third, maturity, is “positive,” and based on “evidential knowledge having the form of laws.”⁴⁶ In this scheme, belief in transcendent force is evidence of a backward society.

Enlightenment-era social scientists gathered social facts in the pursuit of moral causes. Social science was designed to “liberate humankind from ignorance and oppression,” with Jean-Jacques Rousseau, for example, arguing against inequality and for the dignity of the person.⁴⁷ As contemporary sociologist Malcolm Williams writes, there was an important “difference between the natural and social sciences in the nineteenth century—even at their most avowedly scientific. The latter were not just about how the world ‘is’ but how it ‘ought’ to be.”⁴⁸ One of these “oughts” was demonstrating that religion is false.

Anthropology is like sociology in its presuppositions about religion and indeed, “throughout its entire history as an academic discipline, anthropology has been perceived as having an ethos that is predominantly hostile to religious convictions, especially those of Christianity.” Founding anthropologists of the time shared Comte’s view of progress and the idea that religion was based on false claims about nature. Edward Tylor, the first person to hold a faculty appointment in anthropology and often called “the father of anthropology,” saw three stages of human history: savage, barbaric, and civilized. In his theory, “religion is fundamentally the erroneous thought of ‘savages’ that has continued into civilized contexts by sheer, unreflective conservatism, even though its false intellectual foundations have now been exposed.” In fact, “anthropology should be a ‘reformer’s science,’ which actively worked to eradicate religion from modern civilization.”⁴⁹

The most famous anthropologist of the generation after Tylor was James Frazer, whose stages of history were magic, religion, and science. Religion and science were locked in a battle over true knowledge, as he thought that “religion gives primitive, irrational answers to questions correctly answered by science.” He too saw one purpose of this social science as demonstrating that religion is a set of false beliefs, believing that “anthropologists should work to ensure that science would increase and religion decrease,” writing that “it is for those who care for progress to aid the final triumph of science as much as they can in their day.”⁵⁰

The first sociological theorists, building on Enlightenment thought, developed more elaborate theories that promoted metaphysical naturalism, using social science reasoning to explain how religious belief was false, and actually reducible to social forces. Karl Marx (1818–1883), Max Weber (1864–1920), and Emile Durkheim (1858–1917) later became known as the “classical theorists” of

sociology or, pejoratively but tellingly, the “holy trinity” of classical sociological theorists. These three would ultimately be more directly influential than the earlier Enlightenment figures, and were clearly engaged in an agenda of metaphysical naturalism.

What these three shared was an assumption that individual humans were alienated from the objective world, and that therefore people do not realize that the social forces that act upon them are actually the result of human activity. The central purpose of the classic sociologists was then “demystification”—to make people aware of humanity’s own control over itself. Critically, religious belief was one of the primary institutionalized ideas that people needed to become aware was not a force outside of humanity, but something that humans had invented. For example, for Marx, religious beliefs are caused by the relations of the means of production in a particular era, and religion is one aspect of false consciousness that humanity needs to see through in order to experience true liberation. In its bumper-sticker version, religion is the “opiate of the masses” depriving humanity of the correct perception of who is oppressing them.

Durkheim similarly argued that people do not realize that it was they who created religious symbolism, not some transcendent force, and that religion was a metaphorical representative of the society. If people would agree with Durkheim’s insight that sacred symbols were *actually* a reflection of social relationships, this fact would undermine religion in the same way that showing humans had evolved from lower primates would do. The general goal of the classic sociologists was to show “that the force believed in as divine entities were merely reflections of social experience.”⁵¹ Classical sociology argued that not only should social science use methodological naturalism, but also that social scientists have an obligation to promote metaphysical naturalism to further human freedom. Social science and religion were not compatible or capable of synthesis—the point of social science was to show that religion is false. To this day, sociology PhD programs in the U.S. begin the first semester with a class devoted to these classical theorists.

Sociology in America

At the same time the classical sociologists were writing in Europe, on the west side of the Atlantic social science was coming into its own. Historians point to this period, between the end of the American Civil War and World War I, as a transformative time for naturalist thought in American academia. Before this period, American natural scientists tended to believe that science described the details of God’s creation, and thus science was ultimately supportive of theological claims.⁵² But, “increasingly after 1870,” write historians Jon H. Roberts and James Turner, “scientists preferred confessions of ignorance to invocations of supernaturalism.”⁵³ It helped that the dominant version of Christianity in academia of the time was

what would now be called liberal Protestantism where, for example, the Bible was not thought of as literally true in all details.

The growing specialization within academia contributed to the emergence of distinct social science disciplines, and what we would now consider social science was at the time embedded in courses on moral philosophy. Specialization meant carving off the social aspects of the field of moral philosophy, and the proto-social scientists of the time thought this specialization was critical for their future growth in the universities.⁵⁴ The proto-social scientists allied themselves with the increasingly powerful natural sciences which, by this time, were reaching consensus on methodological naturalism. Roberts and Turner describe it well:

As disciplines that self-consciously sought to ally themselves with the natural sciences, the human sciences were in a very real sense born with a commitment to methodological naturalism, as . . . the natural sciences had already rendered exclusion of the supernatural from discourse quite conventional. Indeed, the notion that it was essential to restrict discourse and patterns of explanation to natural agencies and events had become one of the reigning assumptions in conceptions of what it meant to do science. Disciplines with aspirations to anchor themselves within institutions dedicated to scientific inquiry and production of knowledge could ill afford to incur the taint of “speculation” by incorporating God into their analysis.⁵⁵

American sociologists reached back to European figures like Comte, and built metaphysical naturalism and systemic knowledge conflict into the bedrock of American sociology. Ironically, American sociology started as a field that collected social data for the Social Gospel movement—a late nineteenth-century religious social reform movement.⁵⁶ As Northern Baptist pastor and influential social gospel advocate Walter Rauschenbusch wrote, “we need a combination of the Kingdom of God and the modern comprehension of the organic development of human society . . . So directing religious energy by scientific knowledge that a comprehensive and continuous reconstruction of social life in the name of God is within the bounds of human possibility.”⁵⁷ These religious social reformers were methodological but not metaphysical naturalists. As contemporary sociologist Michael Evans writes, “most Social Gospel writers committed themselves to scientific approaches and knowledge without committing to the underlying secularism of Comte or Spencer.”⁵⁸

A competing faction of sociologists that wanted to be seen as forwarding an objective science of society regarded any association with religion as detracting from that goal.⁵⁹ This made *metaphysical* naturalism attractive. Moreover, nearly all of the scientific sociologists in America during the discipline’s establishment “were personally hostile to religion per se,” writes contemporary sociologist Christian Smith. “These were skeptical Enlightenment atheologians, personally devoted apostles of secularization.”⁶⁰

The motivation for promoting metaphysical naturalism was a combination of the personal anti-religiosity of the founders and the need to draw very strong intellectual boundaries against the competing group of religious social gospel sociologists. By delegitimizing religious belief writ large, this latter faction could be convincingly defeated and sociology could be a “science,” given that natural scientists, with their naturalistic assumptions, controlled what was considered to be legitimate knowledge in universities.

In his examination of sociology textbooks published from the 1880s through the 1920s, Christian Smith concludes that they were devoted to the idea that religious knowledge-claims were false. In the words of a nineteenth-century textbook writer, emphasizing that religion is about knowledge claims about nature, “All . . . phenomena are now satisfactorily explained on strictly natural principles. Among people acquainted with science, all . . . supernatural beings have been dispensed with, and the belief in them is declared to be wholly false and to have always been false.” Echoing Comte, another textbook states that religion is the anthropomorphic projection of “savages,” and that this projection constitutes “the basis of all religious ideas.” Smith concludes that the textbooks claim that “religion is concerned with the spiritual realm, which is beyond sociology’s ability to examine, but . . . all religions are finally reducible to naturalistic, material, and social causes, and are clearly false in their claims.”⁶¹

In sum, while metaphysical naturalism is not dominant in the natural sciences, the European social scientists such as Comte advocated for metaphysical naturalism, and this was adopted by American social science. Later European theorists like Marx, Weber and Durkheim reinforced this vision. American social science was born with methodological naturalism in its DNA, and sociology was born with a commitment to advocating metaphysical naturalism as well.

Committed to showing that religious *beliefs* are false, sociologists saw religion as about knowledge about the world, and therefore any conflict with science must be about knowledge. Moreover, it was not just a few religious beliefs that were false, but the entire religious system of knowledge, further encouraging sociologists to see systemic knowledge conflict. Of course, most sociologists are not consciously engaged in promoting metaphysical naturalism or cognizant of the systemic knowledge assumptions embedded in classic sociological theory. Rather, when needing to go beyond their data, they must turn to theoretical assumptions to complete their claims, and they turn to theories which assume systemic knowledge conflict.

CONCLUSION

In the previous chapter I showed that the elite scientists and the theologians—the advocates—are having a debate about systemic knowledge conflict. In this chapter

I showed that the academics who are observing or analyzing the conflict between science and religion also see systemic knowledge conflict. Historians primarily examine elites from the past, so it is not surprising that they have primarily observed systemic knowledge conflict. This could be because they inevitably study elites, or because religion and science in the past *were* engaged in systemic knowledge conflict.

We might expect that sociologists, who do study the public, would not portray the religion and science relationship as one of systemic knowledge conflict. What we find is that theories that originated a hundred or more years ago, but are still influential to this day, promote the idea that any relationship concern systemic knowledge. These have left a legacy of difficulty in seeing anything but knowledge conflict.

Elites in the literatures portrayed in the past two chapters are portrayed as resolutely concerned about knowledge conflict. However, the historians are studying debates of more than fifty years ago, and the sociological theories I reviewed are similarly aged. If we look at elite debates of the past fifty years, we will see a presentation of religion and science that does not imply conflict over knowledge, a transformation that has not been recognized. I turn to this examination in the next chapter.