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UNIVERSITY OF CALIFORNIA, SAN DIEGO

Religion and Science in American Public Life

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy

in

Sociology (Science Studies)

by

Michael Stacy Evans

Committee in Charge:

Professor John H. Evans, Chair Professor Steven Epstein Professor Martha Lampland Professor Joel Robbins Professor Robert Westman

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2012

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ABSTRACT OF THE DISSERTATION

Religion and Science in American Public Life

by

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Doctor of Philosophy in Sociology (Science Studies)

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Is good debate between religion and science possible? Through analysis of over 10,000 newspaper articles, biographical research on key participants, and in-depth interviews with 62 ordinary persons, I find that substantive arguments about issues are intertwined with arguments and beliefs about how public debate should work. What elite representatives do in public debate conflicts with ideals of public debate that ordinary persons use to evaluate them. This normative conflict limits how religion and science can participate in the American public sphere, both now and in future debates.

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Chapter One: Introduction

Is good public debate between religion and science possible? The dominant conflict narrative suggests that the answer is "no." Good debate is deliberative. Good debate happens when people and ideas are in productive engagement in public life. Good debate is not possible, the conflict narrative suggests, because religion and science will always be at war with each other.

Outrageous public statements reinforce the impression of conflict. Take, for example, recent debates over creationism, Intelligent Design (ID), and evolution. When the voters of Dover, Pennsylvania voted out their ID-supporting school board, televangelist Pat Robertson responded:

I'd like to say to the good citizens of Dover: If there is a disaster in your area, don't turn to God, you just rejected him from your city. And don't wonder why he hasn't helped you when problems begin, if they begin. I'm not saying they will, but if they do, just remember, you just voted God out of your city.¹

Likewise, biologist Richard Dawkins derides all who oppose evolution:

It is absolutely safe to say that if you meet somebody who claims not to believe in evolution, that person is ignorant, stupid or insane (or wicked, but I'd rather not consider that).²

¹From *The 700 Club*, aired 10 November 2005.

²From an NYT review of *Blueprints: Solving the Mystery of Evolution*, published 9 April 1989.

When public statements from religious leaders and scientists sound like the rantings of mad scientists and false prophets, it is easy to think that something about religion or science causes debate to go wrong. So we ask questions about religion and science. The variety of these questions reflects the complexity of religion and science. Does faith conflict with reason? Is evolution a threat to biblical truth? Do scientists believe in God? Can prayer be evaluated through double-blind clinical studies? What grades do regular church attendees get in science courses? Do evangelicals know that the earth revolves around the sun, and not vice versa?

In asking these questions about religion and science, it is easy to forget that public debates involving religion and science are, first and foremost, public debates. By "public debates" I mean extended public conversations about important issues that occur primarily through mass media such as newspapers and television. Religion and science are not hermetically sealed in their own capsule. They are two out of many cultural institutions involved in the broader process of working out issues through public talk.

But what if public debate is itself the source of problems with religion and science debates? Religion and science may participate in public debate, but the whole point of public debate is to negotiate and manage the changing categories of social life. Public debate shapes what we can talk about, what we know about it, how we talk about it, and what we can do about it. In a fundamental sense, it is public debate that produces and reproduces religion and science in public life. Many people claim that religion and science cause problems for public debate. But it is just as possible that public debate causes problems for religion and science.

In the world of religion and science scholarship, few inhabitants write about religion and science as part of some larger process of American public life (but see Evans 2002, Evans JH 2010). This dissertation's novel contribution to religion and science scholarship is that it appears to be about religion and science, but it is really a dissertation about

public debate. I agree with most other scholars that there are problems in American religion and science debate. But I think that the problems stem from how public debate works, rather than from the relationship between religion and science.

I structure the analysis around a well-known problem of public debate: representation. In theory, public debate is open to participation from anyone. But if everyone were to talk in public at once, the result would be cacophony, not debate. In practice, most significant and influential public debates occur in mass media, where elite actors define, present, and debate important issues before the widest possible audience. I call these elite actors "representatives." Representatives participate in public debate instead of, though not necessarily on behalf of, ordinary people. Representatives have unique power to influence our understanding of what is being debated, simply because they are the ones doing the talking in public. Good debate occurs when representatives deliberate in public over issues of concern. The problem of representation is that representatives are often doing something else entirely.

Return for a moment to the quotes from Robertson and Dawkins. If this was a casual exchange between two somewhat inebriated bar patrons, quickly forgotten after a good night's rest, it would be unremarkable. But that is far from the case. Pat Robertson and Richard Dawkins are highly visible representatives in public debate. Mass media outlets distribute their words to a wide audience. In a good debate, Robertson and Dawkins would be engaged in a rich, deliberative, and thoughtful conversation about human origins. Instead, they are slinging personal insults and channeling divine threats.

Thinking about representation as a problem for public religion and science debate generates very different kinds of questions than those generated by the conflict thesis. How does representation shape public debates? How do representatives attempt to intervene in public debates? How do ordinary people evaluate representatives as good or bad? What does it mean that, for example, Pat Robertson and Richard Dawkins are

seen as representatives of (respectively) religion and science? Does representation work differently for religion or science than it does for other domains of public life?

In what follows, I look at public debates about human origins, stem cell research, environmental policy, and the origins of sexuality. I call these "religion and science" debates because they meet two conditions. One, these are all debates where some people make claims based on religious authority. Two, they are also debates where some people make claims based on scientific authority. This definition accounts for religion and science as parts of broader public debates, but avoids the all too common problem of selecting only those instances where religion and science already appear to be in conflict.

As with many controversial issues in American life, these "religion and science" debates ramify in complicated ways across the American cultural landscape. For example, arguments in debates about the origins of sexuality also implicate hot-button political issues such as gay marriage, personal and professional issues such as the ethics of psychological treatment, and religious organizational issues such as the limits of congregational authority to resist denominational mandates against gay clergy. One social scientist with finite resources cannot possibly track all of the ramifications of these debates, or even identify and organize all of the possible data sources for a single debate. So this study is limited to a practical subset of what is available.

For information on debates and representatives, I constructed a data set containing thousands of articles about each issue from major national and regional newspapers in the United States from the past 10 years, and analyzed this data set using various forms of computer assistance. For questions about how ordinary people evaluate representatives, I interviewed 62 ordinary Americans across two different locations in the United States. Respondents varied in terms of religious background and affiliation, and in terms of occupational commitments (e.g. scientific vs. non-scientific job). While I describe the various methods I used at appropriate points throughout the dissertation, I have also

included a detailed Methodological Appendix at the end of the dissertation for reference. In all cases, respondent names are pseudonymized to protect respondent identities.

In the remainder of this introductory chapter I set the stage for the analysis in chapters 2 through 5. First, I review existing literature on religion and science. I show that, whatever their disciplinary commitments or ultimate conclusions, all existing analyses of religion and science are grounded in deliberative models of public debate where participants and ideas engage each other in public life. I then reframe the question about good religion and science debates as a question of public life rather than simply a question about religion and science. I review existing literature on representation in public life, focusing on how representation in the public sphere exercises power and shapes debates. Finally, I preview the findings from subsequent chapters and provide a narrative outline of the rest of the dissertation.

1.1 Religion vs. Science?

Both religion and science figure prominently in American public life. Most Americans claim sort of religious affiliation. Most Americans agree that America is a "Christian nation." Religious participation remains vibrant. Religious discourse permeates public discussion in settings ranging from recovery meetings to Presidential speeches. At the same time, most Americans have significant interest in science and technology. People regularly debate American competitiveness in terms of scientific and engineering education. Public respect for scientists remains high. "Scientific citizenship" (Irwin 2001) is a key part of American identity. To the extent that religion and science are important to Americans, it is no surprise to see that religion and science are part of public life. It would be surprising if they were not.³

³For more extensive and detailed information about the simple claims I make here, see for example Pew Research Center 2009, NSB 2008, and the many top-level data summaries available at ARDA

At the same time, there is little consensus about what counts as "religion" and what counts as "science." "Religion" in public discourse is sometimes institutions, sometimes ideas, sometimes practices, sometimes people, and sometimes all of these at once. It is sometimes any reference to moral principles, sometimes Christianity or Islam, sometimes what happens in churches, sometimes Protestantism or Catholicism, sometimes clergy, sometimes any reference to supernatural forces, and sometimes just "faith." "Science" is also sometimes institutions, ideas, practices, people, and all of these at once. It is sometimes any use of the scientific method, sometimes what happens in big labs and universities, sometimes particle physics or biology, sometimes scientists, sometimes any reference to natural forces, and sometimes just "reason." In short, the categories of "religion" and "science," like many categories invoked to describe society, are messy, incoherent, and inevitably, inherently incomplete. So discussions about religion and science range widely, from concerns about what they really are, to how they are related, to how religion and science operate and affect broader social concerns.

Three Perspectives on Religion and Science

Despite this range of definitions and interests, however, it is possible to talk about three major perspectives on religion and science that recur in popular and scholarly literature. Following convention, I call these three perspectives *conflict*, *complementarity*, and *complexity*. In this section I use these perspectives to organize theological, historical, and popular literature on religion and science. I note here that there is substantial slippage in this literature between the claim that there is one single "religion and science" debate (with many manifestations), and the claim that there are many debates where religion and science are involved. This distinction becomes even more apparent in the sociological literature discussed in a later section.

(thearda.com). An excellent example of vibrant religion is American evangelicalism, see Smith 1998.

Conflict

For more than a century, the dominant perspective in religion and science has been the "conflict" or "warfare" perspective. First popularized by John William Draper in his book *History of the Conflict Between Religion and Science* (Draper 1874, see also White 1896), the conflict thesis posits that religion and science are inherently conflicting domains of human knowledge with mutually exclusive explanations for how the world works. In this view, religion and science are essential and enduring categories of human life, extending back into antiquity (Freeman 2005) and likely projecting into any visible human future (Dawkins 2006). Citing such examples as the trial of Galileo, the "prayer gauge" debate, and the Scopes trial, scholars and popular sources attribute particular instances of conflict to an overarching and inevitable conflict between religion and science (White 1896; Boorstin 1983). The usual conclusion of these analyses is that science provides the superior explanation for how the world works and is therefore winning, or will win, its battle with religion (e.g. Russell 1997).

The conflict narrative imagines the world progressing toward total secular rationality. In this developmental view, societies become increasingly secularized as they become more modern (see discussion in Taylor 2007). Religion, as a primitive or irrational vestige of less developed societies, will be slowly eradicated by science, the paradigmatic rational epistemology. Rationality will displace irrationality. The future is secular.

In the more benign version of the conflict narrative, the displacement of religion by science is an evolutionary process. Rationality eventually wins out with the better form of knowledge production. Science's superior method of truth will, in the end, prove more durable. We need only wait for religion to play itself out. Though it is unfortunate that some people are still primitive and irrational, we can be generally tolerant of belief pluralism until our better future comes along.

In the most extreme normative version of the conflict perspective, historically illustrated by secularization policies in the Soviet Union (Froese 2008) and East Germany (Wohlrab-Sahr, Schmidt-Lux, and Karstein 2008) and currently motivating the production of popular bestsellers such as *The God Delusion* (Dawkins 2006) and *God Is Not Great: How Religion Poisons Everything* (Hitchens 2007), there is no time to waste. If the better future is rational and secular, then religion is not simply a vestige of past irrationality, but an inimical force that is hostile to human flourishing. Even though science may win in the end, it is immoral and dangerous to allow that process to play out by itself. Science must defeat religion to produce a better world (Harris 2004). Anything less than the destruction of religion is a failure of humanity.

Despite the sometimes aggressive polemical language, "conflict" and "warfare" are used metaphorically. To the best of my knowledge, no respectable writer seriously advocates the genocide of religious people to advance the cause of science. Even if they did, science has no armies, and such systematic violence would be difficult to mobilize. What is meant by conflict or warfare is not physical violence between armed bands of theologians and scientists, but rather confrontation between different perspectives. I discuss below some variations on what "conflict" usually entails in these arguments. The basic point is that conflict takes place in the public square, not on the battlefield. Battles are fought with words, ideas, policy, and laws, not guns, bombs, and assassination. This may seem obvious. But as I discuss later in this chapter, the fact that any proposed relationship between religion and science plays out primarily in the public sphere is of crucial importance to the argument of this dissertation.

⁴There are, of course, any number of people who advocate violence against members of particular religious groups. In America there is substantial anti-Muslim rhetoric, for example. However, my impression is that this is (at least) as likely to come from other religious people as it is to come from non-religious people.

Complementarity

In the past fifty years, many scholars have challenged both the epistemological and historical bases of the conflict thesis. From an epistemological perspective, theologians and scientists offer an alternative perspective often called "complementarity." Like the conflict perspective, complementarity sees religion and science as essentially distinct realms of human understanding. Science is concerned with knowledge of the natural world. Religion is concerned with meaning and moral order. But in the complementarity view, this difference does not necessarily mean conflict. While conflict is one possible outcome, it can be avoided.

Under the aegis of complementarity there are differing normative prescriptions for avoiding conflict. For example, the "non-overlapping magisteria" (NOMA) or "two worlds" approach, advocated by Stephen Jay Gould (1999) and Pope John Paul II (1992), suggests that religion and science should be kept completely separate so conflict will not occur over areas of epistemological jurisdiction. This position resonates with debates over the separation of religion from politics (Audi and Wolterstorff 1997, Habermas 2006). Science is assumed to be a universally accessible way of knowing about the world, so it serves as the legitimate basis for government. Religion, by contrast, is plural and local, so it must be excluded from public deliberation over policies and laws that affect everyone.

At the opposite end of the normative spectrum, "dialogue" and "consonance" approaches suggest that religion and science should be in beneficial dialogue with one another, and even attempt to reconcile their differences, to best avoid conflict. Theologians, scientists, and organizations such as the John Templeton Foundation and the Metanexus Institute actively attempt to reconcile religion and science by highlighting similarities between religion and science (Barbour 1966, Polkinghorne 1998, Peters 1998), provid-

ing structured dialogues between actors affiliated with religious and scientific institutions (e.g. annual Metanexus conferences), organizing public events to raise awareness of compatibility (Anderson 2006), providing personal testimonies of reconciliation between religion and science (Collins 2006), and constructing systematic theologies that bring, for example, evolutionary theory and soteriology together into a coherent whole (Haught 2000).

Complementarity shares the underpinning conceptual model of the warfare perspective, but does not assume inevitable secularization. Most proponents of complementarity are from vibrant religious traditions that bring the secularization thesis into question. As with the warfare perspective, complementarity sees potential conflict between religion and science as occurring primarily in the public square rather than through physical violence. Complementarity also sees peace as the normative ideal. For NOMA, peace is achieved through a firewall between religion and science that maintains peace in public life. Likewise, the "dialogue" and "consonance" approaches embrace the ideal of public debate as the place for productive deliberative engagement between religion and science (however defined). In all complementarity perspectives, the underlying motivation is to minimize conflict in public life.

Complexity

A more recent alternative to the "conflict" and "complementarity" perspectives comes from historians, who examine the specific circumstances of historical events that are commonly cited as "religion and science" conflicts. Instead of presuming an enduring epistemological conflict, the "complexity thesis" (Brooke 1991, Numbers 2007) claims that instances of conflict between religion and science are not necessarily conflict, not necessarily about religion and science and, most importantly, not indicative of any sort of larger pattern of conflict between religion and science. Instead, the complexity thesis

claims that science and religion have no identifiable pattern of interaction.

This claim has two parts. First, there is no way to demarcate religion and science. Historically and sociologically the boundaries of "religion" and "science" are not fixed, and in practice move around so much that there is no overarching narrative that can explain their connections. There are many times and places where religion and science either were not in conflict or were not even considered as separate categories. For example, in 19th century America, Baconian Common Sense Realism emphasized science as part of God's revelation in nature (Bozeman 1977). And in Victorian England, some of the most ardent of "Darwin's defenders" promoted evolution as part of the Divine plan for the world (Livingstone 1987).

Second, though conflict sometimes occurs that can be called "science vs. religion," most episodes of conflict are local and contingent rather than universal and enduring. Local theological disputes (Livingstone 1994) or contentions over professional jurisdiction (Turner 1978) embody local concerns about power and authority that do not easily map onto a master narrative of conflict. So, for example, battles over Copernicus and Galileo are not episodes in the inevitable conflict between religion and science over the truth of the cosmos, but historically contingent conflicts over institutional authority (Shea 1986, Westman 1986). Likewise, the Scopes trial was as much about conflict between conservative and moderate American Protestantism as conflict between Darwin and God (Numbers 1992, Lienesch 2007).

On its face, the complexity perspective is a ground-level attempt to debunk the conflict narrative by showing empirical examples that are contrary to what the conflict narrative would predict. However, this debunking is not just motivated by an overarching commitment to a position on religion and science (such as secularization). It is also motivated by concern for finding what is actually at stake in these conflicts. Even though complexity does not share many assumptions about religion and science with the con-

flict or complementarity perspectives, it does share assumptions about the desirability of good public debate.

Conflict, complementarity, and complexity are all actually normative positions that are grounded in norms of deliberation. The rarely articulated background assumption is that ideas and people should be encountering one another and engaging one another in public life. The disagreements are over how this should best unfold.

The Sociology of Religion and Science

Given the prominence of religion and science in public life, it might be surprising that there are relatively few empirical sociological analyses of religion and science. Of course there are established subfields in the sociology of religion and the sociology of science, but these rarely intersect (but see Gieryn 1983, Merton 1970, Wuthnow 1985). At the same time, given good epistemological and empirical reasons for considering alternatives, it might be surprising that most sociological work on religion and science remains grounded in the conflict thesis. Yet the strange situation of the sociology of religion and science is that there is not very much of it, and what there is largely reproduces the conflict narrative.

The sociology (and closely related) literature can be divided into three major analytical categories. I call these "symbolic-epistemological conflict," "symbolic-directional influence," and "social-institutional." These approaches roughly map onto the conflict, complementarity, and complexity perspectives in the broader religion and science literature. The primary distinction is between symbolic analyses, which treat religion and science as "systems of ideas, beliefs, or discourses," and social-institutional analyses, which focus on "the institutions that propagate these ideas, beliefs, or discourses"

⁵This section reproduces the basic argument and structure of Evans and Evans, "Religion and Science." Further details and additional references can be found there.

(Evans and Evans 2008:91). The further division within symbolic analyses distinguishes two types of symbolic studies. The "epistemological conflict" analyses assume that religion and science are essential and fixed categories, that they are in conflict, and that one necessarily displaces the other. The "directional influence" analyses do not necessarily assume an essential definition of religion and science, and often suggest ways that the two symbol systems can influence one another without conflict or displacement.

Symbolic-Epistemological Conflict Literature

The symbolic-epistemological conflict literature in the sociological study of religion and science draws heavily from Weber's ideas about "disenchantment." In Weber's view, as the process of rationalization continued in all spheres of life, modern religion's supernatural authority and truth claims would be increasingly displaced by the rational authority of modern science and reasoned inquiry (see Berger 1967). From Weber's starting point, it is a short leap to the claim that science, as the most important engine of rationality, must displace religion as societies experience modernity, since the symbol systems are incompatible in their claims. So, for example, anthropologist Anthony Wallace argued that scientific knowledge is simply more adequate than religious knowledge, and it is inevitable that religious knowledge will become an "interesting historical memory" (Wallace 1966:265). Again, it is not that one set of institutions will displace another, but that the ideas and beliefs generated by science will displace those of religion, both in the broader sense of cultural authority and at the individual level where people attempt to make sense of their world.

At the level of cultural authority, a typical example of this approach is the "efficacy of prayer" debate, which originated in 19th century arguments over public days of prayer. Francis Galton, a noted statistician, published a study in 1873 showing that people who received more prayer, such as clergy, tended to have shorter lifespans than people who

received less prayer, such as lawyers (Turner 1974). Science, he concluded, was a better source of efficacious intervention in health and illness than religion. Prayer did not work, but medical treatment did. This debate remains live, as physicians, public health professionals, and medical sociologists continue to debate whether or not prayer is an efficacious intervention in health and illness. Some studies (e.g. Byrd 1988) seem to suggest that it is, while many others do not (see overviews in Astin et al. 2000, Cadge 2009). The key point here is not in the findings, but in the observation that these studies share the assumption that science and religion are not compatible symbol systems in the evaluation of claims about health and illness. If intervention is based on science, religion must step aside.

At the individual level, sociologists have paid significant attention to the religiosity of scientists, who (in this view) should be the vanguard of rationality and therefore least likely to be religious. Studies by Leuba (1916, 1934) and Stark (1963) found that higher status scientists were either less religious, or less active in their religious tradition. However, Lehman and Shriver (1968) and Thalheimer (1973) found that social scientists, who are lower in scientific status, were significantly less religious than higher status natural scientists. Analysts speculated this was due either to "scholarly distance from religion" (Lehman and Shriver 1968) or a "boundary posturing mechanism" (Wuthnow 1985) designed to make lower status scientists seem higher status because of their denial of religious influence. The most recent research suggests that scientists are as a whole less religious than non-scientists, but that religiosity persists (Larson and Witham 1997, Ecklund 2010), and religiosity across the scientific status hierarchy has flattened significantly over time (Ecklund and Scheitle 2007, Ecklund and Park 2009). But whatever the specific findings, again, these studies retain the fundamental assumption that religion and science are incompatible symbol systems, and that rise or decline in one is necessarily related to decline or rise in the other.

Symbolic Directional Influence Literature

Unlike the symbolic epistemological conflict literature, the symbolic directional influence literature suggests that religion and science may not be competing symbol systems in a relationship where one displaces the other. Rather, the ideas and beliefs of one may contribute to the content of ideas and beliefs of the other. The pioneering and most influential work in this vein is Robert Merton's doctoral dissertation (Merton 1970), which suggested that science owed its rise (and its specific form) to two features of Protestant religion. At the social-psychological level, he argued, the cultural values expressed by Puritanism in particular contributed to an empirical, experimental, and interventionist approach to the natural world. At the social-institutional level, science effectively borrowed legitimacy from religion until it could become an autonomous sphere generating its own legitimacy. In these two specific ways, according to Merton, religion made the rise of modern science possible.

Merton's full argument is too complex to relate here, but in many respects the details of the argument do not matter, as the core point that "religion contributes to the rise of science" has been appropriated by many different kinds of scholars for many different purposes. For example, scholars such as Sorokin (1937), Thorner (1952) and, more recently, Cole and Phelan (1999) and Schofer (2003, 2004) do straightforward cross-national comparisons of religiosity and science with religiosity as the independent variable and science as the dependent variable. More qualitative analyses look at the influence of "forward-looking" Christian theology on the rise of science (Stark 2003, 2005), or at the ways that science has benefited at various times from conflicts within religion, as with the conflict between Jews and conservative Protestants in American universities (Hollinger 1996, Cantor 2005). Scholars also highlight the centrality of religious imagery and metaphor to science, as in the "God particle" (Nelkin and Lindee

1995), and how such language might even affect how research agendas are defined (Noble 1997).

Anthropologists have also examined religion and science in terms of directional influence. Webb Keane (2002) points out that it may well be religion, with basic values and a life-ordering symbol system, that carries modernity forward. For Keane, Protestantism in particular gives people the cultural framework for imagining themselves as part of the project of modernity in a way that science does not (see also Sahlins 1996). Further, both Robbins (2006) and Cannell (2006) point out that even the core concepts of anthropology as a scientific discipline are grounded in specific Protestant ways of understanding the world. Thus religion may not only have influenced science at a key historical moment, as Merton suggested, but may continue to influence science at a basic and fundamental symbolic level.

Social-Institutional Literature

Unlike either of the symbolic approaches to religion and science, social-institutional approaches do not take positions on the epistemological status of religion and science. Rather, they focus on the institutions that propagate the symbols, examine how such institutions define the boundaries of "religion" and "science," and investigate how these institutions interact as the symbols are propagated. One of the most influential works in this literature is Gieryn's (1983, see also Gieryn, Bevins and Zehr 1985) article on "boundary-work" and the definition of science as "not religion" in 19th century contests over professional authority. For Gieryn and those who follow his lead (e.g. Evans 2002, Mulkay 1995), religion and science are what people associated with religious and scientific institutions do, so the important site of analysis is the battle between practitioners and supporting institutions rather than the inherent properties of the symbol systems. So, for example, in battles over creationism and Intelligent Design, the conflict may appear

to be about incompatible symbol systems, but as Binder (2002, see also Lienesch 2007) argues, the content of the symbol systems is less important than the institutional context in which conflict takes place.

A similar strand of thinking runs through recent theories of secularization. From a social-institutional perspective, secularization is not the result of rational science destroying the plausibility structure of religion, as Weber-influenced symbolic epistemological conflict literature would have it, but rather the outcome of struggles by particular actors to gain purchase in particular contexts for reasons that often have little to do with the content of an idea or belief. Such struggles may involve explicit claims about religion and science, as in the case of American sociology (Evans MS 2009), but not necessarily. A recent collection edited by Christian Smith (2003) provides several examples where secularization of such institutions as journalism (Flory 2003) and the promulgation of public morality (Kemeny 2003) had little to do with religious content, participation from scientists, or appeals to scientific authority. Instead, secularization in the broader sense only happened as a consequence of particular battles that did not necessarily engage questions about, or discourse around, religion and science.

In contrast to the conflict and complementarity perspectives, the social-institutional perspective not only sees conflict as local and contingent, but also sees religion and science as local and contingent categories subject to renegotiation and redefinition through boundary work. Further, such boundary work is not necessarily always between religion and science, as other perspectives assume. For example, a recent book by Norris and Inglehart (2004) illustrates that secularization's success or failure may have less to do with the promises of science or a conflict with religion, and more to do with the realized benefits of scientific progress as distributed through the apparatus of the welfare state.

It is probably obvious that the three most prominent approaches in sociology map

onto the three most prominent perspectives on religion and science in the broader popular and scholarly literature. The symbolic epistemological conflict literature assumes the conflict perspective. The symbolic directional influence literature assumes the complementarity perspective. The social-institutional literature works from a complexity perspective. And, like the broader literature it reflects, the sociological literature skews heavily toward essentialist perspectives on religion and science, with social-institutional studies being relatively rare exceptions. Sociology remains largely committed to an underlying assumption of essential differences between religion and science.

1.2 Religion and Science as a Problem of Public Life

There are many differences in how people have approached questions of religion and science. I am more interested in the shared underlying assumptions about religion and science across these perspectives that go completely unremarked in existing literature. The first common underlying assumption is that religion and science encounter each other in the public sphere, not across a literal battlefield. The second is that the ideal for such encounters is deliberative, or in other words, that there should be good debate. The third is that good debate about religion and science is not just interesting in the abstract, but important to American society and meaningful to American citizens.

The Public Sphere

All mainstream perspectives assume that religion and science encounter each other in the public sphere. According to Charles Taylor (2004:83), the public sphere is "a common space in which the members of society are deemed to meet through a variety of media: print, electronic, and also face-to-face encounters; to discuss matters of common interest; and thus to be able to form a common mind about these." By "common mind"

Taylor does not mean that everyone will agree on everything, or that total consensus is possible or even desirable. Rather, the public sphere is the space where people debate what kinds of things to talk about, how those things should be talked about, what kinds of things we can do, and what ways of doing things are generally acceptable.

Public debate thus shapes what can talk about, what we know about it, how we talk about it, and what we can do about it. Given this power to shape imagination, thought, and, ultimately, social activity, theorists of democracy agree that a good public sphere is central to a fair and just society that enables human flourishing for its citizens (Habermas 1989, Taylor 2004). Public debate informs policy-makers about issues of concern and provides public guidance and accountability for the formal exercise of executive and legislative power. For example, congressional leaders considering a tax increase need only watch the news or read newspapers to see a wide range of opinions, arguments, and reasons being discussed. Likewise, debates in the public sphere enrich the private lives of citizens by informing them about issues of broad concern, and by demonstrating that a wide range of positions on any given issue is available.

I use the words "wide" and "broad" because they invoke the kind of ideal public sphere whose purpose is to maximize the range of possibilities for thinking and acting. Minimally, this requires a space for discussion of issues where differences do not escalate into violence (Habermas 1974). Generally speaking, the laws and police powers of the state provide a kind of "backstop" (Mitzen 2005) to the public sphere so that even people whose ideas are in serious conflict do not take up arms and assault one another. Rather, they (in theory) take to the airwaves, the editorial page, the lectern, or even their local pub, to make arguments and claims that contribute to a multi-sided discussion of the issue with which they are concerned.

Beyond the minimal requirement of enforced non-violence, the ideal public sphere provides access to all citizens (Habermas 1974). This does not mean that access is equal,

or that every single idea will be heard by every single citizen. Rather, there is ideally no unequal burden or constraint on particular groups of citizens based, for example, on wealth, racial background, sexual preference, or gender. In the ideal public sphere, anyone has as much of a chance to participate in public debate as anyone else. Of course, to the extent that inequalities exist in society, providing universal access to the public sphere may import those inequalities into public debate (Fraser 1990). And obviously there will be variations in individual preferences regarding participation. The key point, and the assumption shared by most, if not all, analyses of religion and science, is that the public sphere provides the arena for widely accessible non-violent discussion of issues of concern, including (but not limited to) religion and science.

What is Good Debate?

Even though they use different kinds of evidence and often come to different conclusions, the various analyses of religion and science all are based (explicitly or implicitly) on a deliberative model of the public sphere. By "deliberation" I mean that participants in the public sphere encounter and engage one another with ideas, arguments, and claims. This may at first seem like a repeat of the previous point. But the emphasis here is on "encounter" and "engage." Good public debate is not just when people participate in the public sphere, but also when they encounter and engage one another in the public sphere.

Consider Robertson and Dawkins again. Their statements in the public sphere are undoubtedly non-violent participation. They are saying things in the public sphere. Other people can see what they are saying and use that to inform their own decision-making. However, Robertson and Dawkins are not actually encountering or engaging one another with ideas, arguments, and claims. To the extent that they acknowledge other persons or positions, such acknowledgment is simply prelude to derisory rhetoric and insults. This

is participation, but it is not deliberation. It is not good debate.

For scholars of the public sphere, public deliberation is critical for the functioning of a democracy (Habermas 1989). Without encounters and engagements of ideas and arguments, societies are in danger of descending into the naked exercise of power to settle differences. Without a healthy public sphere and good debate, any number of bad outcomes are possible, from extensive factionalization (and subsequent ineffectual government) to polarized two-party systems to totalitarian or authoritarian regimes. Good debate maximizes emancipatory possibilities for citizens.

Back to religion and science. Propositions about conflict, complementarity, and complexity are propositions about how religion and science realize, or fail to realize, the deliberative ideal of the public sphere. Each view suggests an answer to the question "Is good debate between religion and science possible?"

From a conflict perspective, the answer is "no." Good debate is not possible because religion and science are at war. There is no interest in engagement. Religion and science are eternally and inevitably opposed. Further, for those working in a secularization mode, religion is an active problem for public deliberation because it benefits from subverting rational thought and argument. Religion cannot therefore legitimately participate in public debate. So the best thing to do is to wait out (or accelerate) the decline of religion so that the rational society can progress and a truly deliberative public sphere, based on shared public (secular) reason, can emerge.

From a complementarity perspective, the answer is "yes," and in the case of dialogue advocates, "yes, please." Deliberation is necessary in encounters between religion and science. Good debate between religion and science generates and fosters productive relationships between two influential domains of society. In the NOMA model, deliberation clarifies the differences between religion and science. Such boundary work is key to maintaining the two magisteria as non-overlapping, and thus crucial to keeping

the peace. In the dialogue model, deliberation is necessary to identify common areas of concern and to move toward reconciliation between potentially conflicting viewpoints on those issues, again with an eye toward peace.

For complexity advocates, and from social-institutional sociological perspectives, the answer is "yes, but not always, and not always in the same way." While good debate is possible, whether or not good debate is possible for religion and science is not a single question that is universally applicable. There have been times when such good debate has happened and times when it has not. So it is at least possible. But look carefully at the underlying commitment to debunking the conflict narrative. That commitment is itself grounded in the deliberative ideal. If we are going to argue about religion and science, complexity advocates suggest, we should at least be having an informed debate about empirical cases rather than resorting to inadequate and counterproductive stereotypes left over from a previous century. The social-institutional literature embodies this approach through the study of how definitions and boundaries of religion and science become constituted through debate, and how such debates shape social life.

Why Does Good Debate about Religion and Science Matter?

If the "religion and science" literature were just a few isolated pieces scattered across the scholarly landscape, we might shrug and move on. But this is not the case. Obviously different disciplines vary across time in their interest levels in religion and science. For example, sociology began the century very interested in questions of religion and science, turned its attention elsewhere in mid-century, and only recently has experienced a resurgence of interest in religion and science questions (see Ecklund and Scheitle 2007, Evans and Evans 2008, Evans 2009, Ecklund 2010, Ecklund, Park, and Sorrell 2011, Evans 2011, Longest and Smith 2011, Scheitle 2011). But across disciplines, and

throughout the past century, "religion and science" has been of enduring popular and scholarly concern. People are interested.

But why? As a recent book title (Attridge 2009) asks about religion and science debate: "Why does it continue?" There are many answers to this question. But one of the most obvious is that these debates are sustained and durable because many complicated social arrangements depend on how these debates unfold. For example, debates between creationists and evolution proponents are not just about abstract origin stories. They concern the education of American citizens and the state's role in enforcing a particular view of the educated citizen (Binder 2002; Nelkin 1982; Numbers 1992). Debates about the efficacy of prayer (Galton 1872; Byrd 1988; Cadge 2009) and the health benefits of religiosity (Idler 1995) are important battlegrounds over the political authority of religion to influence the government, the role of science in determining good medicine, and the foundations of medical ethics (Ellison, Gay, and Glass 1989; Turner 1974). Abortion debates certainly involve issues of life and death, but historically they have also engaged "the role of women, the role of the state as a moral agent...the right to privacy, the nature of democracy, and society's obligation to those in need" (Ferree et al 2002:6).

As entrenched institutions with connections to multiple sources of power, religion and science are also powerful sources of legitimacy. Empirically, debates become more significant when they draw on religion or science for legitimation. For example, Epstein (1996) demonstrates how patients with HIV/AIDS were largely dismissed as participants in debates about research and treatment until they appropriated the cultural authority of science. Ferree et al (2002) claim that abortion is a prominent public issue in part because it is inextricably connected to religious "master frames" (see Snow and Benford 1992) that claim transcendent truth about life and death. Most recently, debates over homosexuality have become more prominent as participants have invoked scientific claims about a "gay gene" or the benefits of "affirmation therapy" to counter religious claims

about the correct form of sexual relations (Davies and Neal 1996; Le Vay 1994; Moon 2004).

When we argue about religion and science, we are arguing about many other things at the same time. Religion and science debates are not simply objects of abstract interest, or self-contained hermetic spheres of debate restricted to a few narrow or technical questions. Religion and science debates endure because they are important and influential more broadly in public life. They are not just important because they are about religion and science, but especially because they are also about many other things.

What I propose in this dissertation is a basic shift in thinking about religion and science in public life. Instead of thinking about religion and science as a problem for public debate, we should think about public debate as a problem for religion and science. That is, if we think there are problems with religion and science debates (and every single perspective makes this claim), then I suggest that the problems lie in features of public debate rather than (necessarily) features of religion and science. Specifically, we should be looking at the problem of representation.

1.3 Representation and Public Life

At the risk of abusing one example, I point again to Robertson and Dawkins as representatives. Recall that by "representative" I mean elite actors who define, present, and debate important issues before the widest possible audience, usually through general audience mass media such as newspapers or television. Representatives participate in public debate instead of, though not necessarily on behalf of, ordinary people. Representatives have unique power to influence our understanding of what is being debated, simply by virtue of being the ones doing the talking in public.

I focus on representatives because, in a deliberative public sphere, representatives

are the persons who should be encountering and engaging one another in public debate. Practically speaking, not everyone can participate in every discussion all of the time. In the most basic sense, representation is the "making present" or "re-presenting" of something or someone that is not present (see Pitkin 1967 for an overview of this concept). To enable productive discussion on issues of interest to a large number of people, a relatively small group of actors represents the positions, opinions and arguments of larger groups. The problem of representation is, how do we get from a large group of interested people to a elite group of actors with the power to deliberate in public? Theories of representation are theories about the connection between ordinary people and elites.

In religion and science debates, ordinary people are often disconnected from elites (Smith 2000; Greeley and Hout 2006). In studies of the political activities of religious elites, scholars have found that formally appointed leaders such as church council members or clergy may have a different set of priorities than lay people, due to different levels of personal commitments to social causes (Hadden 1969; Guth et al 1997), or because their organizational duties may outweigh need to represent ordinary believers (Jelen 1993), a situation commonly referred to as the "clergy-laity gap." Elites might also leverage one set of issues and positions to gain power or elite standing, then change their minds or drift from their original positions so that the original set of issues is no longer salient, as with Christian politicians such as Jimmy Carter (Fowler, Hertzke, and Olson 1998).

In studies of scientific elites, scholars have created an entire subfield called "public understanding of science" (e.g. Wynne 1992) solely to study the gaps between scientists and ordinary people. Explanations range from a "knowledge deficit" on the part of ordinary people, to a "values conflict" between elite scientists and ordinary people (Sturgis and Allum 2004, Evans JH 2010). At the same time that scientific elites emphasize the truth of claims about, for example, evolutionary origins or genetic markers for

sexuality, ordinary people often operate with "vernacular knowledge" that is scientifically "wrong" but useful for building social relationships and communicating with other ordinary people (Wagner 2007).

If the ideal of the public sphere is deliberative, and representatives are the ones who are supposed to be encountering and engaging one another in a deliberative public sphere, what does it mean that ordinary people and elite representatives are disconnected? What does it mean that Robertson and Dawkins, for example, are representatives of (respectively) religion and science? How do ordinary people evaluate representatives like Robertson and Dawkins? How does this evaluation affect the shape of public debate? How does it affect our understanding of what religion and science are doing in the public sphere? Does representation even work the same way for religion and for science?

These are crucial questions. The answers to these questions would help unlock many other related questions across the religion and science literature. Yet there is essentially no literature on representation in religion and science debates that would answer these questions. In fact, representation in public life has only recently become recognized as a distinct problem in political science and sociology.

The Good Representative

Representation has long been a central problem for political theorists (Pitkin 1967, 2004). But until very recently, representation has been treated as the formal exercise of power through institutional politics. Questions of representation have mostly been questions about how to arrange institutional politics to achieve certain desired outcomes. As a consequence, normative questions dominate the theoretical literature. For example, is it better to keep the people out of elite decision-making (Hamilton 1982), or to bring the

people in to avoid marginalization (Williams 1998)? Should a representative reflect the people's will, or act on her own with the people's authority (Hobbes 1991, Pitkin 1967)? Is it better to have institutional representation based on territorial boundaries, people's group memberships, people's interests, or something more abstract and symbolic (Mansbridge 1999, Pitkin 1967, Schwartz 1988)? Is representation good for democracy, or bad for democracy (Rousseau 1968, Pitkin 2004, Urbinati 2006)?

Normative theories of representation are grounded in empirical assumptions about elections and democracy (Dahl 1998). When scholars talk about political representation, they usually mean electoral representation in democratic states (Pitkin 2004, Saward 2008). For many scholars of politics, elections are the defining feature of democracy (Powell 2000). What makes democracy legitimate is the ability of the people to vote their representatives in or out, providing either a mandate for rule or accountability for bad behavior (Przeworski, Stokes, and Manin 1999). Representation, in this view, is when ordinary people, through the electoral process, authorize, assess, and hold accountable representatives who speak or act on their behalf in the arena of institutional politics. The goal of studying representation is to find the best way to arrange the electoral process to achieve normatively good results, for some value of "good" such as "proportionality" (Katz 1997, Swain 1993), "delegation" (McCrone and Kuklinski 1979), or "responsiveness" (Kitschelt et al. 1999), among others. In practical terms, such studies ask questions about, for example, whether Black constituents should be represented by Black elected officials (Swain 1993, Mansbridge 1999).

In recent years, however, scholars have paid increasing attention to the growing gap between the electoral model of representation and the reality of representation on the ground (Rehfeld 2006, Urbinati and Warren 2008). Rehfeld (2006:1-2) offers several illustrative examples. Many national leaders are in power by virtue of controlling military forces or by inheriting a title rather than being elected through democratic processes, but

nonetheless are recognized as representative of their countries by other states. Agents of international nongovernmental organizations, such as the Red Cross or Amnesty International, are generally recognized as representative of (respectively) prisoners of war or political prisoners, obviously without electoral authorization. World Trade Organization representatives are recognized as representative of their respective countries but are neither elected by their countries nor particularly accountable to their country's populace. Thomassen (2007) also provides the example of Subcomandante Marcos, who is widely recognized as representative of the Zapatista movement, despite the fact that the entire existence of the Zapatistas presupposes an alternative model of political organization and action.

To the extent that political scientists engage activity beyond elections, they usually subsume it under "interest group politics," where various groups and their representatives attempt to influence the behavior of elections or elected representatives (Dahl 1956,Schattschneider 1960, Tichenor and Harris 2005). This treats non-electoral representation as a precursor to electoral representation (Denzau and Munger 1986, Gray and Lowery 1996, Heaney 2004), rather than a political process in its own right (Urbinati 2006). But even these few examples demonstrate how representation beyond elections subverts political theories of representation based either directly or indirectly on democratic elections. Often there is no electoral process, no authorization, and no accountability (Grant and Keohane 2005, Urbinati and Warren 2008). In some cases representatives may not even be acting on behalf of anyone in particular. The only thing these representatives have in common is that some people see them as representative.

These findings have prompted several recent calls for "rethinking representation" (Mansbridge 1999, see also Rehfeld 2006, Saward 2008, Urbinati and Warren 2008). Such rethinking involves two fundamental shifts away from the dominant electoral model of representation. First, it involves understanding elections as one of many possible

arenas for representation, rather than the central model for how representation works. Second, it involves understanding representation in its "robust nonnormative descriptive sense," as a description of understanding all social arrangements that are seen as representative, not just electoral arrangements (Rehfeld 2006). With these two shifts, the study of representation now centers on empirical questions. Instead of starting from normative assumptions about elections and evaluating representatives as good or bad in light of those assumptions, we can now, on one hand, look beyond elections to the public sphere and, on the other hand, ask a key empirical question: How do ordinary people evaluate representatives as good on their own terms, by their own normative standards?

Representation Beyond Elections?

For political scientists, representation beyond elections is the "new frontier" of research into representation, with empirical research only recently suggesting that representation beyond elections has independent power to shape social life (Urbinati 2006, Urbinati and Warren 2008). Yet this "new frontier" is, in many ways, well-mapped territory for sociology. A full explanation of this disciplinary difference is beyond the scope of this brief overview, but in short, it reflects a division between Rawlsian and Habermasian understandings of public debate (see McCarthy 1994). Political scientists generally assume a Rawlsian understanding of public debate as occurring with the established institutional political framework. In this view it makes sense to apply models of electoral behavior to representation, as any public debate that matters will (proximately or ultimately) occur within the framework of electoral politics. Public debate, in this sense, does not exercise any separate power, so there is no need to treat it separately.

In contrast, sociologists generally assume a Habermasian understanding of public debate as extending beyond institutional politics and, critically, capable of generating fundamental challenges to that institutional framework. In this view public debate is not only separate from institutional politics, but also an important source of emancipatory power to overcome unfavorable or inequitable institutional political arrangements. Based on this Habermasian understanding of public debate, sociologists have long recognized that representation in public debates has power to shape social life regardless of electoral processes. Understanding representation as a set of social arrangements, as recent critics in political science have suggested, is consistent with a related literature on claims, framing, and representation in social movements and in the sociology of science (see also Saward 2008).

The strongest statement of this Habermasian position comes from the "multi-institutional politics" perspective recently summarized by Armstrong and Bernstein (2008). While they do not explicitly refer to Habermas' theoretical work, Armstrong and Bernstein identify some of the insights central to a Habermasian understanding of public debate as one of many possible sites of political contention. Posed against a state-focused "political process" model, "multi-institutional politics" assumes that there are many different sources of power, and that political action, particularly as realized through social movements, is only intelligible if actors, goals, and strategies are understood with reference to the many institutional contexts beyond the formal institutional politics of the nation-state. Politics is not just formal governance, but "a general social process occurring in multiple arenas of society" (Armstrong and Bernstein 2008: 77). From this perspective, many activities are political that are not state-oriented, for example, in movements against oppression, in attempts to change culture rather than policy, and in strategies involving novel organizational forms that attend to the "overlapping and nested" institutions of society rather than focusing solely on the state (Armstrong and Bernstein 2008: 82, for examples see Eliasoph 1998, Polletta 2002, Perrin 2006, Lee 2007).

Religion and science controversies illustrate this distribution of power across many different kinds and levels of institutions. In the controversy over creation and evolution, for example, school board members, church officials, prominent scientists, and local governments confront each other in courtrooms, marshal public support through interviews and opinion editorials, and petition curriculum committees (Nelkin 1982; Binder 2002; Superfine 2009). Likewise, in the controversy over human genetic engineering, scientists, bioethicists, theologians, philosophers, and politicians jostle for position on government advisory panels, institutional review boards, congressional committees, and the leadership of professional associations (Evans 2002). Clergy members make claims about the environment or sexuality directly from the pulpit, even as scientists publish scholarly articles and books on those same issues (Djupe and Gilbert 2003).

Taking representation beyond elections seriously is simply a recognition of empirical fact. Politics happens across many levels of organization and many institutional contexts. To say that representation in public debate exercises power in religion and science debates is wholly consistent both with Habermasian understandings of public debate and with theoretical and empirical findings from sociology.

How Representation Matters

Two key specific insights from sociological studies suggest how representation in public debate shapes social life. First, representation shapes perception, formation, and organization of social groups. Bourdieu (1985, 1991), drawing on a tradition leading back to Hobbes (1991, see also Pitkin 1967) theorized that representation is primarily a constitutive process. Representatives do not just reflect the interests or identity of a territorially-defined constituency, as in electoral representation. Representatives also create the symbolic meaning of a group membership, for members and for non-members.

Subcomandante Marcos may be an exemplar to those within the Zapatista movement, but his main symbolic power is that he represents that group to observers across the world, who shape their own perceptions of, and actions toward, the Zapatistas based on what they know of Marcos (Thomassen 2007). Such constitutive power has concrete effects. Groups organize based not only on support for or solidarity with their own exemplars, but also against those they see to be representative of their opposition. For example, Fetner (2008) documents how lesbian and gay activist groups changed organization, frames, claims, and mobilization tactics in response to the rise and fall of Anita Bryant as a representative of the Christian Right anti-gay rights movement.

This constitutive aspect of representation makes representation outside elections both powerful and complicated. Mediating forces can manipulate representation to suit their purposes (see Mills 1956, Domhoff 1967). For example, Gitlin (1981) documents how mass media attention to one set of representatives rather than another effectively contained the Students for a Democratic Society (SDS) by shaping the public perception of SDS both for its members and, perhaps more importantly, for broader American society, resulting in the "unmaking" of the New Left. Even without such manipulation, well-meaning representatives can reinforce problematic stereotypes and reassert hierarchies of privilege. Trebilcot (1988), for example, shows that the variety of individuals within the lesbian community means that any attempt to speak for the lesbian community inevitably excludes some group members. But such speaking may be the only way to draw attention to particular problems. Alcoff (1992) suggests that "retreating to an individualist realm" may minimize the very real shared experiences of, for example, rape victims and incest survivors who want to stake a common claim to outsiders. For good or for ill, representation beyond elections is a powerful constitutive process that affects the perception, formation, and organization of social groups.

This matters for religion and science debates because it means that Pat Robertson

and Richard Dawkins are not simply Pat Robertson and Richard Dawkins. They are part of a process that constitutes religion and science in the public sphere. When Robertson claims religious authority in public debate, he is in part defining for ordinary people what it means to be religious in that debate. When Dawkins claims scientific authority, he is in part defining for ordinary people what it means to be scientific in that debate. This does not mean that meanings transfer unproblematically from representatives to ordinary people, or that such activity overrides all other definitions of "religion" and "science" that are available. The point is that representatives in public debates about religion and science constitute (in part) what such debates are about, who is involved, what is at stake in each debate, and, most basically, what counts as religion and science in each debate. This happens as they speak in public, and as ordinary people evaluate them.

Second, representation shapes what kinds of debate and discussion are possible. One way this happens is by shaping the content of the knowledge on which debate is grounded. For example, Epstein (1996) shows that having representatives from the AIDS activist community involved in AIDS policy changed scientific knowledge about AIDS to include "lay expertise," rather than just clinical or experimental data, with subsequent changes in AIDS policymaking and substantive health outcomes. Much of recent dispute in the US over such issues as climate change or Intelligent Design hinges on who is seen as speaking for scientists, with requisite attempts on all sides to justify that they are the real representatives of "scientific consensus" (e.g. Oreskes 2004). And more generally, because most scientific research builds on earlier research, established representatives of a particular position or field have a disproportionate effect on the content of subsequent scientific knowledge.

A more direct way representation shapes discussion is that elite representatives maneuver to control debate in a way that favors their position. For example, Evans (2002) identifies how professional bioethicists emerged through a jurisdictional battle over who

could legitimately speak for ethics.⁶ As a result, debate about ethics in science shifted from substantive rationality to formal rationality, excluding questions about ends in favor of questions about means. Ferree et al (2002) show how important differences between the institutional position of representatives in Germany and the United States led to very different types of public debate over abortion. In particular, those who are seen as representative by media in the US are more likely to dominate debate, whereas in Germany those who are seen as representative of a political party, union, or organized religion dominate debate, regardless of media involvement.

This matters for religion and science debates because it means that representatives have an advantage in shaping subsequent debate, as they are the ones already prominent in public life. Such prominence can happen for many reasons unrelated to the quality of their arguments or their willingness to engage with other public sphere participants. For example, Pat Robertson benefits from enormous investment of resources in media efforts by the Christian Right over the past thirty years (Wilcox and Larson 2006). These efforts target precisely the kind of attention that makes Robertson prominent in general audience mass media. So even if a new representative appears in public debate and attempts to engage Robertson, that representative must do so, in part, on the terms set by Robertson. Representatives in public debates about religion and science do not just shape current debate. They shape the possibilities for future debate.

Representation matters in public life. Representation is important in "multi-institutional politics" and not simply in elections. Representatives do not just talk in public. They constitute the meaning of what is being debated and change the shape of public

⁶I recognize that some ontological assumptions preclude the casual substitution of an abstract like "ethics" for the more concrete "group members." Yet this is the constitutive power of representation. Speaking for ethics is, effectively, speaking for a group of people (real, actual, imagined, or idealized) who are ethical. Similarly, speaking of representation solely in terms of "claims" or "frames" (see Saward 2008) is unhelpfully reductive. If Bourdieu is right, then there is always some constitutive effect where representatives do not just present claims, but also constitute "people who make these claims."

debate. In short, problems of representation pose fundamental challenges to good public debate. In the remainder of this dissertation, I argue that problems of representation change the possibilities for good public debate about religion and science.

1.4 Chapter Outline and Preview of Findings

To anticipate the findings of the dissertation, let me answer the main question first. Is good debate about religion and science possible? I say yes. But good debate is not happening now, nor is it likely to happen any time soon. In the chapters that follow I break this answer down along a number of dimensions.

A common claim is that religion and science debates are bad debates. In Chapter Two I consider various possible ways that bad debate could occur, and examine whether these explain the current state of current religion and science debates. I apply novel methods to analyze news media and create maps of public talk in four apparent "religion and science" debates: stem cell research, human origins, environment, and the origins of sexuality. To my surprise, and contrary to what everyone assumes, I find no actual debate, at least in the sense of public participants engaging one another in discussion and argument. Religion talk and science talk are entirely disengaged. Newspaper articles about science tend strongly to avoid religion, and vice versa. The most prominent representatives of religion and science in each debate, such as Pat Robertson or Richard Dawkins, simply promote their own agenda or engage historical figures that are not part of contemporary debate. This is the worst-case scenario for bad debate.

Religion and science representatives in these debates are not engaged in deliberative talk. So what are they doing instead? And why does it matter? Chapter Three uses data from the debate analysis and archival sources to identify a "great disconnection" between elite representatives and ordinary people over what counts as good debate. For

elite representatives, good debate means getting your way. In contrast, ordinary people think that good debate means engagement and deliberation. I show that the key problem in these debates is that representatives participate in ways that conflict with what ordinary persons expect. The result is that ordinary persons negatively evaluate representatives and debates on normative grounds. For example, elected politicians are discounted in public debate because they are seen as incapable or unwilling to engage meaningfully with serious issues. Few, if any, representatives are pursuing deliberative debate, even though this conflicts with what ordinary persons want.

So why are representatives trying to get their way in the public sphere, rather than (or in addition to) some other setting? Drawing on theory from science and technology studies (STS), Chapter Four introduces the idea that representatives participate in the public sphere in order to pursue public credibility, which does not necessarily require deliberation. Not everyone pursues credibility in the public sphere, but the ways in which some people and not others pursue credibility in the public sphere shapes the possibilities for good debate in the future. I show how the Religious Right pursues religious credibility in the public sphere, while the Religious Left does not. Historical domination of public debate by theologically and politically conservative religion representatives gives the Religious Right a structural advantage as they continue to "own the space" of religion in public life. But since Religious Right representatives are generally seen as working against good debate, they have poisoned the well of religion in the public sphere. Ordinary respondents, whatever their personal religious commitments, see all religion talk as inimical to good deliberative debate, no matter what its source. This effectively secular norm of public debate renders even moderate and liberal religious language and arguments either as not distinctively religious or as contrary to good debate. So even if the Religious Left wanted to pursue religious credibility in the public sphere and expand the boundaries of public debate, any attempts to be "religious" in the public sphere would be understood as contrary to good debate.

But what about science? Chapter Five shows that the dominant model of scientific credibility depends on separating the public credibility of science from any individual scientist. The result is that scientists generally do not pursue scientific credibility in the public sphere. I show that science remains a respected authority for ordinary Americans. Yet this confidence depends on science remaining "faceless" in public life. Respondents largely endorse the public narrative of scientists as virtuous seekers of knowledge for whom participation in public life is a distraction or, at worst, corruption. Thus respondents see science as valuable, but generally disapprove of scientists in public life. In some cases, respondents think that science representatives are abusing the authority of science for their own personal gain. In other cases, such as that of Richard Dawkins, respondents think that scientists are trying to cut off good debate by deploying expert knowledge to silence opponents. I show that since public defense of science by science representatives runs counter to what ordinary people expect, science is particularly susceptible to challenge in public debate. Despite widespread calls for "the next Carl Sagan," the deliberative norms of the public sphere limit how scientists might be involved in future debate.

In Chapter Six I summarize the findings about religion, science, credibility, and the American public sphere. My conclusion is that good debate about religion and science is possible. But it is extremely unlikely in the current American context. And it is unlikely to change in the foreseeable future. Problems plaguing public debate about religion and science are deep-seated problems that likely plague most contentious debate. Moreover, while there are identifiably different limits on future possibilities for religion and science to be involved in the public sphere, the root causes of problems lie in the structure of American public life, and in the institutional histories that produce different versions of public credibility. So while I am not hopeful about good debate about religion and

science in the near term, I am hopeful that we can start to address more fundamental issues that will, ultimately, contribute to good debate in the future.

Chapter Two:

The Debates That Weren't There

Is good public debate between religion and science happening now? Chapter 1 established three key points about previous religion and science scholarship. First, scholars from many different perspectives agree that good debate is desirable. Second, propositions about the relationship between religion and science are actually propositions about whether or not religion and science debates meet the standards of good debate. Third, empirical studies of religion and science do not actually assess these propositions as claims about existing public debates. So, though key propositions about religion and science rest on empirically testable claims about public debates, such empirical examination is absent from religion and science scholarship (but see Evans JH 2010).

In this chapter I take an empirical approach to the study of religion and science in public debate. Virtually everyone says that religion and science debates fail to meet the standards of good debate in some way. But there is disagreement over how these debates are bad. The purpose of this chapter is to establish what kind of debate is happening now. Is the general agreement over the quality of religion and science debates justified? If so, which explanation best accounts for the kinds of debates that are currently occurring? And what do debates about religion and science tell us about the public sphere more broadly?

I address these questions by analyzing mass media newspaper coverage of four issues where some participants make claims based on scientific authority, and some participants make claims based on religious authority. In each case, there should be debate of the sort that is claimed by almost everyone writing about religion and science. In terms of debate content, there should be topics of discussion that involve both religion and science, whether as sites of confrontation or dialogue. Similarly, religion and science representatives should encounter and (ideally) engage one another through public talk.

But to my surprise, neither of these situations actually occurs in public debate over these four issues. Debates are separated into mostly-religion and mostly-science topics that are unlikely to occur together in public debate. While some religious representatives are prominent, they are not generally engaging with science representatives. Neither topics nor representatives are directly engaging one another. In most cases they are not even encountering one another.

In short, I cannot actually find the debates that everyone is talking about. I conclude that religion and science debates fail to meet the standards of good debate in the most fundamental way possible. Encounters between religion and science are, for the most part, not actually happening. Current scholarship on religion, science, and the public sphere correctly identifies that these debates fail to meet the standards of good debate. But current explanations fail to account for the fundamental lack of engagement that prevents even the possibility of good debate.

2.1 How to Study Good Debate

What do people mean when they say that religion and science debate fails to meet the standards of good debate? As I showed in Chapter 1, there is general agreement that debate between religion and science ought to be deliberative. What counts as good debate

is clear. Representatives should encounter each other, engage in (generally) civil conversations, consider different positions and arguments, remain open-minded, and emphasize ongoing conversation over debate closure.

There is much less agreement over what causes debate to be bad. In reviewing literature on the public sphere, I have identified at least six distinct explanations for bad debate. Of these, five are commonly invoked in the religion and science literature. Each of these explanations implies a particular configuration of public debate that should show up in this study. Before proceeding to the description of study methods, it is important to preview what kinds of empirical data patterns indicate each of these different explanations for bad debate.

First, representatives can engage in confrontation and attack, generating conflict rather than conversation over controversial issues. For example, the classic "warfare thesis" (e.g. White 1896) claims that religion and science are locked in inevitable conflict. Barbour's (1966) influential four-fold typology includes conflict as the least desirable relationship between religion and science. If this is what is happening, then we should see religion and science engaged with each other on every issue where each has a claim. Moreover, we should see representatives engaged in attacks on their supposed opponents and their arguments. Talk will be directed toward conflict rather than conversation.

Second, people can simply misunderstand each other. In this case, even if representatives attempt to engage one another, the resulting conversation is unproductive. For example, Evans and Evans (2010) attribute enduring problems in debate over human origins in part to a misunderstanding over the moral concerns of creationists. If this is what is happening, then we should see religion and science engaged in public talk. But the public talk itself will be mismatched. Representatives of one "side" will be talking about one version of the issue (e.g. moral), while representatives of the other "side" will be talking about some other version of the issue (e.g. epistemological).

Third, people can engage in public debate even though they are unwilling to consider each other's arguments or change their minds. For example, Shields (2009) points to cases where young evangelical Christians are trained to engage in public conversations over controversial issues in hopes of converting others, rather than remaining openminded to the positions of their interlocutors. If this is what is happening, then we should see representatives engaged in public talk. But the talk itself will not take account of other positions in the debate.

Fourth, media can portray representatives as engaged in unproductive conflict, so that otherwise potentially good debate appears to be bad. For example, Numbers (2009) identifies several myths about conflict between religion and science that are often repeated in news media, even though they are not historically correct. If this is what is happening, then we should see religion and science apparently engaged in conflict over controversial issues in these debates. But we should also see that (at least some) representatives are not engaged in conflictual talk. Moreover, we should see explicit framing that reinforces the appearance of conflict, despite what representatives actually say.

Fifth, people can simply fail to speak the truth to one another. Such deception not only violates expectations about sincerity (Trilling 1972), but produces a deficit of trust that makes meaningful deliberation impossible. For example, Forrest and Gross (2004) claim that Intelligent Design proponents conceal their religious affiliations in order to avoid having to defend themselves on religious grounds. This can be difficult to detect. However, if this explanation is correct, then we should still see multiple sides engaged in a discussion about a given issue, even if some of the representatives are not telling the truth about their position or argument.

Sixth, and most fundamentally, debate can be bad because representatives never engage each other in public talk in the first place. In this version of bad debate, representatives talk in public about an issue, but do not actually encounter or engage one another.

In other words, the various "sides" of a debate do not actually debate each other, so good debate cannot possibly occur. If this is true, what we should see is that religion talk and science talk are separated in public debate. We should also see that religion representatives and science representatives do not actually engage each other, but rather talk only about their own position, or only argue with similar representatives (e.g. internal religious conflict, or internal scientific dissent) rather than representatives of the other side.

To my knowledge, no one in the religion and science literature seriously suggests that religion and science do not actually engage each other in public talk. Rather, the common assumption is that religion and science are engaged in public debate, and that such debate is bad for one or more of the five other reasons listed above. But it is at least theoretically possible that there is a more fundamental problem. Considering this possibility is important because, if it occurs, then there is simply no possibility for good debate, even if other apparent problems (e.g. misunderstanding or media framing) are fixed.

Of course, it is possible that some debates fail for one reason, while other debates fail for other reasons. In the religion and science literature, this possibility is rarely considered. For example, the simple warfare narrative assumes that conflict will inevitably occur on any issue where religion and science are involved. Similarly, if (for example) religion representatives are participating in religion and science debates in order to gain converts, then they are likely to do so regardless of the issue at hand. So it is important to consider how different debates may unfold in different ways. It may be the case that every debate fails for different reasons.

It is also possible that debates fail for multiple reasons. For example, some representatives may be liars, while other representatives might be engaged in conflictual attack. In such cases it is important to consider not only which explanations might account

for the observed debates, but also how an account might involve multiple explanations. Note, however, that some explanations are more fundamental than others. It is impossible to be conflictual, for example, if you never actually engage your purported opponent in public talk.

In what follows I report a detailed empirical analysis that looks at four different debates. I conclude that there is a common problem in all of these debates: religion and science never actually encounter and engage each other in public talk. This is a fundamental problem that effectively trumps all other explanations for the failure of good debate. But even though each of the debates exhibit the same fundamental flaw, there are important differences between debates that suggest important new directions for understanding religion and science in public life. In this chapter's concluding discussion I leverage these differences to set up the later chapters in the dissertation.

2.2 Locating Public Debate

Where should we expect to find representatives engaged in public debate? In general, "public debate" is public talk as it occurs in the public sphere. But of course it is impossible to track all public talk, even about one issue. In this study I rely on talk as it occurs in general audience mass media, specifically major national and regional U.S. newspapers. When I use the term "debate" with regard to an issue, I literally mean "the set of newspaper articles that discuss this issue." For example, the human origins debate is the set of articles from major U.S. newspapers that discuss human origins. (Such public debate is by definition "elite debate," and I use the terms interchangeably hereafter.)

In this chapter I look for public debates between religion and science in mass media coverage of issues where religion and science are involved. In general, public debates should exist in mass media for any issue with multiple claims. Specifically, public de-

bates between religion and science should exist in mass media for any issue where both religion and science offer competing claims. Conventions of journalism in mass media favor the debate format for narrating controversial issues. As many scholars of American mass media have noted, such conventions draw on norms of objectivity (Schudson 2001). "Objectivity" usually includes "presentation of conflicting possibilities," "presentation of supporting evidence," "judicious use of quotation marks," and "structuring information in an appropriate sequence" (Tuchman 1972:665-669). Presenting multiple claims about an issue in the form of a debate provides an ordering scheme that readily narrates the issue for readers and offers appealing dramatic value (Bennett 2001, Cook 1998, Iyengar 1991), but also absolves journalists and editors from the responsibility of picking a winner (Tuchman 1972).

In fact, the greater danger is that debates between religion and science will appear to exist when religion and science are simply participants, simply as a result of journalistic framing conventions. Certainly critics of current debate suggest that mass media institutions, particularly in the United States (see Reis 2008), tend to reiterate the naive conflict narrative by framing, or in some cases, constituting public controversies over science and technology issues as "religion vs. science." For example, journalistic norms of objectivity and balance can result in stories that validate religious positions on human origins as legitimate scientific alternatives to evolution, even though scientific experts may disagree (Taylor and Condit 1988, Grimm 2009). Or, as in controversies over embryonic stem cell research, mass media coverage may effectively present a "scientific" frame against a "religious" (or sometimes "moral") frame for interpreting the meaning and implications of new technology (Pardo and Calvo 2008, see also Nisbet, Brossard, and Kroepsch 2003). As the results in this chapter will show, however, this did not turn out to be a problem in practice.

Issue Selection

To find religion and science debate in mass media, I selected four issues that I judged most likely to provoke the public engagement between representatives of religion and science that most scholars of religion and science talk about. Working from the premise that public conversations between representatives of religion and science were unlikely to occur if there were no claims at stake, I started by looking for issues where some participants make claims based on religious authority, and some participants make claims based on scientific authority. Even this minimal approach excludes a variety of possible issues that involve something about religion or science, but are unlikely to produce religion and science debates because religion or science makes no public claim. For example, there are no significant religious claims about scientific or technical issues such as aerodynamics, and there are no significant scientific claims about religious issues such as veneration of saints.

To maximize the chance of finding sustained public debates, I eliminated some issues that met the minimum criteria, but that did not have significant public policy implications. For example, the bodily resurrection of Jesus is an issue where some participants make claims based on religious authority (e.g. the Bible says that Jesus reanimated after 3 days in the tomb), and some participants make claims based on scientific authority (e.g. it is medically impossible to reanimate a body after 3 days). But there are essentially no public policy implications stemming from the bodily resurrection of Jesus, so I do not expect that issue to generate sustained public debate. Likewise, I eliminated issues confined to a very small group of persons. For example, some members of the Church of Jesus Christ of Latter-Day Saints claim that Native Americans are a "remnant of the House of Israel" descended from the Tribe of Manasseh through the Mormon prophet

⁷I say "significant" only to guard against the possibility that someone, somewhere, has generated a claim about these issues that I have not seen emerge into public life.

Lehi, while geneticists claim that there is no scientific evidence that the populations are linked (Southerton 2004). Since this is an issue confined to one part of a religious denomination that, as a whole, constitutes less than two percent of the U.S. population, I do not expect this issue to generate sustained public debate.

After eliminating many issues where religion and science debate was unlikely to exist, I selected four issues where I would expect to see sustained public conversation between representatives of religion and science in mass media. Each debate involves participants making claims based on religious authority and participants making claims based on scientific authority. Each debate also involves stakes not just for one particular group, but for a variety of different groups for different reasons. And each debate has broad policy implications at local and national levels.

The four issues that I selected are human origins, origins of sexuality, environmental policy, and stem cell research. Each of these issues has both religious and scientific claims at stake. For example, human origins debate involves multiple religious claims about creation and divine intervention, as well as multiple scientific claims about human evolution. However, the kind of claims vary widely by debate. Sometimes religious claims derive from strict biblical literalism, as in human origins debate, but sometimes religious claims derive from a retroductive analysis of moral prescriptions, as in the religious claim that sexuality must be a choice because otherwise God has created sinners who cannot stop sinning. Likewise, each debate has broad policy implications. For example, environmental policy looks very different based on whether it is informed by scientific claims about anthropogenic climate change or by religious claims about the futility of intervening in a world destined for Armageddon.

As I discuss each of these issues in greater detail later in the chapter, I will explain why each issue is an especially likely place to find public debate between religion and science. Here the important point is that I have selected cases based on criteria that

should provide the greatest chance of finding the kind of public debates that the scholars discussed in Chapter 1 are talking about. While there might be more issues that also meet these criteria, each of the issues that I have selected as cases are excellent candidates for locating public debate. To the extent that there is such a thing as public debate between religion and science, it is most likely to show up around these issues.

Note, however, that locating issues that are likely to be sites of public debate only presents a starting point for analysis. As Chapter 1 established, propositions about the relationship between religion and science are actually propositions about whether or not religion and science debates meet the standards of good debate. Analyzing these issues does not simply mean checking to see if there are representatives making claims about religion and science. It means checking to see if public debate around these issues is deliberative, that is, to what extent public debate around these issues is characterized by encounters and engagement between representatives of religion and representatives of science.

2.3 Analyzing Public Debate

I use two methods from computational linguistics in this chapter. Computational linguistics is the use of computers to analyze, simulate, or generate human language. If you use a word processor with a grammar checker, or search for web pages on the internet using a search engine, you are already using computational linguistics in your daily life. In fact, those are very good examples of the techniques used in this study.

Named Entity Recognition

Example One: Imagine that you are writing a document in a word processor, and you type "The dog go to the store." If grammar check is turned on, you will see immediately

a red squiggly line or some similar marking to indicate a problem with the grammar. If you click to see the problem, it will tell you about "subject-verb agreement." The grammar checker will suggest either "The dogs go…" or "The dog goes…"

But how does the word processor know this? Does it keep a massive database of all possible sentences? Of course not. It does not "know" anything like that. What it does is constantly disassemble your words into parts of speech, identify the relationships between the words you have typed, and check those relationships against a set of predefined rules. Language is not entirely consistent, but it hangs together based on relatively few syntactic rules. In this case, the word processor sees a singular noun and a plural verb, recognizes that the noun is the subject of the sentence, and flags a violation of its rules of subject-verb agreement.

In this study I use a similar technique to identify and analyze participation by representatives in public debate about religion and science. Named Entity Recognition, or NER, identifies all of the different kinds of named entities in a document. Named entities are things like people, organizations, locations, and dates that have special significance beyond just being another noun in a sentence. As with the grammar checker in your computer, it is not necessary to keep a database of all possible persons, organizations, locations, or dates in order to find them in a document. Like the grammar checker, NER has a set of rules that it uses to identify these entities. Using these rules, NER "knows" that if a sentence says "Jerry Falwell is the leader of the Moral Majority," then the sentence refers to a person named Jerry Falwell and an organization called the Moral Majority.

Running NER against thousands of newspaper articles provides a record of all of the named entities and where they occur in those articles, *without knowing any of the names in advance*. NER answers a basic question about public debate: "who shows up?" By collecting the data from NER into a database for analysis, I can also answer the question

"who shows up *together*?" From the answers to these two questions I make claims about who representatives are in these debates, how prominent they are relative to one another and, most importantly, whether representatives in religion and science debates actually encounter and engage one another.

Note that this top-level data does not distinguish between a situation where representatives in religion and science debates are actually talking to and about one another, and a situation where journalists construct a debate by putting quotes from one representative in the same article as quotes from another representative. Such distinctions require different kinds of analysis, for example, discourse analysis of what a particular representative is actually saying when they talk in public or, more broadly, topic discovery (see below). Throughout the dissertation I use the NER data as a starting point to engage in such analysis.

I report data from NER as ranked lists of representatives and interlocutors. Some tables indicate the visibility of representatives in public debate. This is a simple count of how many articles mention a particular representative. This information indicates who the elite representatives are for a given debate. I also report what I call "interlocution," which is co-occurrence of persons and organizations. I use these data to make claims about deliberation by representatives in public debate. The more that prominent representatives engage each other, the more deliberative the debate. Again, since media conventions tend to shape stories as debates, the question here is not simply whether a debate is deliberative. The question is about whether a given debate is a debate between religion and science representatives and, if so, whether such debate is deliberative. The less religion and science representatives engage one another, the less deliberative the debate between religion and science representatives engage one another, the less deliberative the

Topic Discovery

Example Two: Imagine that you want to know about "American politics." You type "American politics" into your favorite internet search engine. A fraction of a second later, you get a list of web pages (perhaps numbering in the thousands) that are about American politics. But only some of those web pages use the words "American politics." Some are actually mostly about "Founding Fathers" or "constitution" or "first past the post" or "religious conservatism."

How does the search engine know that these pages are about American politics, even when they do not use the words "American politics?" Again, as with the grammar checker, the search engine does not "know" what pages are really about. Or does it?

It turns out that human sorting of words and documents into conceptual groups, or topics, is actually highly predictable. Unlike the rules of grammar, the rules of topic sorting are not the stuff of primary school sentence diagrams and tedious repetition of parts of speech. But the rules can be defined mathematically, which is key to making topic sorting replicable by computers. "Topic discovery" is a technique for taking documents and sorting the words in those documents into conceptually coherent topics. In other words, topic discovery can tell you what a document is "about."

Of course, documents are complicated. Newspaper articles, for example, are usually not just "about" one topic. An article about religious conservatism can also be about the U.S. Constitution and the Founding Fathers and individual liberty. Asked to identify the various topics in such an essay, a human reader would probably recognize these as related, but not identical, topics with different importance in the document and different relationships to one another. Often a discussion of the U.S. Constitution involves a discussion of the Founding Fathers. But sometimes a discussion of the U.S. Constitution

involves a discussion of human rights without any reference to the Founding Fathers. A human reader can tell the difference intuitively. Topic discovery can tell the difference mathematically.

Because the underlying rules of topic sorting are mathematical, the relationships between such topics in a set of documents can be described mathematically. To use a spatial metaphor, the more two topics tend to be in the same document, the closer they are on a map. The less likely two topics are to be in the same document, the farther apart they are on a map. The map "distances" correspond to the likelihood of two topics being in the same document. This scales to as many topics as needed. A third topic can be mapped according to its distance from existing topics, and so forth. Topic discovery can map a document, or set of documents, according to the relationships between topics.

So what does the search engine "know?" Search engines constantly index the internet, retrieve web pages, and run a form of topic discovery on the contents. They then save the mathematical description of those topics. So when you type in a search on "American politics," what is actually happening is that the search engine retrieves the least different mathematical descriptions of other topics that it has previously encountered. In spatial terms, it finds the closest topics on the map, and ranks them by distance from the search topic. The search engine then returns to you the URLs of the documents for which those topics are most prominent, whether or not they specifically contain the exact words that you originally requested.

The Distribution of Public Talk

To translate this into the concerns of this dissertation, topic discovery shows whether, and to what extent, topics are related to each other in public talk. But how can a map of topic distribution answer questions about debates between religion and science?

The key here is that some of the most basic claims about religion and science debates

are actually claims about the arrangement of public talk. Topic discovery allows us to evaluate general claims about religion and science debate as claims about possible topic relations in a given sample of mass media articles. Take, for example, the claim that Intelligent Design is a site of debate between science and religion, whether over moral or epistemological issues (see Evans and Evans 2010). This is actually a strong claim about the arrangement of public talk: Intelligent Design necessarily implicates talk about religion and talk about science. If this is true, then it should be difficult to construct an account of Intelligent Design (e.g. a newspaper article) that does not also discuss both religion topics and science topics. So, when an article in mass media is about Intelligent Design, it will also be about other topics that are identifiable as religion topics or science topics.

In what follows I expose the topic structure of religion and science debates in order to evaluate claims about these debates in terms of topic relationships. I provide maps of debates that indicate both the relative prominence of topics in each debate, and the relations between topics in each debate. I indicate the prominence of a topic using type size. The larger the font, the more likely the topic is to occur in debate. I indicate the relations between topics using the same spatial logic I just described. The farther away any topic is from another topic, the less likely those two topics are to occur together in any given document.

I note that there is an important interpretive step involved in assigning topic names to make the maps readable. While the topic discovery software groups together words into topics (see Methodological Appendix for details), it assigns only a minimal descriptor to each topic (e.g. TOPIC_37). For each topic map, I have interpreted each topic and given each topic what I judge to be an accurate topic name that describes its contents (e.g. "Left Behind Series" or "Human Genetic Evolution" in Figure 2.2). While I have made every effort to select appropriate topic names, it is possible that another person might come up

with different names for these topics. Raw data are available upon request.

Interpreting Topic Maps

How do we interpret a topic map? The use of size to indicate topic prominence is visually intuitive. A topic name shown in bigger font means more talk about that topic in the sample. But the interpretation of spatial information is less obvious. Before proceeding, it is worth walking through a simplified example. Figure 2.1 presents four variations on a hypothetical debate that contains only three topics.

The first step in interpreting topic maps is to look for topics that are obviously about religion and obviously about science. Given the search criteria used to retrieve the debates in this study (see Methodological Appendix), such topics are guaranteed to exist. So, in the examples in Figure 2.1, "Human Genetics Research" is a topic containing talk about scientific research into human genetics. I would interpret this as primarily a scientific topic, since it is about scientific claims. "Is America Christian?" is a topic containing talk about whether America is generally a Christian country. I would interpret this as primarily a religious topic, since it is about religious claims. "Evolution in Schools" is a topic containing talk about whether evolution should be taught in schools. This is not obviously either a scientific or religious topic.

The second step is to look for the spatial distribution of the religion topics and science topics in the debate. Consider Figure 2.1. In Example 2 and Example 3, the religion topic (Is America Christian?) and the science topic (Human Genetics Research) are very close together. In plain language, this means that when articles are about the religion topic, they are also likely to be about the science topic. Setting aside the third topic for the moment (see below), I would interpret this as an engaged debate between religion and science. In contrast, in Examples 1 and 4, the religion topic and the science topic are as far apart as is possible on the map. In plain language, this means that when articles talk

Human Genetics
Is America Research
Christian?

Evolution in
Schools

Example 1: Separate Topics, Unlikely to Be Any Debate (Null Finding)

Human Genetics Is America Research Christian?^{Evolution} in Schools

Example 2: Debate Between Religion and Science Over Evolution in Schools

Human Genetics Research Is America Christian? Evolution in

Example 3: Religion and Science Debate, Not Involving Discussion of Evolution

Schools

Human Genetics Research Is America Christian? Evolution in Schools

Example 4: Religious Debate Over Evolution in Schools, Not Involving Science

Figure 2.1: Interpreting Topic Distribution

about the religion topic, they are unlikely to talk about the science topic (and vice versa). I would interpret this as disconnected talk about unrelated topics, not as an encounter between religion and science.

The third step is to look for the spatial distribution of topics that are not obviously religion topics or science topics. The important question here is whether such topics are part of religion and science debate or not. In the examples in Figure 2.1, the topic "Evolution in Schools" is not obviously a religion or science topic. In Example 1 and Example 3, the evolution topic is not part of science and religion debate. In Example 3, the evolution topic is as far away from the religion and science topic as possible on the map. When articles are about evolution in schools, they are unlikely to be about the religion topic or the science topic. I interpret this to mean that it is simply disconnected. Similarly, in Example 1, the evolution topic is far away from the religion and science topic. The difference is that the religion topic and the science topic are themselves unlikely to occur together. But, just as with Example 3, I would interpret this to mean that the evolution topic is simply disconnected.

Where interpretation becomes more complicated, even in a simplified debate, is when there is some relationship between the topics that are not obviously religion or science topics and topics that are obviously religion or science topics. In these cases, the topic maps helps show whether such topics implicate religion and science or not. In Example 2, the small distances between all topics means that when an article includes talk about evolution in schools, it also includes talk about the religion topic and the science topic. In everyday language, I would say that since it is unusual to talk about one without talking about the others, then there is debate between religion and science over evolution in schools. In Example 4, there is a short distance between "Is American Christian?" and "Evolution in Schools." This indicates that when an article includes talk about evolution in schools, it also includes talk about whether American is generally a Christian country.

However, "Human Genetics Research" is relatively much farther away from both topics on the map. In this example, I would say that debate between religion and science over evolution in schools is not happening, since the science topic does not arise when articles contain talk about the other two topics.

Of course, there are far more than three topics in any full debate. But the same guidelines for interpretation scale up to as many topics as needed. So, to anticipate the first debate, look at Figure 2.2. This is a topic map for debate over human origins. The topic "Left Behind Series" is very far away from "Human Genetic Evolution." "Human Genetic Evolution" is also in a larger type size. We can say, then, that "Human Genetic Evolution" is more likely to show up in any given article than "Left Behind Series." We can also say that if you find an article about "Left Behind Series," it is highly unlikely that it will also be about "Human Genetic Evolution." I use this data to make claims about what kinds of encounters and engagements are actually occurring in public debate. To the extent that topics are distinct from one another in the distribution of debate topics, there is less deliberation. In unnuanced terms, if religion topics are distant from science topics, then deliberation between religion and science is not happening.

Why Two Methods?

The two methods answer two slightly different questions about public debate. Both of these questions are important. First, topic discovery answers the question, "is debate as a whole deliberative?" Topic discovery shows all talk in a debate. If articles about religion topics are usually also about science topics, then I say that deliberation is occurring between religion and science. Talking about religion implicates talking about science. This would show on a topic map as religious topics and science topics located more closely together than other topics. If articles about religion topics are not also about

science topics, then I say that deliberation is not occurring between religion and science. Religion talk is separate from science talk. No encounter, no deliberation.

Second, NER answers the question "are prominent representatives deliberating?" Representatives are the persons who should be deliberating in public life. Obviously the most important question here is whether representatives are recognizable as "religion" or "science" in affiliation or identification. A scientist would clearly be a science representative. A religious leader would be a religion representative. If the most prominent religion and science representatives are encountering and engaging each other (rather than, say, politicians), then I say that deliberation is occurring. If they are not (e.g. scientists are only talking to other scientists or religious leaders are only talking to other religious leaders), then deliberation is not occurring between religion and science.

Topic discovery is necessary for seeing deliberation as a product of talk, not just persons. If a thousand different conversations are happening with a thousand different people, topic discovery will see the pattern of talk just as clearly as if it were two people having one conversation. NER is necessary because it shows patterns among the people who ought to be deliberating. Focusing on the most prominent representatives is a useful indicator of what might be happening throughout debate, especially given the knowledge that representatives shape debate.

Both are necessary because the distribution of talk is not necessarily dependent on the distribution of representatives. If a debate is deliberative in topic terms but not in representative terms, for example, it means that the most prominent representatives are actually less relevant to debate than less prominent representatives (or, deliberation is happening widely across representatives). If a debate is deliberative (or not) in both terms, then the findings of each method can be usefully linked to explain the success or failure of deliberation in a given debate.

In what follows I use both methods together to draw conclusions about public de-

bate. The analysis and the explanations that I offer draw on both kinds of findings. By doing so, I avoid some of the potential pitfalls of declaring one operational version of "deliberative" as the only way to go. It turns out that, in all cases, both methods align in their findings about the level of deliberation in public debate.

A Final Caution

These methods measure what actually happens in public life as it occurs in mass media. Topic discovery measures the distribution of all public talk in the sample. NER measures the distribution of representatives who do the talking in the sample.

These methods do not measure how people read, process, and understand public talk. This is an understudied problem in social science generally. For example, there are many studies of how stories and messages are "framed" in mass media to generate particular patterns of public opinion (e.g. Gamson and Modigliani 1989), but few studies of how individual media consumers process and respond to such frames (Borah 2011, but see Lecheler and De Vries 2011).

Why might this be a problem for analyzing claims about "good debate" in the public sphere? Imagine a person who, in the morning, reads an article about stem cell research lab results in the *New York Times* and, in the evening, watches a segment on *The 700 Club* where a conservative Protestant equates stem cell research to abortion. No analysis of actual public talk would find that this is a debate in the sense of encounter or engagement, as neither piece of public talk takes account of the other. However, since both potentially involve "stem cell research," it is theoretically possible that the person consuming these media items might, in their heads, construct a debate between a lab scientist and a conservative Protestant commentator. That is, there might be a deliberative religion and science debate in someone's head, even though it does not show up in an analysis of actual public talk.

I cannot say definitively that this does not happen. However, I judge the odds of a single ordinary person encountering sequential articles (or television segments, or something similar) in this manner to be very small. I base this judgment on the actual frequency and occurrence of articles in the mass media outlets in this study. Consider that a regular reader of a newspaper would need a heroic memory and motivated interest to associate loosely-related articles or stories, which typically occur weeks and months apart, into a coherent debate inside their heads. Even on those occasions when there is a significant event stimulating newspaper coverage (e.g. the *Kitzmiller* case), such coverage is usually wide (across several newspapers) rather than deep (within the same newspaper).

To be clear, I think that how people evaluate what happens in the public sphere is one of the most important open empirical questions in social science. In later chapters, I address this question through interview methods that are more appropriate to the task. But I note here that these computational linguistics techniques do not access that information. The questions I address here are about the distribution and quality of public talk as it actually occurs in mass media. But, given how that talk occurs, I do not expect that readers will independently construct debates in their heads based on separate encounters with individual newspaper articles. The correct way to assess broad claims about deliberative debate in the public sphere is to analyze the actually occurring talk in the public sphere for its deliberative qualities.

2.4 Human Origins: A Limited Encounter

I begin with debate over human origins, a debate that is often cited as the paradigmatic conflict of religion and science. I retrieved 3,241 relevant articles for a period from 1997-2007 from Lexis-Nexis US Major Papers (see Methodological Appendix for

more detail). Relative to other debates in this study, this debate is significantly larger than the origins of sexuality debate, larger than the stem cell research debate (largely due to stem cell research being a more recent phenomenon), but smaller than debates over the environment. In practical terms, this debate is significant in terms of its prominence in general audience mass media.

I describe this debate as a limited encounter between religion and science. Articles that are about religion are mostly not also about science, and vice versa. However, on the topic of specific truth claims about human origins, there is some limited encounter between religion and science. And while it may seem surprising, discussion of Intelligent Design in the classroom usually involves political and legal discussion, but not discussion of religion topics or science topics. Discussion of "evolution" in these topics is not the same as discussion of "evolution" in science topics.

Representatives in the debate are often dead. Many prominent representatives in debate are historical figures who are invoked by other representatives for their own purposes. Those who are active in public debate generally advocate their own position, but do not engage other active representatives. To the extent that there is engagement, it is mostly engagement with the historical record in service of abstract "metadebate" about religion and science. Despite the limited encounter over biblical creationism, good debate over human origins is not happening now.

Mapping Debate by Topic

Figure 2.2 shows the topic map for debate about human origins. To reduce visual clutter, I show the most prominent of the topics rather than every topic (see Methodological Appendix for raw topic visualization). The most prominent topics in this debate are indicated by larger type size. The largest two topics by far are "Scientific Perspectives

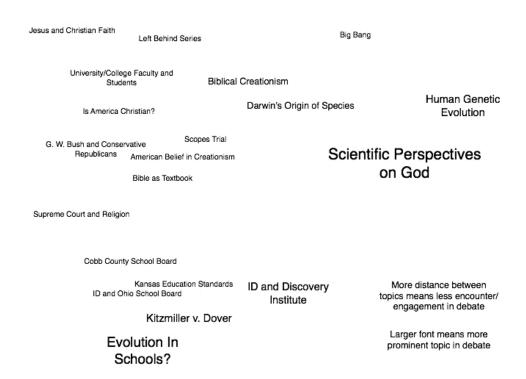


Figure 2.2: Topic Map, Human Origins Debate

on God" and "Evolution in Schools?" The next most prominent topics are "Kitzmiller v. Dover," "ID and Discovery Institute," and "Human Genetic Evolution." After that are the less prominent topics "Biblical Creationism" and "Darwin's Origin of Species." The rest of the topics are lower prominence topics that show up less frequently. Note that some of the most prominent topics (by far) are highly unlikely to occur together in public debate.

If human origins debate is really an encounter between religion and science in public life, what we would expect to see in Figure 2.2 is a tight grouping of topics located close to each other. It would look like Example 2 in Figure 2.1, except with many more topics crowded together in a small area of the map. Ideally religion topics and science topics would be close together, while topics that were not clearly one or the other would still be likely to occur with both religion and science topics. For example, if Intelligent Design is really a key site where religion and science encounter each other in public debate (see Forrest and Gross 2004 for an example of this claim), what we should see is a topic like "Intelligent Design" that is close to religion topics and close to science topics on the map. Note that this would be true regardless of whether the encounter is conflictual or convivial. Any encounter would show up as proximity between science and religion topics. Of course, in such a large debate, there are likely to be some topics that are simply unrelated. But if human origins debate is primarily an encounter between religion and science, most of the topics on the map should be fairly tightly distributed with religion and science topics.

But as Figure 2.2 actually shows, human origins debate as it occurs in mass media newspaper articles is actually nothing like this ideal encounter. On the left (especially upper left) of the topic map are several topics that are about issues internal to, or characteristic of, religion. Some are obvious. "Jesus and Christian Faith" is self-explanatory. "Left Behind Series" refers to evangelical Christian novels about the End Times as prophesied

in the Christian Testament's Book of Revelation. These religion topics tend to involve one another in public debate. A document about the topic "Is America Christian?" is likely to also be about "American Belief in Creationism" or "G. W. Bush and Conservative Republicans." It is unlikely to also be about "Human Genetic Evolution." For the most part, discussion of one religion topic is more likely to involve discussion of a related religion topic, rather than engaging with science or other topics. The exception, which I discuss below, is discussion of "Biblical Creationism," which is likely also to involve "Darwin's Origin of Species."

On the right side of the figure are several topics that are obviously science topics. Three of these are about human evolution, the "big bang" theory of the universe, and scientific perspectives on God. These three topics are closest to the topic "Darwin's Origin of Species," but they are farthest away from topics about religion, education, and church (see upper left of Figure 2.2). Discussion of evolutionary theory as it relates to other scientific issues is largely self-contained. To the extent that God or religion figures in this discussion, it is about what scientists think about God and religion, rather than engagement with religion topics *per se*. Discussion about "Human Genetic Evolution," while relatively prominent overall, is much more likely to occur with discussion about what scientists think about God and religion than it is to occur with discussion about teaching evolution in schools. While science figures in the debate, it is largely confined to discussions of related scientific issues, or about scientists themselves, rather than engaging with other topics.

At the center bottom of Figure 2.2 are topics about the teaching of evolution and Intelligent Design in public schools.⁸ This part of the map includes the most prominent topic in the entire debate, "Evolution in Schools?" Note that most of the topics are about

⁸Intelligent Design proponents claim that evolution is "just a theory" and that alternative theories should be taught in public schools as a matter of fairness and justice. Their efforts are largely centered on educational institutions such as school boards and curriculum committees (see Binder 2007).

specific instances (e.g. court cases such as *Kitzmiller v. Dover*) where Intelligent Design proponents have attempted to introduce their own materials into local school science curricula. Although several of these topics contain references to evolution or science, they are distinct from scientific discussion of these issues. That is, discussion about teaching of evolution in schools is separate from scientific discussions about human origins (and related scientific issues). Articles about any of these specific topics are likely to involve discussion of related legal topics but, as the distance indicates, they are not likely to involve discussion of the science topics as visualized to the right of the figure. This, too, is a self-contained discussion.

Some additional explanation is in order. There are actually (at least) two prominent, but separate, discussions about "evolution" happening in debate over human origins. One topic is about evolution as one possible subject to be taught in schools. The other topic is about evolution as a scientific theory of human origins that relates primarily to other scientific theories (e.g. about the Big Bang). I call these "evolution as explanation" and "evolution as pedagogy." In one topic, the content of "evolution" is explanatory. For example, what are the physical processes that produce speciation? In the other topic, the content of "evolution" is pedagogical. For example, should we teach evolution alongside some other version of human origins in school?

Given that both are about "evolution," how can we say that these are different topics? Topic discovery disentangles polysemy in the use of any given term. Polysemy is the idea that a word or phrase has multiple possible meanings. The meaning in one context may be different in another context. Topic discovery figured out that different topics about "evolution" are not really talking about the same thing. "Evolution as explanation" is debated along with other scientific issues, while "evolution as pedagogy" is debated along with other possibilities for curricular inclusion in public schools. One meaning (and therefore one topic) is not really implicated in the other meaning (or the other topic).

So despite the similarity of words, these topics are distinct and disconnected in public talk.

A Limited Encounter

So, do religion and science actually encounter one another in debate over human origins? Yes, but only between two narrowly scoped topics in a much larger debate. Figure 2.2 shows what I consider a limited encounter between religion and science. Articles about "Biblical Creationism" are most likely to also be about "Darwin's Origin of Species" than to be about any other topic. Since I would judge Biblical Creationism to be primarily a religious topic, and Darwin's Origin of Species to be primarily a science topic, the fact that they tend to occur together in articles implies some level of debate between religion and science. These topics are noteworthy because they are about specific truth claims (though not exclusively, see Evans and Evans 2010). "Biblical Creationism" is about the claim that the Creation account found in the book of Genesis in the Hebrew Bible is a true account of human origins. "Darwin's Origin of Species" is about the claim that the account of evolutionary descent found in Darwin's *The Origin of Species* is a true account of human origins. Unlike some of the other topics that are superficially similar but actually distinguished by polysemic sorting (e.g. the two meanings of "evolution"), these two topics are actually substantially related. Because both religion and science have claims that are substantially about the same thing, the two topics show up as closely related in Figure 2.2.

But this is the only encounter between religion and science in debate over human origins. Aside from this limited encounter over the truth of two competing claims, the three topic areas tend to be self-contained discussions. Science topics tend to involve other science topics. Religion topics tend to involve other discussion of religion. And discussion of what to teach in schools is unlikely to involve discussion of religion or

science topics. Even though discussion about teaching evolution in schools and discussion about scientific perspectives on God and religion feature prominently in the debate about human origins, they tend to feature separately, and rarely mix in actual debate.

This finding may be unexpected. Many scholars who use a conflict or complementarity model point to Intelligent Design, for example, as in important site of conflict between religion and science. They also point to scientific perspectives about God and religion as an important site of conflict between religion and science (Ecklund, Park, and Sorrell 2011). Topic discovery shows that this is not actually the case. Intelligent Design and scientific perspectives on God are prominent topics in public debate. But they are not part of a religion and science conflict. To have conflict, you must first have contact. Talk is happening, but not good debate.

Mapping Debate by Representative

Why do people see debate over human origins as a conflict between religion and science? Why is Intelligent Design, for example, seen as a site of conflict, even though topic discovery shows that it is not even a site of contact? The short answer is that prominent representatives in public debate link their claims and talk to historical narratives of conflict. In debate over human origins, representatives create the appearance of conflict by connecting their specific concerns to a broader conflict narrative that serves their own (distinct) purposes.

To show how this occurs, I turn to the data on representatives from NER analysis. Running NER against the human origins corpus yielded 20,307 entities that fit the criteria for person (e.g. "Jerry Falwell" or "Samantha Smoot") or organization (e.g. "Focus on the Family" or "United Church of Christ"). Table 2.1 reports the 10 most visible persons in this debate, as ordered by article mentions. Each increment of 1 means that another

article has mentioned the person by name. Multiple mentions within an article do not increment the count. Therefore the maximum possible number of article mentions is equal to the total number of articles.

Darwin's Debate

Table 2.1: Top 10 Most Visible Persons, Human Origins Debate

Person	Mentions (<i>n</i> =3241)
Charles Darwin	≥ 500
George W. Bush	≥ 450
John E. Jones III	≥ 190
John Scopes	≥ 175
Michael Behe	126
Eugenie Scott	122
Stephen Jay Gould	110
William Jennings Bryan	100
Galileo Galilei	97
Clarence Darrow	92

The most striking feature of this top 10 list is that more than half of the most prominent representatives in current public debate are dead – in most cases, long dead. Charles Darwin, the naturalist whose books *The Origin of Species* and *The Descent of Man* laid the foundation for an evolutionary theory of human origins and of all biological development, clearly dominates. John Scopes, William Jennings Bryan, and Clarence Darrow, all key figures in the famous 1925 Scopes Monkey trial, figure prominently in the debate. So too does Stephen Jay Gould, science popularizer and highly-cited evolutionary biologist who came up with the theory of "punctuated equilibrium" to describe long periods of apparent evolutionary stasis. Also prominent is Galileo Galilei, the late 16th/early 17th

⁹Gould died in 2002. As with the death of Jerry Falwell, this is a case where a prominent figure died during the time period covered by the newspaper sample. This brings up the possibility that the person figures prominently because of attention paid to them on the occasion of their death, in terms of obituary essays, feature articles, and so forth. While I do not make specific claims about Gould's prominence in public (limiting my claims to his relationship to Darwin in public debate), I think it is difficult to argue

century astronomer and physicist whose support for Copernicanism drew the attention of the Catholic Church.

The living representatives are also a diverse bunch. George W. Bush, a recent U.S. president, is only somewhat less prominent than Charles Darwin in this debate. The remaining representatives in the top 10 are participants in the controversy over teaching Intelligent Design in schools. John E. Jones III, a U.S. District Judge, presided over the *Kitzmiller* case that ruled against the introduction of Intelligent Design materials in Dover, Pennsylvania science classes. Michael Behe, a biochemist and senior fellow at the Discovery Institute, advocates Intelligent Design. Eugenie Scott, a physical anthropologist and executive director of the National Center for Science Education, has consistently fought against the introduction of creationist or ID materials into science classrooms.

Table 2.1 might look like evidence for good debate about religion and science. One objection is that no obvious representatives of religion crack the top 10. Perhaps George W. Bush might be considered a representative of religion. Looking at specific mentions in articles, it is clear that some mentions are simply due to him being a reference point for government and law-making. But many, and perhaps most, of the mentions concern comments he has made about creationism. For example, when asked directly whether he believed that the bible is literally true and a guide to science, Bush replied "I think that for example on the issue of evolution, the verdict is still out on how God created the earth... I don't use the Bible as necessarily a way to predict the findings of science." But a better

that Gould, as the most cited paleontologist in history after Darwin and G. G. Simpson, is only on the list because of media coverage spikes following his death. To give two specific examples from among the multiple reasons he shows up, he served as an expert witness in the *McLean v. Arkansas* case, and he wrote popular science books putting forth the idea that religion and science were "non-overlapping magisteria" (NOMA).

¹⁰At the time of data collection Bush was the sitting president.

¹¹See "Conservative Church Leaders Find a Pillar in Bush," by Laurie Goodstein, NY Times, January 23, 2000, Section 1, Page 16.

response is to note that if the top 10 list were extended to the top 20 representatives, 700 Club televangelist Pat Robertson would show up (around 80 article mentions). Most of these mentions are, of course, references to his memorable comments about God's judgment on the people of Dover, Pennsylvania.

Table 2.2: Top Interlocutors for Most Visible Persons, Human Origins Debate

Person	Most Common Person	Most Common Org
Charles Darwin	John Scopes	Discovery Institute
George W. Bush	Charles Darwin	Discovery Institute
John E. Jones III	Charles Darwin	Dover Area School District
John Scopes	Charles Darwin	US Supreme Court
Michael Behe	Charles Darwin	Lehigh University
Eugenie Scott	Charles Darwin	NCSE
Stephen Jay Gould	Charles Darwin	Harvard University
William Jennings Bryan	Clarence Darrow	ACLU
Galileo Galilei	Charles Darwin	Catholic Church
Clarence Darrow	William Jennings Bryan	US Supreme Court

So there are a range of representatives participating in debate. This looks good. Even though some of the representatives are dead, we can come up with a way to link representatives with the topic map in the previous section. Charles Darwin and Stephen Jay Gould, for example, both publicly expressed views about the place of religion in the world and the relation of religion to science. Based on my interpretation of topic content, such discussion maps approximately onto the prominent topic "Scientific Perspectives on God." Likewise, the several representatives in the controversy over ID in the classroom map onto the prominent topics "*Kitzmiller v. Dover*," "ID and Discovery Institute," and "Evolution in Schools?"

But what of Galileo? Galileo predates Darwin, so he obviously has not taken sides when it comes to Darwinian evolution and biblical creationism. Neither does he have much to say about what to teach in American public schools. How do we classify someone like Galileo? And what is Galileo doing in debates over human origins? The answer

to these questions helps reveal why what looks like good debate from one perspective is not good debate from another.

Table 2.2 provides important clues in the form of interlocution data for the top 10 most visible persons. "Interlocution" is when named entities, such as persons or organizations, are mentioned together in articles. Table 2.2 shows, for example, that in articles where Galileo Galilei is mentioned, the most common person mentioned along with Galileo is Charles Darwin. Likewise, in articles where Galileo is mentioned, the most common organization mentioned along with Galileo is the Catholic Church.

Actually the most common person occurring with almost every top representative is Charles Darwin. The main exception is Darwin himself, who occurs primarily along-side John Scopes (the Monkey Trial defendant). Note also that Darwin's most commonly co-occurring organization is the Discovery Institute, which is the most identifiable institutional base for the promotion of Intelligent Design. The only other exception to the Darwin rule of interlocution is Clarence Darrow, the defense counsel in the Scopes trial, who occurs primarily with William Jennings Bryan, that trial's prosecutor.

In fact, if you only looked at Table 2.2, you might say that there is one giant discussion about Charles Darwin. The interlocution findings seem to have very little correlation to the division of debate seen through topic discovery. Looking at representatives in the debate, it appears that Charles Darwin is a sort of central core of debate to which many different interlocutors, arguments, and even substantive topics (in terms of very different concerns that diverse representatives bring) are attached. Whatever current controversy or discussion is being reported in general audience mass media, Charles Darwin is invoked.

Enrollment and Metadebate

Explaining this strange pattern requires a concept from science and technology studies called "enrollment" (Callon 1986). Enrollment happens when a person who is trying to gain power successfully draws on the credibility or political power of another entity to strengthen their position. The simple example is persuasion: I want to change a policy, and I persuade you to sign my petition. The petition is now more convincing to a policy-maker because it has wider support.

For a slightly more complicated example, imagine a family where the rich parent dies without leaving a will. The surviving offspring each claim the country home. One sister simply asserts that she really wants the house. The other sister produces letters from the deceased parent expressing that the parent wanted her to stay in the country home and pursue her dream of becoming a novelist. Legal issues aside, the second claim is more likely to be seen as credible. Why? Because, even though the parent has died, the second sister has successfully "enrolled" the deceased parent in her bid to gain the country home. Her claim is not based (only) on greed; it is (also) "what the parent would have wanted."

In debate over human origins, living representatives enroll dead representatives in an effort to bolster their credibility and gain power. Despite the wide range of substantive topics, Darwin, Galileo, John Scopes, Stephen Jay Gould, and other deceased representatives show up as living representatives enroll them. They are credibility resources. Attaching them to your claim makes your claim more credible.

Table 2.2 shows that everyone is trying to enroll Charles Darwin. As the scientist credited with discovering species evolution, Darwin has almost unparalleled credibility

¹²The actor-network model underlying this concept is much richer and theoretically developed than I acknowledge in this limited use of "enrollment." See Callon (1986) for a fuller description of the processes involved. Note that in the actor-network model, enrollment describes the (successful) outcome, not the process. Note also that, similar to the enrollment of deceased persons that I describe here, non-human (or non-living) actors are fully capable of being enrolled.

in public life. Darwin is one of the most powerful allies you could have. Darwin is also dead, which means that he cannot say that he is not your friend. It is at least possible for anyone to attempt to enroll Darwin in their network of support. The result, as Loewenberg (1941:363) once wrote, is that Darwin becomes "all things to all men." So it does not matter whether you are making specific claims about biblical creationism and *The Origin of Species*, or you are making an argument about teaching ID in public schools. Either way, you call on Darwin for help.¹³

But what are these dead representatives being enrolled to do? Obviously Darwin, for example, is being enrolled for purposes beyond the specific claims of *The Origin of Species*. It turns out that the answer to this question is also the answer to the question that opened this section: Why do people see debate over human origins as a conflict between religion and science? The answer is that Darwin, Galileo, Scopes, and even George W. Bush are being enrolled as credible representatives in a "metadebate" about religion and science. The metadebate is then taken to be an accurate description of the debate about human origins.

"Metadebate" is an unavoidably awkward term. It means "the debate about the debate." Metadebate is the contest to define the framework through which participants and observers will understand debate. Representatives participate both in debate and in metadebate over human origins. At the same time that they make specific claims about, for example, biblical creationism, what to teach in public schools, and scientific perspectives on God, they also make more abstract claims about what the debate is about. For example, they make the more abstract claim that debate about human origins is really about "religion vs. science" or really about "censorship vs. freedom."

Representatives link debate to metadebate in order to bolster abstract claims in meta-

¹³This is a more theoretically-driven variant of the argument in Evans and Evans (2010) about Darwinism as a moral project.

¹⁴This is a debate-specific application of Bourdieu's (1991) argument in *Language and Symbolic Power*.

debate with empirical evidence from debate. This is not obvious solely from NER or topic discovery. Substantively, arguments about "Evolution in Schools?" are about what should be taught in schools. But drilling down to the individual news articles that make up the data set, it is obvious that representatives are actually linking debate to metadebate. Opponents of Intelligent Design gain advantage by linking ID efforts to failed past efforts to change science curricula in schools, such as "creation science." Enrolling Galileo, for example, transforms a local school board dispute debate over evolution in the classroom into the latest instance of how religion tries to leverage power to stop science, *just like the Catholic Church did to Galileo*. Eugenie Scott, for example, portrays ID efforts as the latest episode in a continuing series of efforts to defeat science, no different than "creation science" or similarly religious efforts (Scott 1997). This is metadebate. To the extent that Scott is successful in metadebate, debate about human origins shifts from being seen as specific disconnected instances of somewhat related topics (as topic discovery finds, and as complexity advocates claim), to being seen as "religion vs. science" (as the conflict narrative suggests).

Living representatives enroll dead representatives not only to support their own position in debate, but also to support their position in metadebate. This helps explain the frequent invocation of George W. Bush in debate, even though many representatives disagree with his statement about evolution. Bush is invoked by supporters as representative of their own position, and by opponents as the representative of their (perhaps idealized) opposition. In this sense Bush is like Darwin or Galileo or Scopes. Whether or not they have a position on a particular topic being discussed, they are all also resources enrolled by others in metadebate.

Note, however, that enrollment is contested, and representatives are not always predictably aligned with one side or another, or even with science or religion in particular. For example, most of the time Galileo and Scopes are enrolled as examples of how religious opponents cannot handle scientific truth, that is, to bolster a "religion vs. science" claim in metadebate. Yet they can also support a "censorship vs. freedom" claim in metadebate. Discovery Institute fellow and ID proponent John West attempts this exact enrollment:

The effort to try to suppress ideas that you dislike, to use the government to suppress ideas you dislike, has a failed history... Do they really want to be on the side of the people who didn't want to let John Scopes talk or who tried to censor Galileo?¹⁵

Bait and Switch

Now we can say why people see debate over human origins as a conflict between religion and science. Abstract metadebate is taken to be the actual debate about human origins. The gap between between what people are actually substantively discussing in public debate (topics) and what representatives are doing when they argue in public debate permits this confusion. Empirically there is little substantive encounter between religion and science. Drilling down to individual news articles reveals that representatives are not generally engaging other representatives in substantive debate. Instead, representatives speak out on particular topics in attempts to shift metadebate in their favor.

Let's return to the now-familiar examples of Pat Robertson and Richard Dawkins. Both of these representatives show up prominently in public debate over human origins (Robertson more than Dawkins, but both are in the top 30 by article mentions). When Pat Robertson makes his statement about God's judgment on the citizens of Dover, Pennsylvania, he is making reference to the Intelligent Design decision. However, he is not debating Intelligent Design. Instead, he is staking out a position in metadebate: debate

¹⁵"Ohio Board Undoes Stand on Evolution," by Jodi Rudoren, NY Times, February 15, 2006, Section A, Column 6.

should really be about God wants people to do. Likewise, when Richard Dawkins makes his statement about people who do not believe in evolution, he is not actually debating evolution. Instead, he is staking out a position in metadebate: evolution is beyond question, so we should be debating what to do about religious resistance.

To say that religion and science are in conflict in this debate is to mistake abstract metadebate for substantive debate about human origins. The problem with "religion vs. science" is not simply that it is wrong. It is a position in metadebate, and it is currently a dominant position. It could be otherwise, and may be otherwise at some point. The problem with "religion vs. science" is that the "religion vs. science" narrative in metadebate, bolstered by historical references to Darwin and Galileo, masks the disconnection of religion and science topics in public debate over human origins. What might appear to be substantive engagement by representatives is little more than jostling for position in an abstract metadebate that is disconnected from substantive topics.

Whatever we might argue in abstract metadebate, empirical evidence shows that religion and science have only a limited encounter in debate over human origins. The limited encounter of biblical creationism and Darwin's *Origin of Species* offers little opportunity for engagement and deliberation. Even worse, representatives prioritize participation in abstract metadebate over substantive debate. As it is happening now, debate over human origins is not good debate.

2.5 Origins of Homosexuality: Science and Everything Else

The second debate is debate over the origins of homosexuality. Basically the question is, what makes a person gay or straight? In theory this question should be about the

origins of sexuality. In practice, it is about the origins of homosexuality. Few bother to ask what makes a person heterosexual.

Debate over the origins of homosexuality might seem at first to be an unlikely place to look for public debate about religion and science. Yet the issue of sexuality has long been an issue where public figures have made claims from religious and scientific authority alike. For example, as Jordan (1997) points out, Christianity in particular has long wrestled with the question of homosexual orientation and behavior (which are often distinct in religious discourse). Since medieval times, prominent religious representatives have made public claims intended to keep scientific and medical information out of the process of determining whether homosexual orientation and behavior are sinful (Jordan 1997). By the same token, natural philosophers and, later, scientists, have consistently attempted to draw on scientific evidence to determine what makes someone gay or straight. For example, some scientists have claimed that there is a "gay gene" that determines the direction of human sexual attraction (Hamer et al. 1993). Such a finding would potentially settle key religious questions about whether homosexuality is a sinful choice or a natural aspect of God's creation. Moreover, in terms of public policy, there is arguably more at stake in the issue of sexuality than there is for issues such as human origins, as questions around the malleability of sexuality implicate questions of justice with regard to legal rights to marriage, adoption, immigration, inheritance, healthcare, and employment.

Yet the first thing that you notice when you look at public debate about the origins of homosexuality is that there is not much of it. Using the methodology outlined in the Methodological Appendix, I retrieved only 362 articles for the period from 1997 to 2007, despite multiple inclusive search criteria. By way of illustrative contrast, I retrieved 3,241 articles about human origins from the same period. While this is a debate with wide-ranging stakes, and it is of great concern to religious organizations, gay ad-

vocacy organizations, activists, politicians and many ordinary people with wide-ranging experiences of sexuality, this does not translate into anything like significant coverage in general audience mass media.

I describe this debate as "science and everything else." In terms of topic distribution, there are a few science topics that are primarily internal discussion among scientists about specific genetics claims. However, these are disconnected from everything else. "Everything else" includes many varied topics, many of which are religion-related but many of which are not. While there are a variety of topics that are related to one another in public talk, articles that are about these other topics are disconnected from science topics.

Representatives in this debate are prominent because of a few public controversies. But scientists are prominent because of arguments with other scientists. The remaining public controversies involve a variety of religious and political actors, but do not involve argument with scientists. Some representatives are prominent because they are enrolled to reinforce moral or religious positions in debate. There is substantial encounter between various religious and moral topics and representatives. But there is no substantial encounter between religion and science in either sense. Good debate is not happening now.

Mapping Debate Through Topics

Given the historical and political dimensions of this debate, we would probably expect to see that religion topics and science topics occur together on a topic map. Given the wide variety of political implications in this debate, we might also expect to see various political or legal topics on the map. And to the extent that this debate is primarily an encounter between religion and science over the origins (and implications) of sexual-

ity, we would expect to see that other topics equally implicate both science and religion topics.

However, as Figure 2.3 shows, what we actually see is a debate where religion topics and science topics are prominent, but entirely disengaged. Moreover, while topics around legal and political issues show up, it is only religion topics that are engaged with these other topics. Science topics do not encounter other topics, whether religion-related or not, in this debate.

The most prominent topic by far is "Christian Homosexual Change Groups," which is clearly a religion topic. Two of the other four most probable topics are clearly science topics. One is about "Genes and Sexual Orientation" and the other is "Genes and Human Behavior." The remaining two most prominent topics do not explicitly indicate religion or science content. "Talking to Parents" and "Homosexuality in Montgomery County School Curriculum" are prominent and implicate a wide range of other topics, but are not specifically religion or science topics.

Unlike the previous debate, however, religion topics and science topics, while separate, are not entirely self-contained discussions. More precisely, as Figure 2.3 illustrates, religion topics are mixed in with a variety of topics that are not obviously about religion or science. So, while "Christian Homosexual Change Groups" and "Talking to Parents" may be the most probable topics, they tend to share space with many other topics in these newspaper articles. For example, some of the stories about the Montgomery County sexed curriculum often also discuss the Christian viewpoint on whether homosexuality can be changed. ¹⁶

Note, however, the obvious separation of the science topics "Genes and Sexual Orientation" and "Genes and Human Behavior." This is a striking finding. Discussion of

¹⁶See, for example, "Weast Halts Launch Of Sex-Ed Program; Decision Comes After Setback in Court" by Lori Aratani, Washington Post, May 6, 2005.

Genes and Sexual Orientation

Genes and Human Behavior

Talking to Parents

Massachusetts Same-Sex Marriage Conversion Therapy

Christian Homosexual

Change Groups

Spitzer Study

Homosexuality in Montgomery County Curriculum

Dr. Laura TV Show

Pastoral Ministry

More distance between topics means less encounter/ engagement in debate

Larger font means more prominent topic in debate

Figure 2.3: Topic Map, Origins of Homosexuality Debate

genetic research tends to be self-contained, or related to discussion of similar research into DNA or neuroscience. As with the previous debate over human origins, some of the most prominent topics in debate over the origins of sexuality are simply disconnected. Discussion about science topics is far more likely to implicate other discussion about science topics than it is to implicate topics around religion, personal narratives, and so forth. Looking at specific articles, this distinction is clear. Articles about the possible discovery of a "gay gene," for example, tend to discuss competing scientific studies and treat the issue only as a debate internal to science.¹⁷

What Figure 2.3 shows is that there public talk about the origins of sexuality is basically split into two disconnected discussions. One is a rich discussion about homosexuality, change, morals, persons, religion, politics, and policy where each of these topics

¹⁷See, for example, "New research questions findings of 'gay gene' study" AP story carried by Atlanta Journal and Constitution, April 23, 1999, or "The fading 'gay gene" by Matthew Brelis, Boston Globe, February 7, 1999.

implicates several other topics. The other is a highly constrained discussion about scientific findings around genetics and behavior where articles rarely implicate topics beyond the internal scientific discussion. Of course, this is not to say that no article ever is about both (e.g.) "Conversion Therapy" and "Genes and Human Behavior." Topic discovery is probabilistic. If you look at every article, you will eventually run across a story about the "gay gene" that also mentions, for example, the Family Research Council, a conservative religious organization that grounds a critique of homosexuality in concerns over the traditional family.¹⁸

But the important point here is that there is no way to portray this as a debate between religion and science. This debate is better described as "science and everything else," where "everything else" contains more or less related topics ranging from political ("Massachusetts Same-Sex Marriage") and religious ("Pastoral Ministry") topics to more topics that are not explicitly religious or political ("Talking to Parents," "Conversion Therapy," "Reparative Therapy"). But this is not "science vs. everything else." In topic terms, the science topics are actually separate topics from everything else. They are not in opposition because they are not even in contact with other topics. As far as religion and science are concerned, deliberation cannot even begin.

Mapping Debate Through Representatives

How, then, do we make sense out of this debate? Representatives help substantially. Running NER yielded 3,813 entities that fit the criteria for person (e.g. "Richard Land" or "Tiger Woods") or organization (e.g. "Tulsa Community College" or "Pilgrim United Church of Christ"). Again by way of illustrative contrast, NER analysis of human origins debate yielded 20,307 persons and organizations. The universe of entities, while

¹⁸"What Makes People Gay?" by Neil Swidey, a 10,000 word feature in the Boston Globe Magazine section, August 14, 2005.

seemingly large in absolute terms, actually reflects the relatively small universe of public debate over the origins of homosexuality.

Table 2.3: Top 10 Most Visible Persons, Origins of Homosexuality Debate

Person	Mentions $(max[n]=362)$
Laura Schlessinger	34
John Paulk	30
George W. Bush	22
James Dobson	24
Jerry Falwell	21
Wayne Besen	20
Anne Paulk	20
Dean Hamer	20
Joseph Nicolosi	20
Matthew Shepard	19

The first thing to note about Table 2.3 is that even the most mentioned person across the debate only raises 34 article mentions. Keeping in mind that the maximum article mentions is the number of articles, in this case 362, this is hardly a dominant position in the debate. Based on visibility rankings, no one is especially central or dominant in public debate over the origins of homosexuality, at least in the sense of showing up more often than other representatives. In descriptive terms, the most visible persons in this debate are a radio talk show host (Schlessinger), a United States President (Bush), two Christian ex-gay activists (John and Anne Paulk), a gay activist (Besen), a conservative Christian political activist (Falwell), a conservative Christian moral activist (Dobson), a genetic scientist (Hamer), a proponent of "reparative therapy" (Nicolosi), and a victim of tragic anti-gay violence (Shepard). Most are people who have some sort of stake in this particular issue, but the stakes vary widely. Obviously, however, many are clearly associated with religion and at least one (Hamer) is associated with science.

¹⁹That being said, distribution of persons tends to follow a Zipf distribution (that is, a straight line on a log-log plot), so even being in the top 10 is a big deal as there is fairly steep dropoff after the top group of representatives.

If we only looked at this ranking, we might say that Laura Schlessinger, a radio talk show host, and John Paulk, a former leader of the Love Won Out conference and former chairman of Exodus International, are the most important representatives in the debate. However, ranking by visibility does not indicate the shape of debate, and in particular, the context in which these representatives gained visibility. To understand these patterns, we must also include information on interlocution, that is, with whom (person and/or organization) are these highly visible persons paired in public debate? This is, on one hand, an indicator of media framing, but it is also a useful measure to see whether the highly visible people are arguing only with one another, meaning that a small cluster of articles contains all of their activity, or whether they are arguing with people or organizations beyond the scope of this top 10 ranking.

Table 2.4 reports interlocution data for the top 10 most visible persons in this debate. The immediately obvious pattern is that much of the interlocution happens around the organizations Focus on the Family and Exodus International, and among John Paulk, Anne Paulk, James Dobson, Jerry Falwell, and Wayne Besen. Conversely, the remaining visible persons tend to be isolated with their own interlocutors.

Table 2.4: Top Interlocutors for Most Visible Persons, Origins of Homosexuality Debate

Person	Most Common Person	Most Common Org
Laura Schlessinger	Joan Garry	Paramount
John Paulk	James Dobson	Focus on the Family
George W. Bush	John Kerry	APA
James Dobson	John Paulk	Focus on the Family
Jerry Falwell	Pat Robertson	Exodus International
Wayne Besen	Gary Cooper/Michael Bussee	Exodus International
Anne Paulk	John Paulk	Exodus International
Dean Hamer	George Rice	National Cancer Institute
Joseph Nicolosi	Clinton Anderson	APA
Matthew Shepard	Trent Lott	Family Research Council

What explains this strange pattern? In short, controversies draw coverage. Take, for

example, Laura Schlessinger, who is well-known in the media field as a moralist with a strong family emphasis who tells callers what to do with their lives. "Dr. Laura" actually gained coverage in this debate for some of her comments about the origins of sexuality, for example that homosexuality is "deviant," "destructive," and a "biological error." These comments did not immediately draw mass media coverage, but when Paramount announced a new "Dr. Laura" TV show, a mobilized opposition drew public attention to the comments in an effort to stop the show's production. Websites such as stopdrlaura.com and organizations such as the Gay and Lesbian Alliance against Defamation (GLAAD) organized call and email campaigns to persuade Paramount to cancel the deal. Schlessinger's response included taking out a full-page ad in *Variety* magazine to claim "I never intend to hurt anyone or contribute in any way to an atmosphere of hate or intolerance."²⁰ In Table 2.4, Schlessinger's primary interlocutor is Joan Garry, then executive Director of GLAAD, while Paramount is the most mentioned organization along with Schlessinger. Schlessinger is thus visible because of an isolated controversy in which she made offensive comments that drove media-focused activist response against her sponsoring organization.

Another isolated controversy explains both the presence of Dean Hamer and the lack of interlocution with other visible persons or organizations. Dean Hamer was a genetic scientist at the National Cancer Institute who published (with co-authors) a 1993 article in *Science* titled "A Linkage Between DNA Markers on the X Chromosome," in which the authors concluded that their evidence "indicat[ed] a statistical confidence level of more than 99 percent that at least one subtype of male sexual orientation is genetically influenced" (Hamer et al. 1993). In 1999, however, neurologist George Rice of the University of Western Ontario failed to reproduce the results, sparking public discussion

²⁰See "Making waves: proposed TV show of radio's Dr. Laura Schlessinger causing rift in gay community," by Jennifer Weiner, Pittsburgh Post-Gazette, March 14, 2000, D5.

and pushing Hamer to defend his results, primarily by questioning the methodology of Rice's study. This prompted several articles, especially in science and technology sections of the newspapers, that reviewed the controversy and presented both Hamer and Rice's research in scientific perspective. The story gained traction as a story of scientific controversy. Consistent with the mapping of debate by topic, such stories tend not to be linked to other issues or topics in the debate, but rather treated as self-contained and isolated from the rest of discussion. Scientists are arguing with scientists.

Contrast this to another controversy: the efforts of Joseph Nicolosi and the National Association for Research & Therapy of Homosexuality (NARTH) to get recognition for their "reparative therapy" efforts from the American Psychological Association. This is an odd case. The interlocution data suggests that Nicolosi is primarily dealing with the American Psychological Association and with Clinton Anderson, the Director of APA's Lesbian, Gay and Bisexual Concerns Office. That is, from the perspective of interlocution, it appears to be similar to the Hamer/Rice dispute, a self-contained argument over points of scientific evidence and fact. But topic discovery shows that the related topic ("Reparative Therapy") seem more likely to occur with many other topics (everything else) than with science topics. What explains this apparent contradiction?

The answer is that a small cluster of people and groups actually dominate the discussion of topics that are seen as related. Take away Laura Schlessinger, George W. Bush (who must campaign on every issue against his electoral interlocutor, John Kerry), and Dean Hamer, and what you are left with is one or two organizations and a few prominent representatives arguing with one another about whether homosexuality can or should be changed. The organizations here are Focus on the Family, Exodus International, and the Family Research Council, all of which are grounded in conservative Protestant theology and doctrine, and all of which take the position that homosexuality is wrong (or bad) and should be changed, and (not listed in interlocution data) Human Rights Campaign and

Truth Won Out, which (respectively) advocate for equal rights based on sexuality and actively track and oppose the so-called "ex-gay" movement.

Much of this debate hinges on one specific incident from September 2000. Wayne Besen, at the time a spokesperson for the Human Rights Campaign, took a photo of John Paulk at Mister P's, a widely known gay bar in Washington, DC. At the time, John Paulk was the manager of Focus on the Family's Homosexuality and Gender department, the elected chairman of the board of Exodus International, the public face of the Love Won Out touring conference, and the most visible person cited by these organizations as an exemplar of a successful Christian "ex-gay" conversion. John and his wife Anne Paulk (herself "ex-gay") even appeared on a *Newsweek* cover in August 1998 proclaiming their successful conversion to heterosexuality. Besen released the information to the media as illustrative proof that the "ex-gay" movement was a fraud, citing additionally the departure and subsequent commitment ceremony of two of the group's early leaders, Gary Cooper and Michael Bussee.

Media coverage of the event implicated other representatives. John Paulk's links to Focus on the Family implicated James Dobson, a clinical psychologist and public moralist who constantly mobilizes both religious and non-religious arguments against homosexuality on his widely-carried radio show. John Paulk's links to Exodus International also called into question the truth of the "ex-gay" claim writ large, prompting Joseph Nicolosi and NARTH to mount a defense of their approach by attempting to claim scientific credibility for "conversion therapy." Besen, for his part, left the Human Rights Campaign to pursue anti-"ex-gay" activism full-time through his organization Truth Wins Out. The Paulk incident crystallized particular configurations of positions and characteristics in this debate, and attached such configurations to particular persons (representatives) as part of ongoing debate. This makes sense, as the shape of public debate unfolds in part according to the representatives who participate, both through the

strategies they employ themselves and through the strategies that they force their opponents to employ in response (see Evans 1997, Fetner 2008).

Not all of the people in the debate are such active participants. The two most obvious examples are Jerry Falwell and Matthew Shepard, who are invoked in many different discussions of sexuality, including but not limited to the Paulk scandal. Jerry Falwell, for his part, is not really in this debate because of his own ongoing activity in public debate over homosexuality. While he has in the past taken positions against homosexuality as a leader of the Moral Majority, he is also known for reversing his position and advocating a "love the sinner, hate the sin" approach in his later years. Then why Falwell? One answer is indicated by his chief interlocutor, Pat Robertson. I note with emphasis that neither of these persons are actually prominent in this debate based on direct quotation. Rather, whenever persons who oppose Dobson, Nicolosi, etc mobilize rhetoric that paints religious groups as conservative, angry, hostile, and even hateful, they invoke Jerry Falwell as the exemplar of such groups, with Pat Robertson also often getting added on to the claim for additional illustration. As with debate over human origins, participants are attempting to enroll allies and opponents.²¹

Matthew Shepard, on the other hand, serves as an exemplar for the treatment of gay people by others in society. His attackers, who beat him and left him tied to a fence post to die, apparently targeted Shepard because of his sexual orientation. Shepard's tragic story is proof that bad things happen to particular persons, and that what is at stake is not simply "the family" or "society" in broad scope, but the fate of individual lives in a supposedly liberal democracy. Shepard's case illustrates why hate crimes legislation, or other sexuality-specific protections, should be enacted.²² Hence the interlocution with

²¹There is also a coincidental part to this, where Falwell's former speechwriter is a gay activist. On the rare occasions where he appears in media, the writers inevitably play up the Falwell connection. Since this is only effective as ironic contrast, I take it to be similar in rhetorical effect to explicitly invoking Falwell as the exemplar of anti-gay religious people.

²²And in fact the primary federal hate crimes legislation that includes protections based on sexuality,

Trent Lott, at the time the Senate Republican leader, whose comments that homosexuality was a sin of addiction like alcoholism or kleptomania provoked extensive response from those seeking specific protections for sexuality. Many of these responses cited Matthew Shepard's death as evidence for why Lott's comments were nonsensical.

Finally, George W. Bush provides useful insight into the penetration of religion in the "everything else" mixture of related topics. As a politician running for presidential office against John Kerry, it might be expected that Bush would be most likely to be in conversation with political organizations, or that Bush and Kerry would both show up on the top 10 list of most visible persons. Yet it is only Bush who shows up on the top 10 list, not John Kerry, and while his predominant interlocutor is Kerry, the American Psychological Association is the organization that shows up most. In taking a public position defending marriage as between "one man and one woman," and in giving speeches at conservative religious institutions such as Bob Jones University, Bush explicitly worked to clarify his religious position, not just his political position. Kerry did not substantially engage religion in this debate. Without a direct response from Kerry to place against Bush in newspaper articles, journalists instead offered the comments of the American Psychological Association to provide balance in viewpoints and perspective. By engaging religion, Bush became more prominent in this debate.

Representatives explain the distribution of topics in topic discovery, at least for those topics that are seen as more or less related. By binding together the many different available topics as packaged arguments in their disputes with each other, visible representatives in debates over the origins of sexuality both define the shape of public debate and provide cartographic reference points in debate. In public debate over the origins of homosexuality, scientists argue with other scientists in science places, and religious people

first introduced under the Clinton administration but not passed until the Obama administration, is called the "Matthew Shepard & James Byrd Jr. Hate Crimes Prevention Act."

argue with gay people wherever they can because they have a stake in changing them. But in debate over the origin of homosexuality, religion and science do not encounter one another. Even though this is historically consistent (Jordan 1997), this is not good debate.

2.6 Environment: Religion and Everything Else

Using a variant of the methodology already used in the other debates, I retrieved 4,236 articles for the environment debate.²³ This is the largest debate of the four under consideration. Note that environment debate is not just about climate change, but also about conservation, regulation, and related issues. This debate is very significant in public life and has many political implications.

Debate about the environment should be a site of religion and science debate. Some public representatives make claims about the environment based on scientific authority, while some public representatives make claims about the environment based on religious authority. For example, scientists regularly claim that immediate intervention is necessary to halt the anthropogenic aspects of global climate change (see Oreskes 2004). At the same time, religious representatives and even some politicians claim that God is in control and that scientific consensus about anthropogenic climate change is therefore completely irrelevant to environmental policy (see Mooney 2005). These are explicitly competing claims about environmental policy that derive directly from science and religion.

Empirically, however, there is no real debate between religion and science. I call this debate "religion and everything else." In terms of topics, there is only one topic that is obviously about religion at all. While it is a prominent topic within the debate, it is

²³This debate resists keyword searches, so I added categorical restrictions from Lexis-Nexis standard categories. Further details are available in the Methodological Appendix.

entirely disconnected from all of the other prominent topics. "Everything else" includes a variety of topics, including many science topics, that are likely to occur together in articles within this debate. But "religion" and "everything else," including science topics, are completely separate.

In terms of representatives, politicians figure prominently. Prominence drops off rapidly after the top few representatives. Nonetheless, several religious figures feature among the top representatives. This is the inverse pattern of the origins of homosexuality debate. Religion representatives (like topics) are prominent but primarily argue with each other about whether or not to get involved in political battles over the environment. There is basically no contact with science. Science encounters policy, but not religion. In terms of religion and science, good debate is not happening now.

Mapping Debate by Topic

If environment debate is completely dominated by religion and science, what we would see is a dense center of all topics located close to each other. Given the number of related issues in environment debate, this is probably unlikely. Some topics are likely to show up as simply unrelated to religion or science. But there are specific topics to seek out, based on public claims about this debate. For example, if global warming was a key site where religion and science encounter each other in public debate (see Mooney 2005 for an example of this claim), what we should see is a topic like "Global Warming" that is close to religion topics and close to science topics on the map. even if other topics show up as unrelated on the map. Likewise, if there is an encounter over any other topic, the map should show this as proximity between science topics, religion, topics and other topics.

Instead, Figure 2.4 shows that religion topics and science topics are as far apart as

it is possible to be on the map. Discussion of religion, particularly evangelical religion, is almost completely disconnected from discussion of other topics in articles. Note that both religion and science topics are featured prominently in this debate, so it is not simply a matter of misjudging the extent to which this is a religion and science issue. The most prominent topic, indicated by larger type size, is "Climate Change Scientists," followed closely by "Federal Environmental Policy." The next most prominent topic is "Evangelical Christians," followed by "Global Warming" and "Coastal Sea Level." The remaining topics are prominent enough to be visible in public debate, but are effectively similar in prominence.

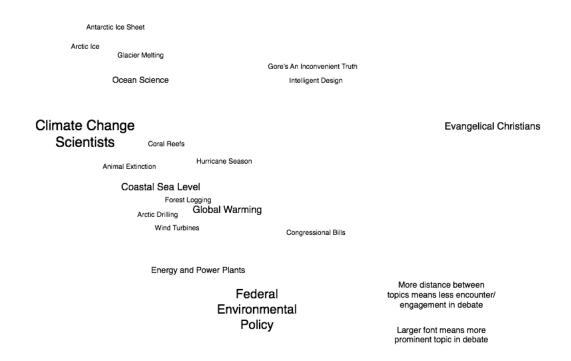


Figure 2.4: Topic Map, Environment Debate

The most prominent topic in debate ("Climate Change Scientists") is obviously a science topic. It basically includes discussion about what scientists say about climate change. The most closely related topics to that topic are also obviously science topics.

So, while many articles in the debate are about "Climate Change Scientists," they are also often about "Animal Extinction," "Ocean Science," or "Coastal Sea Level." Likewise, and more obviously, an article about "Antarctic Ice Sheet" is highly likely to also be about "Arctic Ice" or "Glacier Melting."

These science topics are distant from another prominent topic called "Federal Environmental Policy." Articles about "Federal Environmental Policy" are often also about "Energy and Power Plants" or about topics related to legislation ("Congressional Bills"), rather than, say, "Glacier Melting" or "Coral Reefs." Similarly, topics about infrastructure or regulation, such as "Arctic Drilling" or "Forest Logging," are more likely to occur with other policy-related topics, such as "Wind Turbines," than with "Ocean Science" or "Glacier Melting."

In general, however, science topics and policy topics are intermixed in public debate. Discussion of "Arctic Drilling" does not, for example, usually implicate "Arctic Ice" or "Glacier Melting." But it does implicate "Global Warming." The topic distinction between "Global Warming" and "Climate Change" is also important. Articles about "Climate Change" tend to also be about science topics like "Coral Reefs," "Animal Extinction," or "Ocean Science." Articles about "Global Warming" tend also to be about more direct policy topics, such as "Wind Turbines" or "Forest Logging." I interpret this topic map to show that "Global Warming" is a topic that bridges scientific and political discourse. The related topics, mostly about regulation and infrastructure of industries with environmental impacts (logging, drilling, energy production), reinforce an impression that science and policy topics are mixed together in public talk.

What is striking about Figure 2.4 is that there is only one topic, "Evangelical Christians," that is obviously about religion. While this topic is prominent in the debate (as indicated by type size), it is entirely disconnected. No other topics are close enough to it to reasonably claim any high likelihood of occurring together in an article. Articles in

the environment debate about "Evangelical Christians" are most likely to be only about the one topic. Perhaps even more interesting is that the least likely topic to occur with "Evangelical Christians" is "Climate Change Scientists." Specifically, if an article is about "Evangelical Christians," it is least likely to also be about the science topic "Climate Change." So, even though "Evangelical Christians" is one of the most prominent topics, it is entirely isolated.

Figure 2.4 shows that this debate is about as bad as it is possible to be, if considered against an ideal encounter between religion and science. The only religion topic appears to be a self-contained topic about evangelical Christians that does not engage substantially with any other topic in the debate. While I say that this is "religion and everything else," you could make the case that it is really "evangelicals and everyone else." In topic terms, religion and science are completely disconnected in the environment debate. They do not encounter one another. They are not even close. This is not good debate.

Mapping Debate by Representatives

Topic discovery offers two mysteries. One, why is religion so separated from science in this debate? Two, why is religion really just "evangelical Christians?" Data on representatives helps answer these questions. In the environment debate, prominent political figures are mostly involved with an array of political battles over regulation and remediation of environmental issues. Several other prominent representatives are conservative religious figures who have a history of political activism. Looking at the specific newspaper articles in this debates, it is apparent that these religious conservatives (evangelicals) are arguing with one another over whether or not to be involved in political battles over the environment. Liberal or moderate religious figures simply are

insignificant in the debate. To the extent that science representatives show up, it is in service of the political battles. In terms of representatives, religion and science never actually engage one another directly.

Table 2.5: Top 10 Most Visible Persons, Environment Debate

Person	Mentions (<i>n</i> =4236)
George W. Bush	≥ 500
Al Gore	≥ 220
Bill Clinton	≥ 140
Arnold Schwarzenegger	127
John Kerry	73
John McCain	63
James Dobson	59
Jerry Falwell	49
Pat Robertson	48
Lonnie Thompson	43

Table 2.5 reports NER data for the top 10 representatives in environment debate. The top 6 representatives are all either current or former politicians. Bush was of course U.S. President from 2000-2008. Al Gore served former U.S. President Bill Clinton as Vice President and ran against Bush as the Democratic presidential candidate in 2000. Clinton served as U.S. President. Arnold Schwarzenegger served as California governor. John Kerry serves in the U.S. Senate and ran against Bush as the Democratic presidential candidate in 2004. John McCain serves in the U.S. Senate and ran as the Republican presidential candidate in 2008.

The remaining four representatives appear to be split between religion and science. Three are conservative religious leaders who are active in political discussions. James Dobson, founder of Focus on the Family, the late Jerry Falwell, founder of the Moral Majority, and Pat Robertson, founder of the Christian Coalition, all speak (or spoke) out regularly on political issues from an explicitly conservative religious standpoint. Lonnie Thompson, a scientist specializing in the study of paleoclimate through ice core analysis,

rounds out the top 10.

Judging just by the top 10 list, there is potential for this to be good debate. Bush and Gore clearly dominate the debate. But there are religion and science representatives in the top 10. While they are not nearly as dominant as Bush or Gore, they are similar in prominence to the less prominent politicians.

But see Table 2.6. Table 2.6 shows that most of the top 10 representatives, when mentioned in environment debate, co-occur with George W. Bush. This helps explain George W. Bush's unusually high prominence (relative to other representatives). Bush is really two things at once. First and most obviously, as U.S. President, Bush symbolizes federal policy in coverage of proposed regulations or legislation. He is not just "Bush" but also "the Bush administration."

Table 2.6: Top Interlocutors for Most Visible Persons, Environment Debate

Person	Most Common Person	Most Common Org
George W. Bush	Bill Clinton	EPA
Al Gore	George W. Bush	US Congress
Bill Clinton	George W. Bush	EPA
Arnold Schwarzenegger	George W. Bush	Sierra Club
John Kerry	George W. Bush	EPA
John McCain	George W. Bush	US Congress
James Dobson	George W. Bush	Focus on the Family
Jerry Falwell	Pat Robertson	Republican Party
Pat Robertson	Jerry Falwell	Christian Coalition
Lonnie Thompson	Al Gore	Ohio State University

Bush as "Bush administration" explains the pattern where Schwarzenegger and McCain are prominent, as well as the repeated appearance of the Environmental Protection Agency (EPA). Both Schwarzenegger and McCain suggested policies at odds with the "Bush administration" related to EPA actions. For example, Schwarzenegger's pick for the head of the California EPA controversially suggested that the federal EPA ruled incorrectly on the exclusion of carbon dioxide from Clean Air Act restrictions. Schwarzeneg-

ger then worked with Democrats to create state legislation that restricted such emissions. As an apparent rebuke of fellow Republican George W. Bush, this controversy received significantly more coverage than some of Schwarzenegger's other activities. Similarly, John McCain worked with then-Democratic senator Joe Lieberman to introduce emissions-reducing legislation, in another apparent rebuke to the failure of "Bush's" EPA.

Second, Bush is also a political candidate. In this role he was the electoral opponent for several challengers, including Al Gore and John Kerry. In addition to his prominence as sitting U.S. President, George W. Bush also shows up as he espouses particular policy positions to distinguish his candidacy from that of his opponents. The environment debate is obviously an important site of political contention. Candidates such as Gore and Kerry distinguish themselves from Bush as part of electoral campaigning. They achieve a degree of prominence in debate simply by participating in the electoral process. Hence Gore and Kerry both show up prominently, as the U.S. Presidential election is the most covered race in the American electoral process.

Note that George W. Bush's most common interlocutor is actually Bill Clinton. Bill Clinton is prominent for the same reasons as George W. Bush. First, as sitting president, he symbolized the "Clinton administration" and serves as a point of comparison for the "Bush administration." Second, in the 2000 election, Clinton campaigned extensively on behalf of Al Gore, his former Vice President. To a much lesser extent, he did the same thing in the 2004 election on behalf of John Kerry. Like Bush, Clinton shows up for multiple reasons related to his presidency.

So Table 2.6 helps explain the prominence of most politicians in this debate. But the explanation so far cannot account for an important point. Why is Al Gore so much more prominent than even Bill Clinton and John Kerry? One answer is that the 2000 election, as a site of potential electoral misconduct, received more coverage than most elections.

But this does not explain why Gore outpaced Clinton in this debate. So what is going on?

The answer is that Al Gore is both politician and post-politician in this debate. After losing the 2000 election, Gore went on to focus on environmental activism rather than electoral politics. Having previously written a best-selling book about the environment (Gore 1992), Gore embarked on a lecture tour to promulgate the claim that human activity contributes to climate change, and to warn about the horrible environmental consequences likely to ensue. With the help of several scientific advisors, Gore created a highly visual presentation that he delivered to audiences across the country. In 2006, "An Inconvenient Truth," the documentary film of Gore delivering this lecture, opened across the country. In 2007 the film received an Academy Award.

Gore thus appears in the debate not only as politician, but as post-politician and popular advocate for the environment. "An Inconvenient Truth" even shows up as its own topic in this debate (see Figure 2.4). The popularity of "An Inconvenient Truth" also explains the prominence of the single science representative in this debate. Lonnie Thompson, paleoclimatologist and specialist in ice core analysis, served as a scientific advisor on the project. Some of his findings featured prominently in the film. As indicated by the interlocution data in Table 2.6, the most common person co-occurring with Lonnie Thompson is Al Gore. When Lonnie Thompson shows up in this debate, it is largely due to his involvement with Al Gore's "An Inconvenient Truth" rather than an encounter with, for example, religion representatives.

What of the religion representatives, then? The short answer is that, by and large, the three religion representatives are talking about why the environment should not be an issue for Christians. They are engaged in an internal discussion with other evangelical Christians about the appropriate level of political involvement on the issue. For example, Jerry Falwell said:

I believe that global warming is a myth. And so, therefore, I have no conscience problems at all, and I'm going to buy a Suburban next time. It is God's planet, and he's taking care of it. And I don't believe that anything we do will raise or lower the temperature one point. The whole thing is created to destroy America's free enterprise system and our economic stability.²⁴

And in an open letter condemning the National Association of Evangelicals for taking a position on climate change, James Dobson and other evangelical Christian representatives wrote:

[Some people] are using the global warming controversy to shift the emphasis away from the great moral issues of our time, notably the sanctity of human life, the integrity of marriage and the teaching of sexual abstinence and morality to our children.²⁵

Obviously anyone could say such things. But the prominence of these religious leaders in debate comes from their political influence. As Table 2.6 shows, these religion representatives are largely co-occurring with each other, with their political advocacy organizations, and with elected representatives. For political positioning, and perhaps for electoral politics, it matters what evangelical Christian leaders say about an issue. Politicians, especially those in the Republican Party, court the evangelical vote (Wilcox and Larson 2006). But the important point here is that they are not engaging science and deliberating about the environment. If they talk about "global warming," for example, it is to dismiss it for religious reasons, not to engage in substantive discussion about science. This has political implications and therefore receives media attention, but it is not based on engagement with science either in topic or representative terms.

The picture from NER data matches up neatly with the topic map. Politicians and activists argue about various environmental policies, occasionally bringing in discussion of science to bolster their political arguments. At least one scientist ranks high in

²⁴Quoted in "Remembering Rev. Jerry Falwell in his own words" by Mark Morford, in the May 18, 2007 San Francisco Chronicle, pg. E8.

²⁵From an open letter to the NAE dated March 1, 2007 and widely cited across newspaper articles.

²⁶I discuss this point in more detail in Chapter 4.

prominence. But he is prominent because of involvement with political advocacy and does not engage religion. Religion representatives are primarily arguing with each other about whether or not to get involved in political activism on this issue. Again, religion and science participate, but do not deliberate. In terms of topics, and in terms of representatives, this is not good religion and science debate.

2.7 Stem Cell Research: Debate by Proxy

The final debate is about stem cell research. Using the methodology outlined in the Methodological Appendix, I retrieved 2,605 articles from 2002-2007. Note that this a 5-year period. Stem cell research is a relatively new issue raised by technological developments at the turn of the 21st century. See Methodological Appendix for discussion of the 5-year window on this debate.

I describe this debate as "debate by proxy." Science and religion do not directly encounter one another in this debate except on the infrequent topic of human origins.²⁷ Science talk and religion talk are largely separate. However, many topics are equally likely to implicate religion, science, and politics topics. This suggests that there are encounters between religion and science, but that they are mediated through institutional politics, such as elections and legislative battles. Religion talk and science talk are brought together only as political talk.

Data on representatives confirms this apparent mediation of religion and science debate by institutional politics. The most prominent representatives in debate are politicians who take positions on stem cell research as part of their political strategies. While engaged in political talk, politicians sometimes talk about religion and sometimes talk about science. But religion and science are not engaged in debate. Rather, they are

²⁷This in part validates the findings about the human origins debate as a limited encounter.

pressed into service to distinguish "for" and "against" positions in electoral campaigns and party politics. By itself this is not good debate. Further, the fact that potential encounters between religion and science occur via formal politics means that the public sphere, as an arena for good debate, has been bypassed.

Mapping Debate By Topic

As with previous debates, if there is an obvious and direct engagement between religion and science over stem cell research, what we would see is science topics and religion topics in close proximity, either directly to one another, or to a topic over which they are debating. An interesting variation in stem cell research debate is whether the alleged encounter is based on moral concerns over similarities to abortion or on other grounds (see Evans JH 2010). This should also be apparent on the topic map. For example, if religion and science are engaging one another over moral issues, then religion topics and science topics should occur in close proximity to topics that are associated with moral concerns (e.g. "Abortion").

But, as with previous debates, science topics and religion topics are largely disconnected. Figure 2.5 shows the topic map for stem cell research debate. As before, larger type size indicates higher prominence in debate. The most prominent by far is the topic "Human Embryonic Stem Cell Research" (hereafter "Human ESCR"). The next most prominent is "Party Politics." These are followed by "Religious Morals in Public Life," "Taxes and Health Care," and "Catholic Views on Abortion." The remaining topics vary slightly in prominence as indicated by type size.

As Figure 2.5 shows, the most prominent topic in this debate is "Human ESCR." I interpret this to be a science topic. Articles that are about Human ESCR are most likely to also be about other closely-related science topics, such as "Human Cloning" or "Bone

Party Politics

Proposed Repeal of Stem Cell Funding Ban

Congressional Legislation

Bush's War in Iraq

Roe v. Wade

Terri Schiavo Supreme Court Case

Values in Presidential Voting

Catholic Views on Abortion

Human Embryonic Stem Cell Research Taxes and Health Care Medically Assisted Suicide

Religious Morals in Evangelical Christians

Vatican II

California Stem Cell Institute In Vitro Fertilization

Human Cloning

Human Origins Debate

Bone Marrow Cancer Treatment

More distance between topics means less encounter/ engagement in debate

Larger font means more prominent topic in debate

Figure 2.5: Topic Map, Stem Cell Research Debate

Marrow Cancer Treatment." Discussion of these topics is primarily about the technical or scientific aspects of various forms of research related to stem cells. Thus similar scientific research or techniques (e.g. "In Vitro Fertilization") tends to be discussed at the same time. Articles about these topics are unlikely to also be about non-science topics, such as "Party Politics." They are least likely to also be about "Evangelical Christians" or "Vatican II."

At the right of Figure 2.5 are many closely-arranged topics related to religion. This contains one of the most prominent topics, "Religious Morals in Public Life." Articles about this topic are more likely to also be about "Vatican II," "Catholic Views on Abortion," or "Evangelical Christians." This makes sense, as these topics discuss denomination or group-level variations on (for example) "Religious Morals in Public Life." Religion topics are least likely to also be about "Human Cloning" or "Human ESCR." As with several other debates, most religion talk is distinct and separate from science talk. Articles about religion topics tend also to be about other religion topics.

At the top center of Figure 2.5 is the highly prominent topic "Party Politics." However, "Party Politics" might reasonably be called a prominent outlier. Articles that are about "Party Politics" are about the "inside baseball" of what Republicans and Democrats (primarily) are up to in their political moves. Articles that are about "Party Politics" are usually just about "Party Politics" and not much else. But note that this topic is very far away from topics that are obviously science topics and obviously religion topics. If an article about "Party Politics" is also about something else, it will most likely also be about related politics topics, such as "Congressional Legislation" and "Taxes and Health Care." It is least likely to be about "Bone Marrow Cancer Treatment" or "Evangelical Christians."

Many topics are equally likely to involve politics and either religion topics, science topics, or both. For example, articles about "Proposed Repeal of Stem Cell Re-

search Funding Ban" or "Medically Assisted Suicide" are just as likely to also be about "Party Politics" as "Human ESCR." Articles about "Bush's War in Iraq" are equally likely to also be about "Party Politics" as "Evangelical Christians." And an article about "Taxes and Health Care" is equally likely to also be about "California Stem Cell Institute," "Catholic Views on Abortion," or "Party Politics." Topics such as "Terri Schiavo Supreme Court Case" and "Ronald and Nancy Reagan" are positioned roughly equidistant between religion, science, and politics topics. Even "Roe v. Wade," though less likely to be about science, and "Medically Assisted Suicide," though more likely to be about science, hover near the center of the map, approximately the same distance from all other topics.

There is only one topic that is equally likely to occur with religion topics or science topics, but is unlikely to occur with politics. Near the bottom center of Figure 2.5 is the topic "Human Origins Debate." This topic is not especially prominent in stem cell research debate. Note, however, that this is not two topics with competing claims (as in "Darwin's Origin of Species" and "Biblical Creationism") but rather a single topic about "Human Origins Debate." This topic marks the intrusion of metadebate about "religion and science" (see discussion of human origins debate above) into stem cell research debates. Delving into individual articles, it is apparent that this topic in this particular debate is actually about how stem cell research is another confrontation between religion and science, just like human origins debate. So I do not interpret this topic as a substantive encounter between religion and science in this debate.

Stem cell research debate involves prominent science, religion, and politics topics. Religion topics are unlikely to occur together with science topics. Moral concerns emerge in several topics, but these are highly likely to occur with religion topics, and highly unlikely to occur with science topics. However, a variety of topics are equally likely to implicate religion topics, science topics, and politics topics. I interpret this to

mean that religion and science are not directly encountering one another. To the extent that religion and science are encountering one another, they appear to be doing so through proxies within the political process. However, if the encounter occurs primarily within institutional politics, this is not necessarily good public debate between religion and science.

Mapping Debate By Representative

Data on representatives clarifies the picture from topic discovery. High-level politicians dominate debate about stem cell research. Whether in the electoral process or in specific political controversies, these politicians draw on religion talk and science talk to bolster political argument about abortion, health care, right to die, and the place of moral argument in public debate. There is one prominent religion representative in public debate, but religion is largely concerned with political influence and is not directly engaging science. The apparent encounter and engagement between religion and science in topic terms, however limited, turns out in practice to be the residue of representatives using science and religion as reasons to support political positions. Generally speaking, politicians mobilize religion talk to oppose stem cell research and science talk to support stem cell research. There is no substantive engagement between science and religion. Politics does not mediate the encounter. Rather, politics prevents the encounter.

Table 2.7 shows the top 10 most visible persons in stem cell research debate. Two things immediately stand out. First, most of the top representatives in this debate are involved in institutional politics at the highest levels of U.S. government. Bush, Kerry, and Bill Clinton have already been identified in other debates. Bill Frist was the Republican Majority Leader in the U.S. Senate during most of this period. Ronald Reagan was U.S. President during the 1980s. Nancy Reagan was his spouse and, notably, the

motivating force behind the U.S. government's "Just Say No" campaign and resulting policies against recreational drug use. Sam Brownback is a U.S. Senator and 2008 Republican Presidential primary candidate. Mitt Romney was a Massachusetts Governor and a 2008 Republican Presidential primary candidate.

Table 2.7: Top 10 Most Visible Persons, Stem Cell Research Debate

_1			
Person	Mentions (<i>n</i> =2605)		
George W. Bush	≥ 1300		
John Kerry	≥ 600		
Pope John Paul II	≥ 250		
Bill Clinton	≥ 200		
Ronald Reagan	≥ 200		
Bill Frist	≥ 150		
Terri Schiavo	135		
Nancy Reagan	127		
Sam Brownback	125		
Mitt Romney	106		

Second, U.S. President George W. Bush completely dominates this debate, even though others are also highly prominent. Bush shows up in (at least) every other article in the debate. Even John Kerry, Bush's Democratic opponent in the 2004 U.S. Presidential election, receives fewer than half of the mentions that Bush receives. Bush and Kerry are obviously a step above the rest, however. Pope John Paul II, the formal leader of the worldwide Catholic Church and the only explicit religion representative in Table 2.7, shows up in almost 1 out of every 10 articles, but still comes nowhere close to Bush and Kerry. Terri Schiavo, a Florida patient at the center of a right-to-die controversy, garners only half as many mentions as the Pope. Finally, there are no clear science representatives in the upper echelon of representatives. At the top level, this debate is mostly mostly politicians and a Pope, with George W. Bush dominating debate.

Table 2.8 reinforces the picture of politician dominance in general, and Bush's dom-

²⁸Most of the articles in this debate predate Pope Benedict XVI.

inance in particular. The top 10 representatives in this debate tend to occur with Bush. The exception is Bush, with whom Kerry shows up most. In other words, Bush is so prominent in stem cell research debate that no matter who is mentioned they are likely to be mentioned with George W. Bush. Note also that, unlike previous debates, there are few different organizations. The Catholic Church, Republican Party, and US Congress are implicated along with the top 10 representatives in this debate.

Table 2.8: Top Interlocutors for Most Visible Persons, Stem Cell Research Debate

Person	Most Common Person	Most Common Org		
George W. Bush	John Kerry	US Congress		
John Kerry	George W. Bush	Catholic Church		
Pope John Paul II	George W. Bush	Catholic Church		
Bill Clinton	George W. Bush	US Congress		
Ronald Reagan	Ronald Reagan George W. Bush			
Bill Frist	George W. Bush			
Terri Schiavo	George W. Bush	US Congress		
Nancy Reagan	Tancy Reagan George W. Bush			
Sam Brownback	m Brownback George W. Bush			
Mitt Romney	George W. Bush US Congress			

What explains this dominance of institutional politics and this particular configuration of representatives and organizations among the most prominent in stem cell research debate? The general answer is that stem cell research is a kind of litmus test for faith and politics. Politicians who profess religious affiliation, which is to say most US politicians, are asked about, and talk about, their position on stem cell research in religious terms. In general, proponents of stem cell research use science talk and downplay religion. Opponents of stem cell research use religion talk. As we saw in a previous debate, Republican politicians in particular use religion talk as part of efforts to gain the support of conservative Christian religious voters (Wilcox and Larson 2006). But such talk is not limited solely to Republicans.

I should briefly explain why stem cell provokes religious response. New technolo-

gies are difficult to discuss on their own terms, particularly if they are highly technical. A profound theological discussion is beyond the scope of this chapter, but the summary version is that stem cell research, whatever the technical details, is seen to involve the destruction of viable human embryos. This association places stem cell research firmly within existing religious debates about human life and personhood (see Evans JH 2010). When Pope John Paul II shows up in stem cell research debate, he is talking about stem cell research as similar to abortion or euthanasia in moral terms, as an intervention into qualities of human personhood, rather than similar to (e.g.) in vitro fertilization in technical terms. The explicitly religious topics from topic discovery map onto the American religious traditions that have traditionally opposed abortion and euthanasia: Roman Catholicism and evangelical Protestantism. Pope John Paul II shows up because he is the most prominent public religious figure to have a stake in opposing abortion and euthanasia, which he (as the head of the Catholic Church) attaches to stem cell research debate. Similarly in topic terms, evangelical Christians tend also to show up when abortion is discussed.

The focus of Catholic leadership on stem cell research, and in particular in the attachment of stem cell research to existing debates about abortion, life, and human personhood, also explains the relationship in Table 2.8 between John Kerry and the Catholic Church. John Kerry is a self-professed Roman Catholic. Yet his policy positions on abortion and stem cell research run counter to the Catholic Church's official position on these issues. Pope John Paul II publicly said that deviation on these teachings was "grave error." Some American bishops (notably Michael Sheridan) took this to mean that Kerry was not an appropriate candidate for Catholics, that he was possibly ineligible for communion and, in some cases, that he might be deserving of excommunication.²⁹ In

²⁹See "Can politics be a litmus test for Communion?" by Cathy Lynn Grossman, *USA Today*, June 15, 2004, 10D.

stem cell debate, then, Kerry is not only a Democratic presidential candidate supporting stem cell research. He is also a Catholic whose public talk contradicts official Catholic leadership.

While there are no non-politician evangelical Christians among the top 10 representatives, the biggest policy controversy around stem cell research hinges on claims of evangelical Christian influence on politics. In August 2001, George W. Bush signed into law a ban on government funding for stem cell research.³⁰ Bush was widely accused of using generic moral language (e.g. the "sanctity of life") to mask a religious agenda intended to attract and retain evangelical Christian voters. As with the Catholic Church, Bush and other members of the Republican Party connected stem cell research to other "sanctity of life" issues such as abortion, euthanasia, and human cloning. Sam Brownback, a conservative Republican who openly identifies as evangelical, and who was at the time a promising GOP presidential candidate, proposed a cloning ban similar to the stem cell funding ban. In his speech at the 2004 Republic convention Brownback said:

A fundamental principle of our democracy and our Republican Party is respect for the inherent dignity, equality and sanctity of every human life ... We do not measure the value of a life by wealth or social status. We believe that every person is beautiful, unique, and has great purpose. Every life must be honored and protected.³¹

Not all Republicans invoked this line of reasoning. Nancy Reagan advocated for stem cell research on medical grounds. Her husband, former president Ronald Reagan, died of Alzheimer's disease in 2004. As a degenerative disease, Alzheimer's is one of the diseases thought to be most amenable to stem cell therapeutic intervention. Nancy Reagan

³⁰This did not rule out privately funded or even state-funded research. California, for example, funded a state research institute through a ballot proposition. Nevertheless, President Barack Obama rescinded the federal funding ban shortly after taking office in 2009.

³¹Quoted in "Bush hears praise for policies" by Paul Barton, *Arkansas Democrat-Gazette* September 1, 2004, Front Section.

publicly advocated for stem cell research that would alleviate the suffering of those with degenerative diseases. At the same 2004 Republican convention where Sam Brownback proposed a cloning ban to preserve sanctity of life, Nancy Reagan's son Ron Reagan gave a speech arguing that Ronald Reagan would never have allowed religion to shape his political position on something with the potential to save lives. Nancy Reagan effectively enrolled Ronald Reagan, one of the most important Republican politicians of the past several decades, in support of stem cell research. Her argument was not that religion was wrong, but that it should not be a deciding factor in politics. Rather, scientific research should proceed if it would benefit American citizens.

The Terri Schiavo case provided an important flashpoint for this internal debate among prominent politicians. A full treatment of the history of the case is beyond the scope of this chapter, but three facts are relevant here. First, Terri Schiavo was a woman in persistent vegetative state. Second, the legally responsible party, her husband Michael, sought to have her feeding tubes removed to terminate her life. Third, after almost a decade of legal wrangling, Terri Schiavo's parents hired a pro-life activist to help seek public support for their position that Terri's her life should not be terminated. By 2005, most legal challenges had been defeated and termination was almost certain.

In early 2005 Republican politicians in the U.S. Congress took up the case of Terri Schiavo as an iconic pro-life case, bringing the case to national attention. Bill Frist, the Senate Majority Leader and a medical doctor, issued subpoenas to several people involved in order to forestall any legal action. When this failed, the Senate passed the "Palm Sunday Compromise," a bill that moved the Schiavo case from state court (where legal options had been exhausted) to federal court. Due to the odd circumstances of its introduction, the bill passed 3-0 in the Senate, with 97 members not voting. Most were not present, but Bill Frist, along with two other Republican Senators, passed the bill. A version passed in the House shortly thereafter, and George W. Bush flew from Texas to

Washington, D.C. immediately afterward, signing the bill into law at 1:11am on March 21, 2005. Ultimately the intervention failed after the Supreme Court refused to hear the case, and Schiavo's feeding tube was removed.

So one reason that Bill Frist and Terri Schiavo show up in the top 10 is that prominent Republican politicians working from a "sanctity of life" position enrolled Terri Schiavo in their political maneuvering. But Frist also shows up for another reason. In July 2005, Frist changed his mind about stem cell research. Prior to that time, Frist had opposed stem cell research on "sanctity of life" grounds. He then switched his public position and opposed Bush's stem cell funding ban, based on the potential of scientific research to bring about treatments and cures for significant diseases. Nancy Reagan immediately offered her support for Frist's new position. But other Republicans did not. Mitt Romney, for example, an self-identified Mormon, dismissed pro-stem cell research arguments during the presidential primary campaign, for example by saying "Lofty goals do not justify the creation of life for experimentation and destruction."³²

Representatives clarify the topic map. Stem cell research debate is actually the politics of "for" and "against." Politicians for stem cell research largely draw on arguments about the benefits of scientific research for American citizens. More commonly and more visibly, politicians against stem cell research largely draw on religious arguments about the similarity of stem cell research to other issues of life and personhood, such as abortion and euthanasia. Proponents talk science; opponents talk religion. This is part due to personal convictions, and in part due to political courting of conservative religious voters.

While there are, in theory, many different ways this debate could be configured, this particular configuration reflects a kind of debate by proxy, with religion and science

³²Quoted in "Stem cells' promise pits jobs vs. values," by Jim Hopkins, *USA Today*, February 16, 2005 Final Edition, 1B.

only encountering one another through the medium of institutional politics. However, political battles have calcified science and religion as "for" and "against" in this debate. Religion and science are used to make political distinctions rather than foster public encounters and engagement. This is the exact opposite of good debate.

2.8 Discussion

Is good debate between religion and science happening now? For the four debates I have analyzed in this chapter, the answer is "no." Good religion and science debate is not happening now. Religion and science are largely separate in public debate. Despite looking at the issues where we would expect religion vs. science debate, I could not find one. The single exception is one limited encounter over biblical creationism and Darwin's theory of evolution that occurs in human origins debate. An apparent exception occurs in stem cell research debate, but the apparent encounter is actually a structured opposition mobilized as part of political maneuvering, not a substantive encounter between religion and science.

Both methods described at the beginning of the chapter produce similar findings. Topic discovery shows that talk about religion is disconnected from talk about science. This is most obvious in debates over the environment and over the origins of homosexuality. Debates over the environment are "religion and everything else," with religion talk confined to internal argument among evangelical Christians about whether or not to engage in political activism. Debates over the origins of homosexuality are "science and everything else," with science talk confined to internal argument among scientists over genetic sources of homosexuality.

In places where topic discovery shows religion talk apparently implicating science

talk, only one instance is an unmediated encounter between religion and science.³³ In human origins debate, when an article is about biblical creationism, it is highly likely to also be about Darwin's theory of evolution. In debates over stem cell research, any encounter between religion and science is mediated by politics. Religion talk and science talk are mobilized as political talk in political discussion, particularly of related hotbutton political issues such as abortion and euthanasia.

Similarly, NER data shows that religion and science representatives are not generally encountering or engaging one another. Science representatives are largely engaged with other science representatives in scientific controversies. This happens most obviously in debates over the origins of sexuality, particularly in controversies over the replicability of "gay gene" studies. Religion representatives are largely engaged with other religion representatives in discussions about religion issues. This happens most obviously in debates over the environment, where prominent evangelical Protestants argue about whether involvement in this debate distracts from the "great moral issues of our time."

Where religion representatives and science representatives seem to encounter one another, they are not substantively engaging one another. In debate over human origins, most representatives are involved in a separate abstract metadebate about the conflict narrative. Thus Galileo and Darwin become entangled in discussions of Intelligent Design in the classroom. Representatives are arguing with history, not with each other. In debate over stem cell research, politicians define the terms of the debate by using science talk to support a "for" position and using religion talk to support an "against" position. This reinforces a separation between religion and science rather than encouraging encounter and engagement.

³³By "unmediated" here I mean "not mediated by something other than mass media," since obviously all of these debates are, by definition, mediated in the sense that they take place in mass media.

Scholars of religion and science are justified in concluding that there are problems with debate between religion and science in American public life. But what this chapter has shown is that actual debate is much more fundamentally bad than anyone has recognized. The problem is not that debate is less good than it could be. The problem is that there is no debate in the first place.

This finding is startling in two respects. First, it is startling because no one has actually anticipated this particular problem. Things are worse than anyone thought. But it is also startling because it challenges a basic assumption of the religion and science literature. While there are differences in how people think debate is bad, each of the five other explanations for bad debate assume that problems with religion and science debates are due to the quality of the relationship between religion and science. But there is no relationship between religion and science in these debates. Or, rather, to the extent that there is a relationship, it is one of disconnection and separation. The problem in these debates therefore cannot be a problem between religion and science, as almost everyone assumes. It is a more basic and general problem that subverts good debate.

Put another way, what is wrong with these debates has much to do with how religion and science representatives participate in public debates, but it does not have much to do with how religion and science representatives engage each other. This suggests a basic shift in thinking about religion and science in public life. Instead of focusing on the relationship between religion and science representatives, we need to look instead at how these representatives participate in public debates as representatives in the public sphere. We need to ask questions about representatives in general, not just about religion and science representatives in particular.

In the next chapter I address basic questions about representatives in these debates. What are representatives doing in these debates? How are they approaching public debate, and are their approaches compatible with normative perspectives on good, deliber-

ative debate? Are religion representatives and science representatives behaving in distinctive ways in public debate, or are they simply doing what other representatives do?

In shifting the analysis from the religion-science relationship to representation more generally, I also introduce the problem of evaluation. How do people evaluate representatives? Why is it that (some) people think that science and religion debates are sites of conflict or even engagement between religion and science? Are religion or science representatives evaluated the same way? And how do these expectations of representatives comport with normative perspectives on good, deliberative debate?

Chapter Three:

The Great Disconnection

As Chapter Two showed, religion and science representatives are not actually encountering each other in public debate. This is surprising. While everyone agrees that religion and science debates fall short of expectations for good debate, no one has previously suggested that they are bad because of a more general problem with public debate, rather than a problem between religion and science.

In this chapter I explore what this more general problem might be. In the first part of the chapter I address a set of questions around representatives in these debates. Religion and science representatives are not encountering or engaging one another in these debates. So what are they doing? Are religion and science representatives behaving in distinctive ways, or are they simply doing what other representatives do? And, most fundamentally, how do their approaches to participating in public life comport with deliberative ideals?

I address these questions by analyzing biographical and textual data for a sample containing 43 elite representatives in these debates. Drawing on a variety of primary and secondary sources relating to each representative, I answer some basic questions. Do these representatives actually approach public debate seeking to have good debate? Are there differences between religion representatives, science representatives, and other

representatives in these debates? And does the level of visibility matter?

I find three main approaches to representation among the representatives in the sample. I illustrate each of these approaches with cases taken from the sample. The basic finding is that none of these approaches are fully compatible with a deliberative ideal, though some are less inimical to good debate than others. There is no obvious difference between the prominent religion representatives, science representatives, and other kinds of representatives. However, the approach that is least inimical to deliberative debate is more prevalent among the least prominent representatives in the sample. While none of the approaches lead to good debate, the approaches most likely to generate bad debate are more visible.

In the second part of the chapter, I address a set of questions around the link between representatives and ordinary Americans. Despite a variety of research showing that representatives have constitutive power in public debate, previous research has not examined empirically the link between representatives and ordinary persons. Does the behavior of representatives in public life matter? Why are representatives important? Do ordinary people actually think that there is a problem with these debates? If so, what is the problem that they see?

To address these questions I engaged in semi-structured individual interviews with 62 respondents. Respondents clearly identify why representatives are important. No matter what the debate, representatives serve an important cartographic function. Prominent representatives map debate for ordinary persons by serving as boundary markers that define what a debate is about. More importantly, what ordinary persons think about the quality of debate, that is, whether it is good or bad, depends heavily on their assessment of the representatives that they see as defining the boundaries of each debate.

But where literature on institutional politics suggests that ordinary persons would simply favor those representatives who help them get their way, I find instead that ordinary persons strongly prefer good public debate and define good debate in deliberative terms. Interview respondents primarily evaluate information about representatives in terms of openness to multiple perspectives, respect for conflicting positions, and commitment to ongoing discussion. I call this the "deliberative frame." In each dimension of evaluation (of descriptions, of statements, of names, of ideal debate) respondents mobilize the deliberative frame to guide their evaluations. This normative preference is especially obvious in what I call the "electoral discount." Ordinary people discount elected officials because politicians are seen as unwilling to engage meaningfully in public debate, either because they are incapable of doing so, or because they are seen to be cynically instrumental in their pursuit of political success through public talk.

This fundamental disconnection between elite representatives and ordinary persons over preferences for good public debate suggests an important source of conflict that has previously gone unacknowledged in discussion of religion and science debates. Debates are bad, but the problem does not come from the religion and science relationship. Rather, the problem is a conflict between elite approaches to representation and the deliberative norm of public debate that ordinary people use to evaluate representatives. In subsequent chapters I work through the implications of this normative conflict for religion and science, respectively, as products of public debate.

3.1 How Representatives Approach Public Debate

Claims about the quality of public debate, and its shortcomings, are claims about what representatives do in public life. As previous chapters showed, existing literature has focused on specific instances where religion and science representatives appear to be engaged with each other in public debate, rather than on how religion and science representatives participate along with other representatives in multi-sided debates that

are not limited to religion and science. And as Chapter Two showed, current literature does not correctly describe what actually happens in public debate. So, empirically, what do representatives actually do in public debate? Are claims about the quality of public debate correct in their normative assessment of representatives?

Put more bluntly, do representatives want good debate? As any qualitative researcher or pollster can tell you, this is a better analytical question than it is an interview question. If you asked a prominent representative "Do you want good debate?" it is unlikely that she or he would would say "No, I prefer bad debate," especially if asked in public.³⁴ Even less likely is the possibility that a sociologist could gain access to, for example, George W. Bush, Laura Schlessinger, Pope Benedict, Pat Robertson, and Richard Dawkins, to ask each of them this question in the first place.³⁵ So I do not attempt to answer this question by interviewing elite representatives directly.

Instead I draw on a variety of secondary sources to answer the question. I began by creating a purposive sample of the representatives who showed up in the analysis reported in Chapter Two. I stratified the sample by visibility and affiliation. As before, by visibility I simply mean the number of article mentions within a given debate. After establishing a minimum criterion for visibility (see Methodological Appendix), I established cutoff points for low, medium, and high visibility in each debate, relative to the overall distribution. I then randomly selected representatives in each category until I returned, at minimum, one religion representative, one science representative, and at least one other representative that was neither science nor religion representative, from each level of visibility. If a given representative was no longer living, I selected a different representative from the same category and level of visibility. If a representative in one

³⁴I take this to be uncontroversial.

³⁵It is not impossible. Lindsay (2007) successfully gained access to hundreds of elite respondents in government and industry, primarily by leveraging religious networks. But it is exceptionally difficult and rare. Consider that even top-level journalists rarely get the opportunity to interview more than one of the persons I cited as examples.

debate had already appeared in another debate, I selected an additional representative from the same category and level of visibility. If either religion or science representatives were not available in the same level of prominence (e.g. no highly prominent science representative), I selected the same category but from a lower level of visibility. And in cases where the distribution of top representatives included multiple obvious non-religion and non-science representatives in different categories, I selected additional representatives to ensure coverage of these other areas.

Constructing the sample in this way takes more care and judgment than a simple random sample. However, it is necessary because the distribution of religion and science representatives in these debates is not precisely comparable. Religion representatives tend to be relatively few in number, but more visible. For example, a few members of the Religious Right are highly visible in several debates. By contrast, science representatives tend to be relatively more numerous, but less visible. For example, each newspaper story about a new discovery in genetics tends to quote a scientist in the study, or a local college professor, rather than a single national figure. A random sample would entangle (potential) differences between religion and science representatives with (potential) differences in high and low visibility representatives. The purposive sample, in contrast to a random sample, guarantees inclusion of science and religion representatives of similar visibility.

In practice, following the selection method described above resulted in a sample that included the top religion and science representatives in each debate, even if such representatives were not necessarily in the top 10 for a given debate, supplemented with similarly prominent representatives in other categories (e.g. media, business, politics). The resulting sample included 43 representatives from 4 debates. Some are prominent across debates, some only in one.

For each representative in the sample I constructed a biographical profile that in-

cluded a variety of data, including personal characteristics, samples of public speech or writing, and, where available, biographical profiles, human-interest articles, and media interviews. Of course the amount of available data varied by person. For example, I found many more sources of data about Jerry Falwell than about John Haught, and many more sources of data about George W. Bush than about Christine Gregoire. Much of this material was used to construct the interview materials that will be discussed later in this chapter (see also Methodological Appendix).

But in addition to constructing the biographical profiles, I also analyzed the discursive material for each representative using principles from grounded theory (Glaser and Strauss 1967) to see what kinds of qualitative patterns emerged in the public talk of these figures. Most of these sources are transcripts or videos of interviews conducted by others with prominent (or not-so-prominent) representatives. In these texts I look at how representatives describe their own approaches to public debate. My method here is to look at how each selected representative talks about what she or he does in public life, looking in particular for indications of how a normative vision motivates their participation. The intent is to identify what representatives think public debate ought to be.

In plain English, I looked for evidence that would show whether the approaches that representatives take in public life actually meet the standards of deliberative debate. To be clear, not all representatives make a statement like "I think we should have good debate." And it is difficult, if not impossible, to discern particular intentions of representatives in these debates. Some obviously pursue good debate directly, while for others it is not immediately clear what they are trying to do. Rather than try to ascribe motives or intentions, I simply classify with regard to the normative standard of deliberation. When they do things in public life, is their approach compatible with good deliberative debate?

Three distinct approaches emerged from the data. These approaches recur among representatives regardless of their level of prominence. First, some representatives en-

gage in "public crusade" to advance their particular moral view. This approach depends on avoiding or suppressing debate, and on converting rather than engaging potential interlocutors. Second, some representatives attempt to "set the stage" for good debate by creating and enforcing the conditions they see as necessary for beginning such debate, though what counts as good debate differs among representatives. This approach depends on subverting or excluding participation from those who do not meet the initial conditions for (their version of) good debate. Third, some representatives "elevate the conversation" in order to make existing debate better. In this approach, making debate better means increasing information and deliberation in current debates.

Table 3.1: Articles Mentions by Debate, Selected Representatives

Category	Person	OrigSex	HumOrig	StemCell	Environ
Daliaian	Jerry Falwell	21	47	77	49
Religion	John Haught	0	20	1	0
Science	Richard Dawkins	0	75	22	7
Science	Gavin Schmidt	0	0	0	8
Marality Jam	James Dobson	24	20	75	59
Morality	Laura Schlessinger	34	1	0	0
Politics	George W. Bush	22	≥500	≥1300	≥500
Folities	Al Gore	2	60	91	≥220

In what follows I use eight examples to illustrate these approaches. Table 3.1 summarizes information about the selected examples. For illustrative purposes, I selected two representatives in each of four categories: religion, science, morality, and politics. The categories are not meant to be exhaustive. Instead, they are meant to illustrate that these approaches are not simply characteristic of religion or science representatives, but actually shared across many different categories of representatives. Within each category I also selected one example of higher prominence and one example of lower prominence. This selection criterion helps illustrate that these approaches are not necessarily strategies for achieving prominence, and are not simply reflective of visibility in public debate.

Again, these selected examples are illustrative. For each approach I note (in footnotes) several other representatives in the sample who I have identified as employing the same approach in their public talk.

3.1.1 Public Crusade

Historically, the Crusades involved religious motivations for military quests to reclaim formerly Christian lands and convert those persons with whom the Christian church disagreed. To varying extents, "crusade" is a fitting description for current efforts by representatives in public life to advance their moral agenda and convert persons to their point of view. While not always explicitly motivated by religion, representatives who engage in public crusades unconditionally advocate a position, or package of positions, in public life. From this perspective, there is no such thing as good public debate. Such debate distracts from the crusade's mission, and should be avoided or suppressed.³⁶

Jerry Falwell: A Paradigmatic Case

Take, for example, the late Jerry Falwell. In the 1970s Falwell, a church pastor in Virginia, became convinced that America had departed from the Christian moral path of its founders, and that active religious involvement in politics would be the only effective way to militate against further decline. As Susan Friend Harding (2000) observes, Falwell applied the conservative Protestant notion of "witnessing," that is, persuasive talking intended to convert non-believers, to public life. In Falwell's own words:

If the leaders of Christendom in this nation don't stand up against immorality, we can't expect anyone else to lead. I believe it is the duty of gospel

³⁶Other examples of representatives who use the "public crusade" approach are religious leaders Pat Robertson and Michael Sheridan, policy activists Janet Folger, Wayne Besen, and Samantha Smoot, politicians such as Sam Brownback and James Inhofe, and scientists such as Gerald Schatten.

preachers to set the pace. When sin moves out in front, preachers and Christians everywhere must speak out. I will as long as I have breath.³⁷

In 1979 Falwell founded Moral Majority, a political organization for conservative Protestants. Through Moral Majority Falwell sought to implement laws and policies based on conservative Protestant moral teachings. Similar efforts had worked locally on specific issues such as gay rights (see Fetner 2008 on Anita Bryant), or on a single issue nationally such as gender rights (see Critchlow 2005 on Phyllis Schlafly). Falwell sought national political influence across a broad range of issues, such as abortion, homosexuality, stem cell research, and the "traditional family." Table 3.1 shows Falwell's prominence across the four debates in this study.

To overcome the decentralized organizational structure of conservative Protestantism, Falwell emphasized setting aside the debates over religious issues that separated denominations and congregations in the first place. For Falwell, debate was not productive; it was divisive. In the formative meeting of the Moral Majority, he emphasized the importance of a united front for effective political intervention:

I know that under normal circumstances most of us wouldn't even speak to each other. But these aren't normal circumstances. We've got to work together to save this nation. Afterward we can go back to arguing amongst ourselves.³⁸

Scholars of electoral politics credit Falwell's Moral Majority with the swing of many conservative religious voters from Carter in 1976 to Reagan in 1980, and with the persistent alliance of Republican national politics with conservative Christian moral issues throughout the 1980s (see e.g. Wilcox 1989, Wilcox and Larson 2006). Moral Majority formally dissolved at the end of the 1980s. But Falwell continued his crusade for explicitly Christian moral laws and policies until his death in 2007. In part he remained

³⁷Quoted in Falwell (2008:114).

³⁸Quoted in Falwell (2008:116).

influential because of his ongoing connections to later generations of Christian political activists. But he continued to gain media attention by saying outrageous things in public to draw attention to his moral agenda. As he put it in 2000:

Once you reach the place where your words are respected, then what you say does have impact. Occasionally, I'm accused of saying things that I didn't say. But usually, I'm guilty and by intent, I say what I believe. If it isn't controversial, it isn't worth talking about.³⁹

And in 2006:

A pastor has to be media-savvy if he's going to reach everybody. I don't mean to be ugly and harsh, but to be forthright and candid. And the result is that people that don't like you start listening.⁴⁰

Falwell provides a paradigmatic case of the "public crusade" approach. Until his death he remained committed to advancing a set of moral positions in public life. As a religious "witness," he did not need to engage in debate, because he was telling people what he believed to be right. They could convert, or not. As the founding of the Moral Majority illustrates, debate could only interfere with the crusade. Freed from the need to debate, Falwell could then say or do whatever he liked as long as he deemed it useful for drawing attention to his moral agenda. Participating in public life meant participating without debate, good or otherwise.

Variations on a Moral Theme: James Dobson and Laura Schlessinger

Like Falwell, James Dobson is involved in many debates in this study (see Table 3.1). For Dobson, a psychologist with a Ph.D. from the University of Southern California, the

³⁹This quote is a frequently-cited secondary quote that originates in a 2000 interview with the Richmond Times-Dispatch. This text last retrieved 8 June 2010 from http://www.bloomberg.com/apps/news?pid=20601103&sid=auX3.SI9QH2M.

⁴⁰Quoted in "Religion, Politics a Potent Mix for Falwell," by Steve Inskeep, NPR Morning Edition June 30, 2006, text last retrieved 8 June 2010.

American family is under moral threat. The only way to stop that threat is to reclaim or convert as many people as possible to a traditional view of the family (heterosexual, not divorced, strongly authoritarian). In 1977 Dobson founded Focus on the Family "to spread the Gospel of Jesus Christ through a practical outreach to homes." The Focus on the Family organization publishes books and produces media programming (e.g. the Focus on the Family radio show) to advance Dobson's moral agenda. Popular books, such as *Dare to Discipline, Love for a Lifetime*, and *Love Must Be Tough*, offer practical advice for dating, marriage, and family relationships, primarily by suggesting a return to Dobson's moral ideal of traditional family relationships. In 1981 Dobson founded the Family Research Council, a lobbying organization focused on issues such as student prayer in public schools, heterosexual-only marriage, pornography, abortion, and stem cell research, to advance his moral view of the traditional family through influence on elected public officials rather than just ordinary people.

Dobson thus appears to be engaged in almost the same approach as Falwell: a well-organized public crusade to intervene in public life over moral issues grounded in conservative Christian doctrine. When speaking to religious media, such as the magazine *Christianity Today*, Dobson uses explicitly religious talk, as one would expect from a religious crusader. For example, in a 2004 Q&A with *Christianity Today*, interviewer Stan Guthrie asked what would happen if the American family failed. Would Focus on the Family close up shop? Dobson replied:

The family is created and ordained by God. It will never fail, but it can suffer great harm as a result of man's efforts to redefine it. Love for God and for our neighbor demands that we protect people from this harm.⁴²

But unlike Falwell, Dobson does not simply speak in public as a religious crusader.

⁴¹"Focus on the Family's Foundational Values," last retrieved 11 June 2010 from http://www.focusonthefamily.com/about_us/guiding-principles.aspx.

⁴²Quoted in "Q & A: James Dobson," interview by Stan Guthrie, posted 1 July 2004 to ChristianityToday.com, last retrieved 8 June 2010 from http://www.christianitytoday.com/ct/2004/july/20.19.html.

Despite being touted as the most influential evangelical in America (Gilgoff 2007), Dobson often consciously uses generic moral language that is not necessarily tied to a particular religious tradition. He speaks in terms of "values," or of families, lives, and relationships. This language is a kind of "moral Esperanto" that provides common ground with many people who are not conservative Christians or even religious at all. In theory, "values" are not the sole purview of conservative Protestants. As So, for example, when asked about supporting pro-life politicians, Dobson could have talked about whether they were Godly, or in keeping with biblical requirements, but replied instead in more generic moral terms:

And why would we not support someone who does line up with our values system, when we would have to literally hold our noses to support somebody that contradicts those values? And we have seen elections — they're very dynamic, they're volatile, they change.⁴⁵

In this way Dobson more resembles Laura Schlessinger, a radio talk show host who offers practical moral advice to audience members who call in and talk to "Dr. Laura" about their family problems. Like Dobson, Schlessinger holds a Ph.D. (physiology, Columbia). Like Dobson, Schlessinger has strong views about moral life:

I've become much more interested in advocating moral and ethical behavior in spite of whatever psychological turmoil is present. To me, there's no excuse for behaving unethically. What's happened is that we've forgotten the benefits of a moral framework and instead imagine all our problems to be psychological. More than that, behaving morally has a beneficial long-term effect on one's happiness and mental health. That's why I "preach, teach, and nag" about morals on the show. ...I believe we should be inspiring

⁴³I thank John H. Evans for suggesting the phrase "moral Esperanto," which originates in other work (e.g. Dunn 1979, Stout 2001).

⁴⁴In practice, talk of values is treated as a signal for conservative Protestantism. I discuss this phenomenon in Chapter Four.

⁴⁵Quoted from "Hannity & Colmes," aired 8 October 2007, transcript last retrieved 8 June 2010 from http://www.foxnews.com/printer_friendly_story/0,3566,300457,00.html.

ourselves to be better, not excusing ourselves for acting bad, no matter what our circumstances are.⁴⁶

Also like Dobson, Schlessinger sees the decline of the American family as a problem that needs to be fixed. Schlessinger's goal is for individual persons to be happy through application of moral principles. This is a public crusade. However, it is not a religious crusade. While Schlessinger recognizes that religion is a powerful source of moral teaching, her concern is more about how people can find adequate moral guidance (whatever the source). She describes her approach in terms of finding happiness or fulfillment rather than, for example, finding God's will:

But what saddens me — you know, I write books like "The Proper Care and Feeding of Marriage," because I'm trying to help people really find happiness, and our young people are looking at this trashy behavior, and thinking, "That's a way to be happy," because every time you show a picture of Anna Nicole [Smith], she's smiling. That's not happy; that's tragedy.⁴⁷

Such generic moral language is uncharacteristic of Falwell's "witnessing," as it passes up an opportunity to speak in explicitly religious terms, offering instead a set of publicly accessible reasons that do not depend on religious commitment (see Moen 1992). Yet both Schlessinger and Dobson go even further beyond religious talk, drawing on language from behavioral science in addition to, or rather than, generic moral language. For example, when asked by CNN's Larry King about the origins of homosexuality, Dobson did not use religious language or even generic moral language, favoring a behavioral science justification of his moral position:

It usually comes out of very, very early childhood, and this is very controversial, but this is what I believe and many other people believe, that is has

⁴⁶Quoted in "Dr. Laura wants you to stop whining," by staff writers, *Psychology Today*, published 1 January 1998, last retrieved 10 June 2010 from http://www.psychologytoday.com/articles/199802/dr-laura-wants-you-stop-whining.

⁴⁷Quoted from "Hannity & Colmes," aired 13 February 2007, transcript last retrieved 10 June 2010 from

http://www.foxnews.com/story/0,2933,251962,00.html.

to do with an identity crisis that occurs too early to remember it, where a boy is born with an attachment to his mother and she is everything to him for about 18 months, and between 18 months and five years, he needs to detach from her and to reattach to his father.⁴⁸

Similarly, Schlessinger described homosexuality not in moral terms, but in behavioral and biological terms:

I'm sorry, hear it one more time perfectly clearly: If you're gay or a lesbian, it's a biological error that inhibits you from relating normally to the opposite sex. The fact that you are intelligent, creative and valuable is all true. The error is in your inability to relate sexually intimately, in a loving way to a member of the opposite sex - it is a biological error.⁴⁹

Given the apparent openness to different kinds of talk, Dobson and Schlessinger may appear to be more interested in debate, and even deliberation, when compared to the exclusively religious Falwell. But all of this talk, no matter what its underlying justification, goes toward one end: advancing Dobson and Schlessinger's moral agendas in public life. More ways of talking are more ways to convince people to follow the crusade. The expansion of talk drives additional converts, not additional debate.

For Dobson, bringing in different kinds of reasons is simply another way of subverting potentially divisive debate, particularly in the political arena. Dobson's use of generic moral talk and science talk partly undercuts any competing arguments from non-religious perspectives. It also suggests that Dobson's single moral vision is supported from multiple directions. At its core, Dobson's approach to representation is only a slightly more clever version of Falwell's approach. And as with Falwell, Dobson is not actually interested in debate, only in a public crusade to reclaim lost moral territory and convert people to his cause.

⁴⁹Quoted from the Dr. Laura show, 8 December 1998.

⁴⁸Quoted from "Larry King Live: Interview with Dr. James Dobson," aired 22 November 2006, transcript last retrieved 8 June 2010 from http://transcripts.cnn.com/TRANSCRIPTS/0611/22/lkl.01.html.

Schlessinger, for her part, is committed to moral language primarily for personal reasons. While her own religious commitments have changed substantially over the years, her commitment to a particular moral vision of family life has not. Like Dobson, Schlessinger believes that converting troubled individuals to her moral vision will result in greater benefit and happiness to society. Unlike Dobson, Schlessinger advances her agenda solely through personal interaction rather than through political advocacy. Schlessinger is engaged in public crusade, but the lack of commitment to public debate is due as much to her level of intervention as it is to her principled rejection of alternative moral perspectives. For Schlessinger, this individual intervention sets her apart from "political talkers" who engage in public debate:

Whereas political talkers deal with externalities, I talk to people about how they lead their lives, their decisions, behaviors, attitudes, etc. This is, unlike generalized political talk, up close and very personal. This sometimes gets people defensive, until they are willing to introspect, own up, and do become better.⁵¹

Ultimately both Dobson and Schlessinger offer slightly more sophisticated variations on the Falwell theme. They still employ the public crusade approach. Though they engage in a broader range of talk than Falwell, the goals are the same: advancing a moral agenda and suppressing possible sources of dissent, whether personal objection or public debate.

Politics as Public Crusade: George W. Bush

George W. Bush provides a final illustration of the public crusade approach. Unlike the previous examples, Bush is a successful product of the American electoral system,

⁵⁰Schlessinger is no longer personally religious. Having been involved in Conservative Judaism and later Orthodox Judaism, as of 2003 Schlessinger no longer professes any religious connection.

⁵¹Quoted in "In the Firing Line: Dr. Laura on Politics, Radio, and Her Controversial Past," by Brian Maloney, *The Radio Equalizer*, published 13 September 2006, last retrieved 10 June 2010 from http://radioequalizer.blogspot.com/2006/09/dr-laura-schlessinger-interview-part 13.html.

having campaigned for, and won, both state level and national level executive offices. Winning elections is, of course, a successful strategy for gaining prominence in public life. However, the concern here is with Bush as representative, that is, as a public figure who organizes his public life around a particular vision of what public life ought to be. Many people win elections, but not all organize their public lives for the same reasons.

Like other public crusaders, Bush participates in public life out of moral conviction that something has gone wrong in American society. From Bush's perspective, the main problem of American life is dysfunctional politics grounded in a lack of principled action. His response is to pursue principled decision-making as a political leader:

I think it's very important for people – for a president to make decisions based upon principles. You know, you can be popular, but you may be wrong. And I would rather, when it's all said and done, get back home and look in the mirror and say, I didn't compromise the principles that are etched into my soul in order to be a popular guy. What I want to do is solve problems for the American people and yield the peace that we all want.⁵²

Yet the principles to which Bush refers are not grounded in a desire for good public debate. Quite the opposite. In Bush's view, commitment to principled leadership requires disregard for different and possibly conflicting points of view, whether from other elites or from ordinary persons. Good debate is actually an obstacle, in that it detracts from strong principled actions. When Bush speaks of good debate, it is debate that occurs after the real action has already taken place. Debate is what people do after leaders do the right thing. For example, when asked about polls showing public dissatisfaction with his leadership, Bush replied:

Polls are nothing more than just, like, a puff of air. What matters is results. And, ultimately, people will be able to make, you know, an objective judgment of a president and his administration and, in this case, a country's commitment. And so I care really about is the results of the programs. I

⁵²Quoted in "Interview with President Bush," by Juan Williams, NPR, conducted 29 January 2007.

hope by now people have learned that I'm not one of these guys that really gives a darn about elite opinion. What I really care about is, are we saving lives? And in this case, we are.⁵³

As an inhabitant of elected higher office, Bush could not avoid all debate. America is not a dictatorship. The separation of powers in American politics structures some encounters and engagement as part of policy-making. For example, spending allocations proposed by Congress require Presidential approval. Likewise, declaration of war by the President requires the approval of Congress. But in cases where principled leadership encountered the structural requirement for debate (however minimal), Bush presented the case for debate as something that would always happen and could therefore be set aside in the national interest. While some debate in politics cannot be avoided, unity should triumph over debate:

I think it's important for me to continue to reach out to the Democrats, and will – and Republicans, for that matter – and explain the strategies and the way forward, but also to explain to them that presidents and Congresses will be dealing with this ideological struggle for quite a while, and therefore it makes sense to work together now to help not only us succeed, but help them succeed.⁵⁴

For Bush, the "way forward" is his way, based on his own moral convictions. Yet some of Bush's language might suggest that he is open to debate. For example, when asked in Texas, a largely religious and conservative state, about whether Intelligent Design should be taught in schools, Bush seemed to be advocating public debate as important:

I think – as I said, harking back to my days as my governor ... Then, I said that, first of all, that decision should be made to local school districts, but I felt like both sides ought to be properly taught ... so people can understand

⁵³Quoted in "George W. Bush's BBC Interview," by Matt Frie, BBC, originally aired 14 February 2008, transcript last retrieved 10 June 2010 from http://news.bbc.co.uk/2/hi/americas/7245670.stm.

⁵⁴Quoted in Williams, "Interview with President Bush."

what the debate is about. I think that part of education is to expose people to different schools of thought, and I'm not suggesting – you're asking me whether or not people ought to be exposed to different ideas, and the answer is yes.⁵⁵

But it is clear that this apparent openness to debate is simply part of the greater strategy. While Bush suggests that learning about debate is an important part of education, he is not actually interested in that debate. As a public crusader, Bush is remarkably consistent in suppressing actual debate whenever possible. He is not advocating actually having a debate, since that would mean weakening his principled leadership. Instead, he is trying to make space in policy for an otherwise unpopular position that he personally holds. Apparent openness to debate is an attempt to convert opponents to his point of view:

Well, I think you can have both [evolution and creationism]. I think evolution can – you're getting me way out of my lane here. I'm just a simple president. But it's, I think that God created the Earth, created the world; I think the creation of the world is so mysterious it requires something as large as an almighty, and I don't think it's incompatible with the scientific proof that there is evolution.⁵⁶

Like other public crusaders, Bush adheres to a moral vision of the world as fallen or broken, in this case due to unprincipled and therefore dysfunctional politics. His remedy is principled leadership. This approach dismisses debate as inimical to the exercise of good moral leadership. Where possible, alternative perspectives should be disregarded. Debate can take place after the fact, but not during policy-making. When debate is unavoidable, it should be minimized in favor of unity behind a principled leader. And while advancing a moral agenda sometimes means talking as though debate were important, actual debate is undesirable.

⁵⁵Quoted in 1 August 2006 roundtable interview with members of Texas press, full transcript last retrieved 10 June 2010 from http://www.washingtonpost.com/wp-dyn/content/article/2005/08/02/AR2005080200899.html.

⁵⁶Quoted from "Nightline," aired 8 December 2008.

While they vary in important ways, different representatives engage similarly in the "public crusade" approach in public life. In this approach, good debate, or any debate, is undesirable. What matters is advancing a moral agenda in public life. This means conversion rather than encounter or engagement. While is not always practical to avoid debate, it is preferable to avoid or suppress public debate. Representatives who engage in the public crusade approach do not want good public debate, whatever the definition. They just want to get their way.

3.1.2 Setting the Stage

In dramaturgical terms, "setting the stage" makes performance possible. On stage an associated set of backgrounds, images, and props situates the actors and audience within a common space of meaning. Without first setting the stage, the meaning of a play or performance cannot be fully engaged. This serves as a useful metaphor for a second approach to representation. In the "setting the stage" approach, representatives are committed to producing good debate. But meaningful and productive debate can only happen when certain preconditions are met.⁵⁷ This approach emphasizes participation in public life in order to achieve these preconditions and therefore set the stage for good debate.

Removing the Religion Barrier: Richard Dawkins

At first glance Richard Dawkins might look like another representative engaged in public crusade. Dawkins, an evolutionary biologist and former Oxford University professor, constantly talks in public, primarily to criticize religion. His book *The God Delusion* basically claims that religion is a consensus delusion, grounded in contagious false

⁵⁷Other examples of representatives who use the "setting the stage" approach are activists such as Eugenie Scott, public intellectuals such as Leon Kass, politicians such as Arnold Schwarzenegger, and religious leaders such as Richard Cizik.

beliefs, that prevents human flourishing. This is of course a moral position, and by speaking in public Dawkins advances his moral agenda, much like the examples discussed above.

What distinguishes Dawkins from, say, Falwell, and therefore what distinguishes public crusade from "setting the stage," is a commitment to good public debate. While Dawkins clearly takes an anti-religion stance in public, it is not simply because he wants to convert everyone to his point of view. Dawkins wants good public debate about issues that matter. By good public debate Dawkins means reasonable and non-violent debate grounded in acceptance of facts. For Dawkins, religion subverts the possibility of such debate:

Disagreements between incompatible beliefs cannot be settled by reasoned argument because reasoned argument is drummed out of those trained in religion from the cradle. Instead, disagreements are settled by other means which, in extreme cases, inevitably become violent. Scientists disagree among themselves but they never fight over their disagreements. They argue about evidence or go out and seek new evidence. Much the same is true of philosophers, historians and literary critics."58

Dawkins objects to religion because it produces a world where good debate is not possible. The best possibility for good debate, Dawkins argues, lies in the process of scientific inquiry. Science has a reliable process for disagreement and debate that can ground non-violent, reasonable debate. I use the word "reasonable" here to indicate Dawkins' commitment to evidence and process rather than faith or revelation. Unlike religion, the process of scientific inquiry can provide common grounds for good debate:

Not everybody can evaluate all evidence; we can't evaluate the evidence for quantum physics. So it does have to be a certain amount of taking things on trust. I have to take what physicists say on trust, for example, because I'm

⁵⁸Quoted in "The Atheist," by Gordy Slack, *Slate* magazine, 30 April 2005, last retrieved 8 June 2010 from

http://dir.salon.com/news/feature/2005/04/30/dawkins/index.html.

a biologist. But science [has] a system of appraisal, of peer review, so that I trust the physics community to get their act together in a way that I know from the inside. I wish people would put their trust in evidence, not in faith, revelation, tradition, or authority.⁵⁹

Obviously Dawkins engages in controversial and outrageous public talk in order to discredit religion. But most of his talk concerns indicators of disbelief in scientific conclusions, that is, the denial of what he sees to be the grounds for good debate. So, for example, Dawkins famously said, "[I]f you meet somebody who claims not to believe in evolution, that person is ignorant, stupid or insane (or wicked, but I'd rather not consider that)." However, this is not just an indictment of religion. For Dawkins, a person's position on evolution indicates whether or not that person meets the prerequisites for good debate. This is true for religious people as well:

Well, evolution is different about this, because there are a large number of evolutionists who are also religious. You cannot be both sane and well educated and disbelieve in evolution. The evidence is so strong that any sane, educated person has got to believe in evolution. Now there are plenty of sane, educated, religious people: there are professors of theology, and there are bishops ... and so obviously they all believe in evolution or they wouldn't have gotten where they have because they would be too stupid or too ignorant. So, it is a fact that there are evolutionists who are religious and there are religious people who are evolutionists.⁶¹

But for Dawkins, religion that is friendly to good debate, defined in terms of reasoned deliberation grounded in scientific inquiry, is the exception rather than the rule. Instead, most religion impedes the progress of good debate. To meet the prerequisites for good debate and subsequently to achieve a better world, religion hostile to such good debate must be defeated:

⁵⁹Quoted in "The Problem with God: Interview with Richard Dawkins," by Laura Sheahen for beliefnet.com, interview conducted October 2005, text last retrieved 8 June 2010 from http://www.beliefnet.com/News/ScienceReligion/2005/11/TheProblemWithGodInterviewWithRichard-Dawkins.aspx.

⁶⁰From an NYT review of *Blueprints: Solving the Mystery of Evolution*, published 9 April 1989.

⁶¹Quoted in "My Short Interview with Richard Dawkins," by Lanny Swerdlow, last retrieved 8 June 2010 from http://www.positiveatheism.org/writ/dawkins0.htm."

If only such subtle, nuanced religion predominated, the world would surely be a better place, and I would have written a different book. The melancholy truth is that this kind of understated, decent, revisionist religion in numerically negligible. To the vast majority of believers around the world, religion all too closely resembles what you hear from the likes of Robertson, Falwell or Haggard, Osama bin Laden or the Ayatollah Khomeini. These are not straw men, they are all too influential, and everybody in the modern world has to deal with them.⁶²

Dawkins holds a clear idea about, and preference for, good debate. By "good debate" he means non-violent reasoned discussion about issues of concern, grounded in evidence produced through trustworthy processes. The process of scientific inquiry is ideal for anchoring such debate. But the dominant forms of public religion work against good debate. For example, disbelief in evolution marks a religious denial of available evidence and therefore an unwillingness to engage in good debate. Certainly Dawkins takes a public stand against religion, but he does so to "set the stage" for good debate as he understands it. Getting rid of religion is necessary to institute the broader scientific process of reasonable debate based on evidence rather than revelation. The point is not simply to make science win, as it would be in the public crusade approach. Science winning is prerequisite to good debate, which is necessary to solve problems and improve society.

Evidence-Based Policy: Al Gore

Al Gore also wants good debate. Gore, a former U.S. Senator, Vice President under Bill Clinton, and the defeated 2000 U.S. Presidential candidate, engages in public life in order to solve problems. In this way Gore resembles George W. Bush, another politician with a professed commitment to solving problems through political engagement. And like Bush, Gore may appear to be participating in public life to advance a moral agenda.

⁶²Quoted from Dawkins 2006, p. 15.

For example, Gore is especially prominent in debates over the environment (Table 3.1), and as discussed in Chapter Two, Gore has continued his public engagement on this issue well beyond his career in electoral politics. Through his books, movie, and public lectures, Gore seeks to convince people that climate change is occurring and that remedial action is necessary. This seems like a public crusade approach to converting people to his moral perspective on the environment.

What distinguishes Gore from Bush, and therefore what distinguishes "setting the stage" from "public crusade" as an approach to representation, is that Gore has a moral vision of ongoing good debate rather than (or perhaps in addition to) a commitment to a particular outcome. For Gore, public talk is crucial to solving key problems, whether that is climate change now or other problems later. A better society is one that engages in good debate, which Gore understands to mean deliberative reasoning drawing on values and depending on communication:

[Climate change] is a threat that requires us to use our reasoning capacity, and form long-term goals based on our deepest values. We also have that capacity. It's not a visceral capacity, it's not automatic or semi-automatic. It requires a choice, it requires reflection, it requires communication. All of which we're capable of. But in a world of distraction and complexity, it does require a conscious choice. But I think the world is now at a point where that's beginning to be possible.⁶³

However, good debate is not possible when people disagree over matters of established fact. Gore's public talk attempts to "set the stage" for good debate over climate change by convincing people of the evidentiary basis for considering climate change as a problem. Denial of the facts of climate change impedes good debate. Gore describes his engagement in public life as an effort to move past that denial and establish common ground for debate about how to respond to the problem:

⁶³Quoted in "The Al Gore Interview," by Kieran Mulvaney, *Discovery News*, 13 December 2009, transcript last retrieved 10 June 2010 from http://news.discovery.com/earth/the-al-gore-interview.html.

In the United States of America, unfortunately we still live in a bubble of unreality. And the Category 5 denial is an enormous obstacle to any discussion of solutions. Nobody is interested in solutions if they don't think there's a problem. Given that starting point, I believe it is appropriate to have an over-representation of factual presentations on how dangerous it is, as a predicate for opening up the audience to listen to what the solutions are, and how hopeful it is that we are going to solve this crisis. Over time that mix will change. As the country comes to more accept the reality of the crisis, there's going to be much more receptivity to a full-blown discussion of the solutions.⁶⁴

As with Dawkins' efforts to remove religion from public life, this approach can appear to resemble public crusade, where people are converted to a particular moral perspective. While there is an element of public crusade, again the distinction is in what happens next. From Gore's perspective, what happens after people agree over facts is that they have good debate about how to remediate problems. While debate over the factual matter is not appropriate, Gore sees debate over policy-making, especially among ordinary persons, as absolutely necessary for producing solutions:

I think when enough individuals do change their minds, it will have a profound impact on the political environment, and that's the kind of campaign I'm involved in—to try to change the way people think about this so that the candidates who do run will encounter voters in both parties who demand a solution. ...I've learned the importance of changing people's minds at the grassroots level so that whoever does run will have a much better chance of encountering public opinion that reaches a critical mass and brings about a change not only in White House policies but in the Congress and in the state legislatures and all around the world. 65

Unlike Dawkins, however, Gore is less suspicious of religion as something that subverts good public debate. While Gore retains a commitment to public debate and a commitment to evidence as grounds for debate, he is less concerned with the reasons that

⁶⁴Quoted in "An interview with accidental movie star Al Gore," by David Roberts, *Grist*, 9 May 2006, last retrieved 10 June 2010 from http://www.grist.org/article/roberts2/.

⁶⁵Quoted in "Al Gore Interview: It is Not Too Late to Stop the Crisis," Patty Kim, National Geographic News, 27 November 2006, last retrieved 15 June 2010 from http://news.nationalgeographic.com/news/2006/11/061127-al-gore.html.

people use to justify similar commitments. In public talk, Gore makes cases for agreement on matters of fact from different perspectives in order to involve as many people as possible in public debate. "Setting the stage" means agreement over facts, not necessarily sharing the same reasons for agreement:

Now, beneath the surface, there have been a lot of Republicans, a lot of people who used to be skeptics actually moving towards an acceptance of the science and a determination to do something about it. A lot in the faith-based community, a lot of fundamentalist groups are now saying, you know, the Earth is the Lord and the fullness thereof, and we have an obligation to be good stewards of the planet.⁶⁶

Like Dawkins, Gore has a clear notion of good debate. Gore wants reasoned deliberative communication grounded in evidence and motivated by values. Such debate is necessary for solving critical problems in the world. Also like Dawkins, Gore identifies existing impediments to good debate. For Gore, denial of facts and evidence makes good debate impossible. By engaging in persuasive public talk intended to foster agreement over facts and evidence, particularly in debates over climate change, Gore "sets the stage" for the good debate about policy that he sees as necessary for survival. But Gore differs somewhat from Dawkins. Agreement over facts is the prerequisite for good debate, but how one arrives at belief in those facts is less important. What is more important is that acceptance of the facts sets the stage for good debate.

"Setting the stage" is an approach to achieving good debate in public life. Representatives who employ this approach have a clear notion of good debate and a clear commitment to removing obstacles to good debate. While what counts as good debate, or as an obstacle, may differ among representatives, the common commitment to good debate distinguishes "setting the stage" from "public crusade" as an approach to representation. Instead of converting people to one's own moral perspective as the goal,

⁶⁶Quoted in "Andrea Mitchell Reports," originally aired 9 Dec 2009, transcript last retrieved 10 June 2010 from http://www.msnbc.msn.com/id/34345406/ns/politicsmore politics//print/1/displaymode/1098/.

representatives participate in public life in order to set the stage for achieving the goal of future good debate. For representatives using this approach, good debate is possible and desirable, but not here yet. "Setting the stage" will make such debate possible.

3.1.3 Elevating the Conversation

The phrase "elevating the conversation" comes directly from one of the approach's practitioners in debates over the environment. In the "elevating the conversation" approach, representatives look for ways to intervene usefully and selectively to improve existing debate. Good debate is desirable, and sometimes even happens now. The problem is that debate is sometimes uninformed, which makes reasoned deliberation more difficult. Ignorance makes debate worse. Representatives recognize a gap in information and seek to improve debate by filling that gap with expert knowledge. The point is to elevate existing conversation by increasing information and encouraging deliberation.⁶⁷

Expanding Possibilities: John Haught

John Haught wants good debate. Specifically, he wants good debate between religion and science, in which many different perspectives inform productive deliberation. Haught, a professor of systematic theology and director of the Woodstock Theological Center at Georgetown University, intervenes primarily in debate over human origins (see Table 3.1). As seen in Chapter Two, such debate is the site of one specific conflict between biblical creationism and Darwinism. Haught attempts to bring these together productively.

Haught's theology combines Teilhard de Chardin's process theology with an evolutionary account of human origins. In Haught's kenotic theology of evolution, God is

⁶⁷Other examples of representatives who use the "elevating the conversation" approach are scientists such as Julia Parrish, Kenneth Miller, Robert Spitzer and Dean Hamer.

self-emptying. Divine love becomes creative force in the world, not as a direct act of creation that shapes the world in specific ways, but as an enabling force that fuels the growth of the world. The details of this theology are complex, but the bottom line is that Haught provides an account of God and the world that describes evolution and other related natural processes as expression of creative power emptied from God into the world. Haught thus offers a theological alternative to the conflict model of religion and science.

Despite his religious affiliation, Haught sometimes appears to be taking sides against religion. For example, Haught served as an expert witness in the *Kitzmiller* Intelligent Design case, in which he testified that ID was religious in origin and therefore should not be taught in science classes. The National Center for Science Education recognized Haught's efforts with a "Friend of Darwin" award. But Haught does not see this as opposing religion. Instead, he is opposing bad debate. For Haught, deliberative debate means better understanding, not just of opposition but of one's own position:

In my theology of evolution I ask: What might the Darwinian understanding of the life story mean when viewed from the perspective of Christian faith, and what are the implications of evolution for understanding the content of faith? For me, what comes out of this kind of reflection is that I can't think about God the same way after Darwin as I did before. The conversation with science allows us to dig deeper into the meaning of our faith traditions. What difference does it make to our understanding of God that the world's life-story comes about by evolution rather than by instantaneous magical interventions?⁶⁸

Haught grounds his criticisms of human origins debate in a normative vision of informed, deliberative debate. From Haught's perspective, these debates are not as good as they could be. The problem is that the conflict narrative drives non-deliberative participation based on ignorance of theological possibilities that bring religion and science together in productive dialogue. Such possibilities exist, and as a theological expert

⁶⁸Quoted in "Conversation with John Haught on Evolution, Intelligent Design, and the Recent Dover Trial," by Adam Shapiro, *The Global Spiral*, published 19 April 2006, last retrieved 10 June 2010 from http://www.metanexus.net/magazine/tabid/68/id/9482/Default.aspx.

he has created some of those possibilities himself. Yet ignorance persists, even among other experts. For example, in speaking of the new atheists (e.g. Richard Dawkins, Sam Harris), he laments:

My chief objection to the new atheists is that they are almost completely ignorant of what's going on in the world of theology. They talk about the most fundamentalist and extremist versions of faith, and they hold these up as though they're the normative, central core of faith. And they miss so many things. They miss the moral core of Judaism and Christianity – the theme of social justice, which takes those who are marginalized and brings them to the center of society. They give us an extreme caricature of faith and religion.⁶⁹

But Haught does not restrict his criticism to the new atheists. He also criticizes religious participants in human origins debate. Either because they are not aware of possibilities, or because they are not committed to the ideal of deliberation in public debate, religious participants sometimes work against good debate. For Haught, this is as big a problem as any caused by the new atheists:

But when any Christians reject evolution these days, one may presume that they usually, though not always, do so on the basis of a literalist style of biblical interpretation. It's this that concerns me. Combined with the principle of private interpretation of Scripture, biblical literalism can end up short-circuiting the process of public debate, justifying almost any domestic and international policies one finds convenient.⁷⁰

Obviously Haught wants good debate over human origins, and measures his criticism in terms of how people contribute to better or worse debate. Yet Haught cannot simply make theological expertise available. Not all people are experts. And if people are already unwilling to deliberate, then adding more information means only increasing the number of things that they do not deliberate about. Haught's approach, then, is

⁶⁹Quoted in "The Atheist Delusion," by Steve Paulson, Salon.com 18 Dec, 2007, last retrieved 8 June 2010 from http://www.salon.com/books/feature/2007/12/18/john haught/.

⁷⁰Quoted in "The Atheist Delusion."

to convince elites that productive alternatives exist. Ideally such knowledge will trickle down through public conversation into ordinary people's understanding. But Haught recognizes that elevating the conversation solely through theological intervention in elite public debate may not work. When asked about the future of science and religion dialogue, he replied:

I'm not terribly optimistic that much is going to happen on a broad cultural level, but I am optimistic that both scientists and theologians will see more importance to the conversation than they have up to this point. In a secondary way, once more people start talking about issues in science and religion, this may have an effect on education and on culture, but I don't see this happening overnight. I'm hopeful, but I'm not optimistic.⁷¹

Haught's vision of deliberative public life goes unrealized in the debates that he observes over human origins. His expert theological knowledge allows him to recognize a lack of information in these debates, and provides him with the intellectual resources to contribute expertise that should, in theory, elevate the conversation about human origins. He does not advance a particular moral agenda, and he works within existing debate. These two distinctions mark Haught's approach to representation as different from the previous two approaches. But Haught also recognizes that "elevating the conversation" is an approach that is at best diffuse, indirect, and partial in changing public debate.

Improving the Signal: Gavin Schmidt

Like Haught, Gavin Schmidt, a research scientist in climatology at the NASA Goddard Institute for Space Studies,⁷² sees current public debate as underinformed and therefore not as good as it could be. As a scientific expert in climate modeling and climate change, Schmidt's concern is that debate over the environment is increasingly distant from scientific evidence. This is not simply ignorance on the part of participants. From

⁷¹Ouoted in Shapiro, "Conversation with John Haught."

⁷²See official bio page at http://www.giss.nasa.gov/staff/gschmidt/.

Schmidt's perspective, participants looking to improve their political position pollute debate by illegitimately claiming scientific authority for their public talk:

It's clear that there are a lot of people who talk about politics who are neither interesting nor objective. When it comes to discussing what to do about climate change, it appears to be a fact of life that people will use the worst and least intelligent arguments to make political points. If they can do that by sounding pseudoscientific — by quoting a paper here or misrepresenting another scientist's work over there — then they will. That surprised me before I really looked into it. It no longer surprises me.⁷³

From Schmidt's expert perspective, people are not informed enough about current scientific findings to distinguish between good science and bad science. Obviously Schmidt has a position on the importance of scientific evidence and a position on what the correct understanding of climate science ought to be. His activity could be seen as public crusade to convert others to his point of view. However, like Haught, Schmidt emphasizes good debate as more important than political victory. The goal is not to win an argument and get your way, but to enable a better debate than what is happening now, even if that means that you might ultimately be disadvantaged in a competitive public arena. Good debate, meaning informed and deliberative debate, is most important:

I don't advocate for political solutions. If I do advocate for something, (and if you put your voice into the public sphere, then it has to be to advocate for something. Why would you do it otherwise?) My advocacy is much more towards having more intelligent discussions, which is completely naive and stupid and I realise that.

Schmidt participates in environment debate by presenting data and providing additional resources to "elevate the conversation" about climate change. Unlike public crusaders who seek only to convert others, and unlike representatives such as Al Gore who try to "set the stage" by first winning the argument over evidence in environment

⁷³All quotes from "The Physics That We Know: A Conversation with Schmidt." **EDGE** magazine, 29 June 2009, last retrieved 8 June 2010 from http://www.edge.org/3rd_culture/schmidt09/schmidt09_index.html.

debate, Schmidt rarely presents arguments against those who disagree. Rather, he promotes the use of scientific evidence through a website called RealClimate.org. RealClimate.org provides summaries of the latest scientific findings on climate science, answers frequently asked questions about climate science, and engages in public conversation through blogging and commentary. Schmidt uses his particular expertise to provide resources and interact with interested persons in order to improve the quality of debate:

Over the past five years, I have spent a lot of time building up resources. We spend a lot of time building background for journalists, staffers, and for science advisors of various kinds. We're building up resources that people can use so that they can tell what is a good argument and what is a bad argument. And there has been a shift. There has been a shift in the media; there has been a shift in the majority of people who advise policymakers; there has been a shift in policymakers. This kind of effort — and not just by me, but also by other equally concerned people — has had the effect of elevating the conversation.

But, like Haught, Schmidt has doubts about whether the approach of "elevating the conversation" will actually work to improve debate. From Schmidt's perspective, there are too many people with interests in bad debate. Bad debate is politically useful, as it creates confusion and breaks apart competing political interests. So "elevating the conversation" may not actually be a solution to achieving good debate:

The problem is that the noise serves various people's purposes. It's not that the noise is accidental. When it comes to climate, a lot of the noise is deliberate because if there's an increase of noise you don't hear the signal, and if you don't hear the signal you can't do anything about it. Increasing the level of noise is a deliberate political tactic. It's been used by all segments of the political spectrum for different problems. With the climate issue in the US, it is used by a particular segment of the political community in ways that is personally distressing. How do you deal with that? That is a question, which I am still asking myself.

Like John Haught, Gavin Schmidt understands public debate to be something that is already happening. It can be better or worse. Schmidt's scientific expertise provides

insight into problems of uncertainty over what counts as good scientific information. He recognizes that some persons exploit this uncertainty to subvert good debate. But rather than trying to fight political battles, Schmidt emphasizes "elevating the conversation" by contributing his scientific expertise into the areas where that can (perhaps) make a difference. While he is not necessarily optimistic about the efficacy of this approach, he persists in this approach because it does not detract from good public debate even if others try to do so.

Both John Haught and Gavin Schmidt take positions in their respective debates. However, they do not necessarily take a position against anything but uninformed, non-deliberative debate. "Elevating the conversation" means adding better information, not striking out against those who disagree. Unlike those who engage in the public crusade approach, representatives who "elevate the conversation" are committed to good deliberative debate and are not looking to convert others. But unlike the "setting the stage" approach, "elevating the conversation" requires working with debate as they find it rather than trying to set up conditions for future good debate. In the "elevating the conversation" approach, representatives use their expertise to elevate the conversation that is already happening. They want good debate. They understand good debate to be informed and deliberative. They work to increase information and deliberation in debate, even as they express doubts about whether anything at all will change.

3.1.4 Representatives and Good Debate

Do representatives want good debate? Sometimes. But representatives have different ideas about what good debate is and whether it is desirable. With respect to normative ideals of deliberation, sometimes representatives pursue good debate. But sometimes representatives seek only to win arguments, eliminate different points of view, or change

the grounds of debate.

Three approaches show up among all levels of representatives and across the four debates in this study. In the "public crusade" approach, representatives seek to advance a moral agenda and convert people to their point of view. This requires avoiding debate where possible, and suppressing debate where necessary, in order to minimize opposition to their crusade. In the "setting the stage" approach, representatives seek to establish good deliberative debate. This requires doing whatever is necessary to establish the preconditions for such debate, though representatives do not always agree on what those preconditions should be. Finally, in the "elevating the conversation" approach, representatives seek to improve existing debate. This requires using expert knowledge to identify weaknesses and add useful contributions to debate, even if those contributions might not make a difference.

None of these approaches are entirely compatible with normative ideals of deliberative debate. The "public crusade" approach, most obviously, involves actively avoiding engagement with other representatives, making it impossible for deliberative debate to even begin. The "setting the stage" approach, while it may ultimately be directed toward ends that are compatible with deliberative debate, nonetheless pursues means (e.g. refusing to engage with those who disagree on factual matters) that are incompatible with deliberative debate. And even the "elevating the conversation" approach does not actually encourage engagement, instead promoting additional contributions from a representative's own perspective to inform the debate that (presumably) other representatives would be having. None of the three approaches to representation involve the active pursuit of deliberation in public life.

But are there important differences between categories of representatives? Are some representatives more likely to pursue approaches that are more inimical to deliberative debate? The answer is yes. But perhaps surprisingly, the distribution of these approaches

actually has more to do with visibility than with any categorical distinction. Whatever the category, whether religion, science, or other, higher visibility representatives take approaches that are least consistent with normative perspectives on good debate. "Public crusade" can be found anywhere, but it is prevalent among the highest visibility representatives in the sample. Similarly, "elevating the conversation" can be found anywhere, but it is prevalent among the lowest visibility representatives in the sample.

Given that science representatives tend to be lower visibility, while religion representatives tend to be higher visibility, it it tempting to say that science representatives are more inclined toward deliberative debate, while religion representatives are less inclined toward deliberative debate. But at the same levels of visibility, science and religion representatives look alike in their approaches to public debate. Higher visibility science representatives (e.g. Richard Dawkins) take the same "public crusade" and "setting the stage" approaches as religion representatives. Similarly, low visibility religion representatives (e.g. John Haught) take the same "elevating the conversation" approach as low visibility science representatives.

In short, the most visible representatives in these debates, whatever their affiliation, are mostly likely to approach representation in ways that are most inimical to good deliberative debate. While this may not be generalizable to all representatives in all debates, it does actually account for many of the most visible representatives in these debates. Of course, it is tempting to take this as evidence that some approaches "work" better than others for making people more visible in mass media. This is what many studies of media bias do (e.g. only look at most extreme, only pay attention to controversies, etc). Setting aside the empirical fact that most of these supposedly consistent methods for gaining public visibility do not actually work consistently (see Sobieraj 2011), the question here is not about how representatives become visible. Rather, the question is whether representatives, whatever their ultimate goal or purpose, approach public life in

a manner consistent with normative preferences for good debate. The short answer is that, in general, they do not.

This finding is crucial for understanding how and why people think that these debates are bad. Recall that most scholars and popular authors attribute the lack of quality in these debates to the relationship between religion and science. A bad relationship between religion and science, the theory goes, is imported and reproduced in public debate. Problems of public debate simply reflect problems between religion and science. Yet, even setting aside the absence of such a relationship in public talk (see Chapter Two), the findings here point in a different direction. Certainly problems of public debate are directly attributable to the behavior of the representatives in public life. But most representatives are behaving in ways inimical to good debate. It is just really unusual for representatives to seek out, and develop, the encounters and engagement that marks good, deliberative debate. So the problem in these debates is not the relationship between science and religion. The problem is more general. What representatives do impedes, to a greater or lesser degree, the good debate that normative theorists of deliberative democracy want to see. This is especially true of higher visibility representatives.

If normative theorists were the only ones put out by this behavior, then this would simply be an academic exercise. But, as I established in Chapter One, what representatives do in public life has constitutive effects. Public debates are important because of their implications for broader talk among ordinary Americans. Debates in public life become conversations at the dinner table, the pub, and the water cooler. What does it mean that the most visible representatives in these debates are also the least likely to engage in good debate? What are the implications for the vast majority of Americans who are not (officially) normative theorists? Is it even a problem? Do ordinary persons want good debate?

In the following section, I focus attention on the processes by which problems with

representatives shape what ordinary Americans think about these four debates. This requires investigating how people actually evaluate representatives in public life. Do ordinary Americans want a deliberative public sphere? In theory, such preferences for public talk could conflict with the approaches that representatives take to public debate. For example, if ordinary persons want good deliberative debate, there may be conflict with representatives who engage in public crusade. If people think that public debate is a waste of time, there may be conflict with representatives who "set the stage" or "elevate the conversation." And even "elevating the conversation" could be seen as an insulting attempt to compel ignorant people to agree with knowledgeable scientific experts. Whether these potential problems become actual problems or not depends on how ordinary persons evaluate representatives. So I now turn to the second version of this chapter's question.

3.2 How Ordinary Persons Evaluate Representatives

Do ordinary persons want good debate? This is an important part of the overall question about good public debate. Representatives are a key element in public life. But ordinary people still matter. They talk, they organize, they vote. And they do these things based on their evaluations of public talk. The perceptions and actions of ordinary people are an important product of public debate. While representatives are important because they are the ones talking in public, ordinary people are important because they produce and reproduce social categories through their everyday actions.

As with representatives in the previous section, this question is a better analytical question than it is an interview question. There are many reasons why a person would avoid saying "I do not want good debate," even if, analytically, that is how we might interpret their answer. Unlike representatives, however, ordinary persons are generally

available to be interviewed. To answer the question for ordinary persons, I constructed an interview schedule that looks at multiple dimensions of evaluation in public life. By "evaluation" I simply mean how and why persons recognize something as good or bad.⁷⁴ How ordinary persons evaluate what representatives are doing in public religion and science debates provides information about their own preferences in public debate. Their underlying model of good debate emerges as they evaluate different public activities using different kinds of information.

Examining how people evaluate representatives is standard practice for scholars of institutional politics. What ordinary persons think about representatives in institutional politics matters because, as voters, they can remove representatives from power in the next election (Przeworski, Stokes, and Manin 1999). As a result, there are many studies of how people evaluate representatives in institutional politics. These studies consistently find that voters want representatives who help them get their way, and vote based not only on direct substantive political similarities (Downs 1957, Enelow and Hinich 1982, Rabinowitz and Macdonald 1989) or interests (Dahl 1956, Schattschneider 1960, Denzau and Munger 1986), but on evaluative "shortcuts" such as candidate gender (Koch 2000, 2002), race (Sigelman et al. 1995), and religion (Jelen 1993).

The expectation from institutional politics is that ordinary persons do not want good debate. They want to get their way, and they prefer representatives who help them do that. Whether or not this is also true for the public sphere remains an open question. In the few studies that are available, sociologists have not focused on whether ordinary persons want to see good debate. Instead, they have focused on assessing the value of

⁷⁴A more technical answer is that evaluation is granting or withholding symbolic power based on comparison of activity to norms. Consider Bourdieu (1991:192): "Political capital is a form of symbolic capital, *credit* founded on *credence* or belief and *recognition* or, more precisely, on the innumerable operations of credit by which agents confer on a person (or on an object) the very powers that they recognize in him (or it) ...Symbolic power is a power which the person submitting to *grants* to the person who exercises it ...It is a power which exists because the person who submits to it believes that it exists."

deliberation in public talk for achieving particular public goals. Schneiderhan and Khan (2008), for example, demonstrate a "deliberative difference" in the quality of decision-making and opinion formation both in experimental and in observational settings. Participants in Perrin's (2006) discussion groups cultivated a broader "democratic imagination" through their discussions of various hypothetical political scenarios (see also Polletta and Lee 2006). Lee (2007) shows how the formalization of participation in conservation efforts led to a decline in inclusion of local perspectives and a decline in the overall quality of decision-making.

But few scholars, if any, have systematically attempted to access more general preferences about public debate that ordinary persons may hold across issues and locations (but see Ryfe 2007). The novel interview exercise in this chapter attempts to access these preferences. In doing so, it provides one of the first systematic efforts to answer the question "do ordinary persons want good debate?"

Interviews

I prepared for interviews by collecting biographical data and quotes from each representative in the sample of 43 elite representatives. This ensured that the representatives being evaluated would be distributed across categories and would vary in visibility for each debate. In order to test evaluation based on name recognition, I used the previously compiled list of the top ten most frequently mentioned people in each debate (see Chapter Two). For each of the representatives (the sample, not the top ten persons) in each debate, I compiled an anonymous resume containing information about their personal backgrounds, such as gender, age, nationality, education, religious affiliation (if known) and work history. I printed these resumes and identified them only by code number. For each representative in each debate I also collected a sample quote from their public discourse that I judged to be typical of their claims and their style of presenting those

claims. I anonymized each quote and printed them onto index cards identified only by code number.

The interview itself consisted of five stages for each debate. First, I asked open-ended questions such as "what is this debate about?" and "who do you think is debating?" Second, I presented a sample of anonymous resumes (one at a time), and asked who each person represents in that debate, and why the respondent thought so. Third, I presented a sample of quotes (one at a time) and asked who they thought the person who made that statement represents, and why they thought so. Fourth, I went through the top ten names mentioned in each debate and asked who they thought each person represented in that debate, and why. Finally, I asked them to select their ideal committee for making decisions related to that debate. I repeated this for each debate as time and respondent availability permitted. Each stage represents a different dimension of evaluation: pre-existing knowledge of the debate (open-ended), evaluation based on identity (resumes), evaluation based on interests (statements), evaluation based on recognition and association (top ten list), and finally, what qualities of representatives are most important (committee selection).⁷⁵

I conducted interviews with 62 respondents across two different locations in the United States. The sample was highly purposive, and designed to maximize range (see Weiss 1994). Because of the religion and science content of the debates, I set purposive recruitment targets based a 2-dimensional matrix of religious affiliation (proportional to general US population) and occupation (specifically, whether or not the respondent's occupation is explicitly bound to science or technology). Using these two dimensions, I generated a matrix for calculating target numbers of respondents in the sample, and pur-

⁷⁵I note that because respondents might understand different questions in different ways, despite interviewer guidance, the findings reported below do not depend solely on one dimension or interpretation of one question (e.g. not just the committee question), but hold across several different dimensions of evaluation. See Methodological Appendix for full interview schedule.

sued a highly purposive recruiting strategy for the interviews at the first site in Southern California, a city of over 1.5 million residents that is known for high-tech industries and military presence. To maximize heterogeneity, and to guard against the possibility that the interview sample reflects the peculiarities of one geographic location, I also interviewed 15 respondents at the second site in South Florida, a city of fewer than 200,000 residents that is primarily known as a tourism and retirement destination.

I contacted an initial set of respondents through existing contacts in the two communities. During the interviews and subsequent follow-up communication, I asked respondents if they knew of other potential respondents who would be interested in being interviewed for this study (snowball sampling), and emphasized that I was looking for the contacts who would be most different from them (in their view). The resulting sample met the purposive targets at each location as well as within the total sample, and also ranged usefully across such dimensions of difference as age (18 to 79, median 40), gender (45% male, 55% female), and more fine-grained religious differences (e.g. atheist vs. unaffiliated spiritual, Methodist vs. Presbyterian). All interviews were digitally recorded, professionally transcribed, and analyzed using computer assistance to manage the grounded theory process (see Strauss 1987).

3.2.1 Representation as Cartography

In each interview respondents had the opportunity to describe a given debate. Before seeing any names, resumes, statements, or any other potentially guiding information, respondents told me what they thought about the debate in terms that made sense to them. How they talked about a topic varied. Sometimes respondents preferred to describe groups of people, such as "scientists" or "creationists." Sometimes respondents described debate in terms of positions, such as "pro-evolution" or "pro-environment."

Sometimes respondents simply did not say anything at all (e.g. "I don't know enough about it, really.") And similar to many responses to open-ended questions throughout the interview (and in interviews generally, see Luker 2008), substantive answers sometimes emerged only in dialogue or following prompting or challenge on the part of the interviewer, rather than being clearly presented in finished form.

But while respondents varied in their specific approach to describing what debates are about, they consistently distinguished between debates that are about religion and science and debates that are about something else entirely. In almost every case, respondents described human origins debate and stem cell research debate as some variation of religion and science, whether as specific persons ("creationists vs. scientists") or in more general terms ("religion vs. science"). And in almost every case, respondents did not see sexuality debate or environment debate as religion and science debates. Sexuality debate is seen primarily as "religious vs. gays" or "no conflict/don't know." Environment debate, by contrast, is seen as multi-sided, with the sides varying among politicians, scientists, environmental activists, religious persons, and corporate industry.

Given that I selected each of these debates based on the involvement both of religion and of science, the fact that some debates are seen as religion and science debates while others are barely seen as involving religion and science at all is a basic refutation of the idea that religion and science are inherently conflictual or opposed (see also Ecklund, Park, and Sorrell 2011, Evans 2011, Longest and Smith 2011, Scheitle 2011). But the more important point is that respondents' internal maps of what debates are about align neatly with the distribution of prominent representatives in those debates. This is instructive for how we understand the role of representatives in public debate more generally.

Religion and Science Debates as Religion and Science

The vast majority of respondents understood human origins debate to be some version of "creationists vs. scientists" or "religion vs. science." For example, Jennifer describes it as a "kind of a science versus religion debate" where the "most vocal" participants "are the fundamentalist Christians basing their [position] on the Bible." Jennifer specifically recalls going to a religious school as a child, where "they were teaching us that it was exactly 4,004 years before Christ that the world was here and dinosaurs are a myth put there by God to confuse people and scientists are wrong and that kind of thing." She also notes that members of a local religious community consistently challenge her "friends who teach biology in schools" whenever they teach concepts related to evolution. After relating these various anecdotes, she summarizes human origins debate as "scientists versus fundamentalist Christians."

Jennifer is hardly alone. Nor is her approach to answering the question unusual. Respondents often drew on personal experiences with their friends, neighbors, and coworkers, as well as what they saw in newspapers or on television, to describe what the debate is about, who was debating, and what the overall debate tended to look like. Respondents also tended to describe debate in multiple ways in response to prompting. So, for example, Yuri describes human origins debate as being among a variety of creationists, including "Christian pastors" and "Jewish rabbis" but that people arguing "for the evolution part [are] mostly people who doesn't believe in God." She explicitly admits that her framing of debate reflects her knowledge of the creationist position, and allows that her "bias come[s] in because I'm not as harsh as how I view the evolution people."

While there is some variation in how respondents describe and articulate their understanding of human origins debate, clearly respondents consistently see it as some version of religion and science debate. Whether it is creationists vs. scientists, creationists vs.

atheists, or simply religion vs. science, respondents see this debate as structured entirely by a conflict between religion and science in some form. This is consistent with what the epistemological conflict model would predict. Respondents describe competing claims about human origins, with science offering an evolutionary account and religion offering a creationist account that cannot both be true.

Like human origins debate, the dominant mode for describing stem cell research debate is in religion and science terms. But in contrast to human origins debate, stem cell research debate appears to be understood primarily as an issue of moral positioning. Note that there are several variations that describe stem cell research debate as a kind of expression of moral objections. Zoe, for example, says "some people don't believe that we should have that right to genetically manipulate or clone or whatever, but other people believe that it's part of progression, it can help cure illnesses and diseases, so why not continue on that research?" In discussing who is involved in the debate, she specifies "the very religious people, they definitely are the people who are very against it and think it's against God, think it's unnatural," while "people who are more scientifically inclined want to do everything they can to cure diseases and fix things and make a better future."

Like Zoe, many respondents saw stem cell research debate as religious people making moral claims on science, even while recognizing potential benefits of scientific research. Max, for example, cited a study that he had read where a child had "had an IQ of maybe 40," but "after injecting fetal stem cells into his brain, he was able to tie his shoe, hold his defecation and actually communicate." But he quickly points out that there are many moral issues involved that have to be worked out. He says, "if you're going to be using fetal stem cells and you could say, well, then people will just have babies for stem cells. But then you're like, well, you can only use aborted ones. Well, then people will have abortions for stem cells. So then it becomes a moral issue."

Like the human origins debate, the stem cell research debate provokes respondents

to describe debate in primarily religion and science terms. However, this is not because of competing epistemological claims, but rather because of moral claims that are seen to originate in religious traditions competing with moral claims implied by the science of stem cell research (see also Evans and Evans 2010, Evans JH 2010). As Erika puts it, the debate is really about what to do given "the scientific research that's taken us into uncharted waters." In most cases, respondents understand this debate to be primarily about religion making moral claims to which science must, in various ways, respond. While the resulting "religion vs. science" description is consistent with what a conflict model might predict, the reasons for that description are not expressed in terms of epistemological conflict. But more importantly for the theory I elaborate later in this chapter, respondents still see both debates in religion and science terms.

Religion and Science Debates as Something Else

In debates over the environment and origins of sexuality, while religion and science participate, debates are not seen as primarily religion and science debates. Only three respondents explicitly talked about sexuality debate in religion and science terms. Morris, for example, has talked about this debate "in Sunday School class" and basically thinks that it is about whether being gay is "biological or choice." For Morris, those who are arguing are "scientists of course, geneticists and whatnot, as opposed to those who are religious conservatives."

But for the most part, respondents see debate over origins of sexuality as a conflict between religious people and others. Barry, for example, says that it "is more of a religious debate on whether being gay or straight is correct from the point of view of – I don't want to say going to heaven or hell, but from a religious standpoint, is it acceptable." Clarifying who might be debating, Barry says that "I think it is the Catholic church that is doing most of the debating and I think they're debating with the gay community but

much more so with themselves about the apparent kind of hypocrisy of – now I'm not an expert on the bible but what it says to be – love thy brother and yet don't love thy brother if they're gay." For Barry, debate over the origins of sexuality is rooted in a religious issue that manifests as debate over how to treat gay people in society.

Though respondents consistently identified religion as important, they usually imagined the other "side" or "sides" not as scientists or even science more generally, but as gay persons. For example, Sterling describes the debate in terms of gay persons defending themselves against (primarily religious) people who are trying to limit them. Sterling has "a family member who's gay, if that matters" and notes that "the gay advocacy groups are very strongly vocal" and "trying to make the point on this issue." He thinks that "the only people arguing against them are just people that are just saying, 'That's wrong," which fortunately is not "a huge vocal opposition." Similarly, Anita sees gay persons as defending themselves in public debate against moral attacks. In Anita's terms, gay people "want to be accepted by society, be recognized," but must defend against "the other side," which is "people are raising their children, and they have a concern [about gay people]."

Sexuality debate is not generally understood in religion and science terms. But it is sometimes not even considered in debate terms. Alexander, for example, while admitting that "this [debate] is something I'm not so familiar with," nonetheless suggested that it was probably about personal experiences, where "some people believe that there are things that you learn, how you're raised, and that's how you come about, that's what you become," while "other people believe that you are born with the God-given destiny, and that's where you live." For Alexander and several others, the debate is not so much an overarching conflict, but more of a discussion about how to make sense out of one's own experiences and beliefs. But whether framed as conflict or not, this debate did not prompt respondents to describe it in religion and science terms, despite the involvement

of religion and science in public talk about the issue.

Environment debate is primarily seen as a multi-sided debate with extensive political and activist involvement. As with sexuality debate, while some respondents describe the debate in religion and science terms, most do not. No clear consensus emerges. For most respondents, the debate is about some combination of politics, science, religion, industry, and activism. What that combination includes varies considerably, but rarely does anyone consider this to be a religion and science debate.

To the extent that there is common ground in how respondents see this debate, it is that environment debate is an arena for different interest groups to promote their agenda, with religion and science not registering among the most prominent groups. Harvey talks about watching specials on the History Channel and how "Gore is so prominent," but says that when it comes to debate, he "usually hear[s] it through whatever political lies are said," and that "political parties at large pretty much bring the thing up every once in a while as an issue to try to attract votes when the elections are on." Scott similarly describes this debate as being among "folk that have an economic interest, folks that have I guess I would say a moral interest from the standpoint that their personal morals motivate them to become involved because of a perceived injustice, and people that have not so much an economic interest in the results of the argument skewing one way or another but rather folks that have an economic interest in there being an argument at all"

Even when respondents recognize that environment debate could potentially be religion and science debate, they point out that it generally is not a religion and science debate in practice. Leo, for example, says that "there isn't a whole lot of people left who don't see climate change as an issue" and that "there's very few who deny that it's even occurring." Even "younger Christians, especially in the evangelical sector, are seeking solutions to climate change trying to reverse." When I asked him where the older

religious persons, especially evangelicals, stand, he replied "I just don't think it's that big of an issue. Older evangelicals are more concerned with moral issues, for example abortion, homosexuality, whereas younger evangelicals have a different focus on social justice, sound environmental polity, things like that." For Leo, even if older religious people could in theory make this more of a religion and science debate, they do not do so, because they are arguing elsewhere. As with sexuality debate, respondents simply do not see environment debate in religion and science terms.

Representatives as Boundary Markers

Despite the involvement of religion and science in public debate over the origins of sexuality and the environment, neither of these debates are seen by respondents as religion and science debates. At a basic level, this finding refutes the idea that religion and science are inherently opposed. How ordinary persons understand these debates cannot be predicted by the involvement of religion and science in public talk.

But that does not mean that these evaluations are unpredictable. In fact, how ordinary people see these debates maps neatly onto the distribution of representatives (and, to a lesser extent, to the distribution of talk). The most prominent representatives in human origins debate are either religion or science representatives who are closely associated with conflicting positions, in this case evolution and creationism. The most prominent representatives in stem cell research debate are religious leaders and politicians who are making moral claims against science that are grounded in religion talk. Both of these debates have visible religion and science representatives; both are seen as religion and science debates.

Similarly, the most prominent representatives in debate over the origins of sexuality are various religious leaders, gay activists, and ex-gay activists who primarily take progay positions grounded in political discourse and anti-gay positions based in religious

belief, even if such arguments are expressed as support for various scientific propositions about genetics or behavioral conditioning. The most prominent representatives in environment debate are a mix of political actors and religious leaders who sometimes use religion talk, but do so primarily to align with business interests or to minimize the importance of the environment issue entirely. Both of these debates have a range of representatives that are not clearly religion and science representatives; both are seen as something other than religion and science debates.

Obviously it is not the case that every respondent has a master list of prominent representatives to which they refer in describing these debates. But there is an inescapable alignment between the mental maps of debate that respondents hold, and the maps of public talk produced by the distribution of prominent representatives (see Chapter 2 for more detail). What ordinary persons understand debate to be is entirely predictable with reference to the most prominent representatives who show up in these debates. In this sense, prominent representatives serve as boundary markers for public debate.

To be clear, I do not have a comprehensive theory of how representatives become prominent, or even necessarily how each person constructs a map that aligns with the distribution of representatives in public talk. However, the empirical finding that representatives usefully predict the shape of debate confirms the theoretical idea that representatives are constitutive in public life. The fact that even "religion and science" debates are not always seen as religion and science debates further supports the idea that such a theory can move us beyond "religion and science" explanations for bad debate and toward a more general theory of representation and evaluation in public life. To pursue this point, I now turn to an analysis of how respondents evaluate representatives in these debates.

3.2.2 The Deliberative Frame

By the "deliberative frame" I mean that respondents primarily evaluate representatives in terms of openness to multiple perspectives, respect for conflicting positions, and commitment to ongoing discussion. In each dimension of evaluation, respondents mobilize a deliberative frame within which the representative is evaluated. Evaluation sometimes appears to be based on shortcuts, for example based on apparent identity or interests, that seem unrelated to norms of public debate. However, respondents primarily use such shortcuts to assess the open- or closed-mindedness of a representative. The assessment of deliberative potential outweighs agreement with the representative's position or resemblance to the representative's apparent constitutency.

Evaluating Resumes

In the resume portion of the interview, respondents review anonymized resumes of selected representatives that include information on things like age, education, nationality, employment history, publications, religious affiliations, and awards. Not every respondent gives the same importance to each factor in the evaluation process. The consistent finding is that, whatever factors they think are important, respondents negatively evaluate those resumes that they think signal closed-mindedness.

In some cases respondents use conservative religion, or affiliation with conservative religious organizations, to evaluate a representative as closed-minded. For example, this is how Samuel assesses the resume of a prominent author and "family values" activist affiliated with conservative Christian group Focus on the Family:

Yeah, this one would be in opposition to [gays]. It's pretty cut and dried, just based on the books that he's written. Again, focusing on the American values. So it's more the traditional versus opening up to other options. So, yeah, I would definitely think that, because of his religious background.

But note that this evaluation process is directed toward a deliberative ideal, not just against religion in particular. Respondents also negatively evaluated any resumes that seemed to indicate a fixed perspective or apparently illiberal commitment to one point of view. This includes the resumes of scientists. Commitment to science is sometimes seen as inhibiting rather than encouraging good debate. For example, in evaluating the resume of a prominent, award-winning endowed professor of science, Holly remarks:

He's a researcher, obviously. He represents more science-based, probably more closed-off science-based population as opposed to researchers. [I mean] just a more research-based closed-minded population that don't necessarily look at all the facts and think that perhaps only their viewpoint and their research is the most that matters.

Likewise, respondents positively evaluate those who appear open-minded or objective, including some scientists and religious moderates. In assessing the resume of a conservative Christian broadcaster and activist, Lydia responds:

This is also a really bright person. And this is really a passionate person. I wouldn't say fundamentalist – she's not fundamentalist – it's not that. She's sort of – this is the woman who's trying to bridge the gap between [one side] and [the other side]. She's coming up and trying to talk really intelligently about it.

And Barry invokes a number of identity-related factors in his positive evaluation of a research psychologist's resume:

[B]ecause this person is an author of scientific papers on sexual orientation, I'm assuming this person has researched sexual orientation and has a more balanced view of it. Now there are things that might counter what I'm saying here. Traditionally an older population is not always as open to diversity. [Representative] is associated with the Presbyterian Medical Center. In my experience religion fosters a more conservative attitude towards the gay community but I'm not going to assume that because I've had a lot of friends myself who are very religious yet very open to the gay movement.

Evaluating Statements

In the statement part of the interview, respondents evaluate statements that representatives have actually made in public debate. I draw these statements primarily from the sample of articles used in Chapter Two. I note that the statements and the resumes draw from the same pool, but do not necessarily match up. A respondent does not see only statements from the representatives whose resumes they evaluate in the prior exercise. The instructions to respondents include direction to avoid guessing or matching statements to resumes.

In evaluating these statements made by representatives, respondents negatively evaluate language that takes a strong, fixed position or specifically targets someone else's position. For example, Harvey evaluates a statement claiming that environmental problems are an offense against God:

I think this is a rather narrow-minded view, and it's anti-environmentalist. This guy will take a crap in his kitchen and make a statement like that and call it an offense against God.

Respondents were particularly sensitive to tone in statements made by putative representatives. In responding to a quote from a prominent scientist about how people who don't believe in evolution are ignorant, stupid, or insane, Morgane disagrees with the claim about evolution, but expresses greater concern about the tone of the statement:

Well, I disagree with this statement wholeheartedly, of course. And this person is obviously not just an evolutionist, but somebody who lacks any kind of integrity or compassion or just basic communication skills.

In evaluating a statement from a prominent conservative religious activist referring to the "homosexual agenda" as "a beast that wants our kids," Arthur sarcastically replies "That's not inflammatory at all. This person is obviously rabid." And Daniela says:

I strongly disagree with this. I don't know – I think it's because of the word "beast." Well, it really – I think a lot of the ways the really conservative religious people in this particular debate really shoot themselves in the foot [is] by using words like "beast." And the way they frame this ...I mean, they use words that make them seem nonhuman. Just like in war, all right, the way the military community would talk about the enemy in ways that are nonhuman to make them easier to kill.

But this is not simply substitution of one kind of disapproval for another. Respondents often negatively evaluate a statement even when they otherwise agree with the substantive claims in a particular statement. They identify similar interests, but reject the representative on deliberative grounds (see also Wolfe 1996, Evans JH 2010). For example, Dwight evaluates the "ignorant, stupid, or insane" statement similarly to Morgane, even though Dwight is staunchly pro-evolution:

That is a little harsh. I like to think that I'm not that judgmental about them. They have a belief or disbelief in evolution, and there's reasons behind it, and the best you can do is to try and understand those reasons.

And Don provides the following assessment of a statement that homosexuality is a "biological error:"

Whoa. I don't agree with this. There's two words you can take out and I might. I think it's biological but I don't think it's an error. You take the "error" words out and there's some truth to it. Who would say that? Somebody that was homophobic.

Likewise, respondents positively evaluate statements that are explicitly open to different conclusions, or cognizant of alternative positions without condemning them. For example, Solomon positively assesses a statement made by a senior fellow at a conservative think tank:

This could have been a scientist, it could have been a spiritual leader ...spiritual there meaning a grounded person. This is the statement that comes

closest to my opinion, and I think this is a person who came to this conclusion by perhaps his own experiences or observations. But this is a person who would be open to, again, listen[ing] to the other points of view. This is a person who you'd want to have in a group discussion to introduce mutual ideas.

And Ian evaluates a statement by a prominent conservative Christian activist:

At least I can respect this person. Mainly from his tone of voice. He believes. It makes it an opinion on his part rather than an edict, which I respect. I disagree with it. It probably represents a church group as well.

Obviously respondents use shortcuts, but note that respondents are not consistent in their use of shortcuts in evaluating resumes and statements. Religion does not always mean negative assessment, for example. The scope of this project limits the claims to be made about *which* shortcuts are most common, or what the source of particular stereotypes might be. Disagreement does not always mean disapproval. Agreement does not always mean approval. Clearly what respondents see as deliberative, or signalling openness to multiple perspectives, varies considerably. The robust qualitative finding is that respondents evaluate representatives using a deliberative frame.

Appointing Hypothetical Committees

In the committee part of the interview, respondents suggest who would be good representatives on a committee that will have the ideal debate about a topic. This question applies separately to each debate, as a respondent may have different views on what counts as ideal debate for, say, origins of the world as opposed to stem cell research. Committees can be populated with particular persons (e.g. Bob Newhart) or with unidentified members of a social group (e.g. "a scientist"), or some combination (e.g. "my minister, a scientist, and James Dobson"). The point is to see why respondents suggest one person rather than another, and what that indicates about their preferences for good debate.

In selecting representatives for their hypothetical committees, respondents consistently justify their choices with reference to the deliberative frame. This occurs in three different ways. First, respondents select individuals that they judge to be personally open-minded and respectful of other positions. Second, respondents construct committees that, as a whole, reflect their preference for inclusion of multiple perspectives and ongoing discussion. Finally, respondents pay particular attention to the ways that any committee would relate to a broader audience, rather than just to a select audience of elites or like-minded people.

Several respondents appointed representatives to their committees based on personal qualities they judged to be consistent with the deliberative frame, such as open-mindedness, neutrality, or willingness to have conversations with people who disagree. In many cases these representatives were either popular activist media figures, such as George Clooney or Oprah Winfrey, or moderate religious leaders, such as the Dalai Lama. Charles, for example, explains his choice of Dr. Drew Pinsky, host of the talk show *Loveline*:

Well Dr. Drew, I think, because I really like what he has to say about sexuality and different kinds of viewpoints about it. I think he has a really good way of articulating different arguments and doing it in ways that people aren't necessarily put off by it, even if they disagree.

Both Erika and Damien (in separate interviews) pick representatives a bit closer to home, but for similar reasons:

Erika: I know I would put my friend on it. She's a Methodist minister. Because she's very strong in her views and her views are very well considered. She's – has a real interest about people and life, has a large exposure to different kinds of people.

Damien: I think I would put my pastor in there. I'd put him in there because I think he's absolutely willing to engage in the talk and also like – also be like – not seek to punish or to treat [the other side] as outcasts or anything

by any means ...there's no sense of condemnation or anything like that, and I think – to me that's a really important thing. So [the committee] wouldn't make policies that are exclusive.

Respondents also emphasized inclusion of multiple perspectives in the overall committee composition. Selection favors representatives who will keep discussion going rather than ending debate, even if this means that no one wins the argument. While the specifics of the representatives and issues are not always the same, and the "sides" in each debate might vary, both Miley and Amanda clearly express an underlying commitment to a committee that is consistent with a deliberative frame. Asked about a (hypothetical) committee to decide what would be taught about human origins in schools, Miley responds:

Okay, well I don't know specific people. I'd probably try to have it as even as possible, maybe two religious people; I'm not exactly sure who. Two scientists, scientific people that have studied evolution and have all the evidence for it, then maybe one kind of neutral – not so much neutral, but who could get facts from both.

And on the issue of research into homosexuality, Amanda offers a more sociological perspective on representation, but still favors deliberation as the guiding principle:

Okay, I would like it to be evenly representative. And I don't think you know, necessarily the supposed ten or thirteen percent of the committee being as in the population, but more like fifty-fifty representing heterosexual and homosexual perspectives. And I'd like it to be split gender-wise as well, equally. But not all like the guys, straight guys and then you know what I mean? I'd like it to be so that there was some good equity there.

Respondents also picked committee members that they judged would help extend the conversation to a broader public audience. Sometimes this meant selecting ordinary people who they thought might talk to other people more easily. For example, in selecting committee members for a committee on environmental policy, Judith offers the following choice:

I want an electrician, just because I think that would help understand everything more. So when we present to the people our ideas, there's gonna be someone that can explain every facet of this new engine, of this new whatever. So these aren't necessarily gonna be famous people. I want to understand why this works and how it will be better. I need someone that can in laymen's terms describe it to us because I don't think people are getting on board for this stuff.

But on another issue, Judith gives a slightly more cynical take on the deliberative frame during her committee selection:

I would have it be a balance, if you will. Have someone on there that I know would disagree just to kind of, at least, appease some people and reach more people. I'd probably pick Ronald Reagan; he's my right-wing guy. Now I need females. Maya Angelou because she's so eloquent. And Ayn Rand. Really mix it up.

As Judith's quote indicates, even though respondents often held strong positions on particular issues, their commitment to the deliberative frame (whatever the motive) could override their temptation to "stack the deck" in favor of their own position.⁷⁶ Raymond, for example, does not select his committee based on issue agreement, but on his assessment of whether his putative committee members would be acceptable within a deliberative frame:

Well, the Falwells and the popes and the Pat Robertsons and the George Bushes probably would certainly not be there. I might have Al Gore there just because I respect his clear-mindedness about things. And even if he took a position that I might not agree with, I would be interested to know why I don't agree with him, you know, why he – because I think his words are reasonable, well reasoned, so I might have Al Gore on there.

Sometimes respondents admittedly stacked the deck in favor of their own position by selecting committee members who would agree with their own point of view. But

⁷⁶I do not address here the relationship between policy preferences and process preferences. Assumptions about this relationship underpin most liberal democratic (e.g. Habermasian) arguments about the role of religion in public life. Limited empirical research suggest that there is no predictable relationship (see Hibbing and Theiss-Morse 2002).

they still tended to justify their choices in terms of inclusion or open-mindedness, even when the committee was stacked in their favor. Take, for example, Pamela's committee on the issue of human origins, which emphasizes her desire for a range of backgrounds to be included:

Well, I would stack the deck on my committee and make sure that all of them believed in Jesus Christ ... because of the impact of the nature of what they're going to decide. I would want somebody on the committee who represents a broad spectrum of background, maybe has experience in a number of different facets of life, or a number of different fields of life, or a number of different experiences in life. I mean they all should have some variety of background.

And Josefina excludes people with whom she disagrees from a committee on environmental policy, but primarily because she does not see them as open-minded participants:

I don't think anybody on the, speaking from, you know, thinking that morality and environment can't go hand-in-hand, I don't think anybody like that should be on the committee. Conservative Christians ...I don't want somebody like Susan Sarandon who causes so much tension on the topic. I want somebody that's kind of a neutral figure but a face that people recognize and can talk about the environmental issues in a tone where everybody can understand it.

Despite commitments to a particular position in debate, respondents justify their choices with reference to the deliberative frame, either by appointing individuals who they judge to be open-minded and inclusive, or by ensuring that the committee as a whole reflects a wider range of perspectives. Even when they stack the deck in favor of their position, they include a range of viewpoints as well. Their use of interests in evaluation, then, is not simply to reconstruct debate to favor their own interests. Rather, they use their knowledge of representatives to construct deliberative debate that brings together many different perspectives. They seek to maximize, rather than narrow, the scope of debate.

3.2.3 The Electoral Discount

In practice, electoral politics and public debate are fully entangled. As is obvious from Chapter Two, formally elected representatives often participate in public debate, though of course the extent of this participation varies by issue. In this study, for example, few politicians figured prominently in debates about human origins (see Table 2.1) or the origins of homosexuality (see Table 2.3), while many politicians figured prominently in debates about stem cell research (see Table 2.7) and environment (see Table 2.5). But regardless of the extent to which elected officials figured in a debate, respondents apply an electoral discount in evaluating representatives seen as active in electoral politics.

I use the term "electoral discount" to bring together the ways that respondents evaluated elected representatives as less legitimate, or illegitimate, across several different dimensions of evaluation. While this is most widely articulated as a criticism of particular recognized names, such as George W. Bush, Al Gore, or John Kerry, it is also a persistent finding in respondent evaluations of resumes, statements, and hypothetical committee appointments. Respondents consistently discount the participation of elected officials in public debates.

To be clear, I do not mean simply to say that respondents are dissatisfied with government in general. Respondents do express this sentiment, for example by accusing government of doing "whatever it needs to do to appease people," referring to political debates in Congress as "a bunch of hot air," complaining about how government has "too much control" in our lives, or joking about "a [college] degree in government, I'd like to know what that would look like!" Nor are they simply unhappy with particular candidates that do not share their own views, though that is also common. I mean more that respondents see the motives of elected representatives as suspect (e.g. that they are

corrupt), that they see elected representatives as incapable of doing what people want them to do, and that they expect elected representatives to be dissimulating about what they really think. While this electoral discount shows up largely as criticisms of particular elected representatives and their purported constituencies, the sentiment also shows up throughout the interviews as a more general indictment of elected representatives.

Though I treat the electoral discount as separate for illustrative purposes, I note that it should properly be treated as a consequence of respondent preference for deliberation in public life. What is objectionable about elected representatives is that they subvert good public debate. The reasons vary. Some are seen as incapable. Some are seen as compromised. And some are seen as simply more interested in their own careers or profits than they are in public deliberation. But whatever the reason, elected representatives fail to realize the deliberative ideal that ordinary people expect in public life. The electoral discount results from the conflict of what elected representatives do with what ordinary people think ought to be done.

Evaluation without Names

I focus first on the interview elements that did not require naming representatives. Both resumes and statements are anonymized. Asking about names first encourages guessing later. Asking about anonymized resumes and statements first keeps the focus on the items to be evaluated rather than possible matches.

While there are many examples of respondents discounting elected representatives once their names are invoked (e.g. George W. Bush), I note that before even mentioning names the electoral discount showed up as an important pattern in evaluation. Respondents negatively evaluate resumes that indicated political experience. In evaluating the resume of a elected executive involved in public debates over stem cell research, Ernest immediately raises concerns about a political background:

Currently politician...as soon as you say politician, that makes me think "Is he going to do what he believes or is he going to do what it takes to get elected?"

And Connie discounts an apparent politician as not genuinely motivated by his own opinions:

Okay. This is somebody who works for the government, and so he's been taught very well to go ahead being very noncommittal in his viewpoints. Yet obviously he communicates them very well to the public because of his background in communication...and he keeps his opinions to himself.

Respondents also negatively evaluate statements that "sounded" like they came from politicians. In particular, respondents invoke politicians as examples of instrumentalists who only say things to keep their careers going. Josefina, for example, evaluates a statement about global warming as "representing more of the politicians who have spent a career not supporting this and who need to back up their statements." Respondents also express concern about links between political and economic interests. When presented with a particularly strong declarative statement declaring global warming to be a myth, Phoebe says:

I think this represents politicians. Not all politicians, but someone who is, you know, trying to create more economic growth at the expense of the environment.

At the same time, respondents often positively evaluated statements that did not immediately suggest politicians had made them, but which in reality were made by politicians. This suggests that identification as someone who is involved in electoral politics, rather than substantive disagreement over the content of the statement, prompts an evaluative discount for elected representatives. For example, although George W. Bush by name was repeatedly criticized (see below), anonymized public statements made by George W. Bush often provoked neutral or positive responses. Responding to a statement about stem cell research and human cloning, Daniela says:

I partially agree with this statement. I don't know that I would say that I strongly oppose human cloning, but I definitely agree with the rest of the statement...I think this represents a lot, I think this does represent the general American or the average American.

In selecting committees, some respondents specifically excluded politicians. Susanne, for example, refuses to appoint a hypothetical committee on the stem cell research issue, indicating that it should not be a political issue at all, and expressing serious concern about introducing politicians into the process:

In my opinion, I don't think it should be a political issue, so that's a difficult thing. So we would exclude politicians and again, to me, it's a question of education, that's not political. It becomes a political issue, and that's, to me, that is not the arena that this needs to go in.

Others exclude politicians because of characteristics they are believed to possess that disqualify them from public deliberation. Bonnie, for example, excludes "pretty much any currently active politician I can think of, because they tend not to listen." Timothy expresses a similar distaste:

I wouldn't put politicians on it. I don't think they have the brainpower, usually, or the freedom from special interests. Maybe it's not so much a matter of brainpower in every case, but they have to do something, and they have to act, and they don't have the freedom to really be careful.

And Elaine discounts the involvement of professional politicians as self-serving:

They would have to sign something that says I'm never gonna run for public office if I serve on this committee. You know, when you get these ridiculous policies that are created that nobody's ever gonna be able to follow, and they're basically created because somebody needed something to add to their resume or something?

When respondents selected politicians (either by category or by name) to a committee, they usually did so based on an assessment of politicians as substantively irrelevant, but useful for working with the public. Chantal, for example, thinks politicans can be helpful in a bureaucratic sense:

One of them would be an appointed politician. Because I think that you definitely need someone who could explain to people what's going on, and why. Someone who can do the law and handle all those type of, those political, social, the social aspect of handling all that.

Jennifer suggests that politicians provide legitimacy to the process, but clearly indicates that she could simply select the politician most favorable to her own interests:

I need a politican. Just, like, to have one on the committee just to make it seem official. A politician who is pro-gay marriage rights and I don't know who that would be. Maybe like one of those people – the mayor of San Francisco I think was on the news in some of the ads or something.

I describe below many vivid examples of negative name recognition in these debates. But it is important to remember that the electoral discount, and in particular the assessment of politicians as insincere, permeated respondent evaluations even when specific names were not presented. Respondents applied the electoral discount in open discussion, through evaluation of anonymous resumes and statements, and in the appointment of hypothetical policy committees. The basic finding is that simply being seen as a participant in electoral politics marks a representative as less legitimate in public debate. For most respondents, politicians work against good debate, if they work at all.

Name Recognition

Given the extent and frequency of electoral campaigns in American public life, it is not surprising that respondents had stronger responses to specific names of politicians that were presented to them, such as George W. Bush, John Kerry, John McCain, and Al Gore. But name recognition did not automatically mean evaluation in one direction or

another. In many cases, respondents had no clear idea who these elected representatives might represent, or what positions they might hold. Charles evaluates John Kerry in debates about environmental policy:

John Kerry, my impression of John Kerry is kind of very gray, like I don't really know that he said very much substantial and I haven't read anything by him. His campaign was a lot of rhetoric even by today's standards, which is full of rhetoric. I don't really remember anything substantial that he said.

Sometimes respondents tried to guess based on what they knew of a candidate's identity. Yuri evaluates George W. Bush in debates about human origins:

Gosh, you know, to be honest with you I would like to say he stands for creation because, you know, he has that Christian background, but I haven't personally, like, heard him, you know, say "this is what I'm believing" so I can't say for sure.

But beyond simply not knowing an elected representative's substantive commitments, respondents suggested that politicans were not capable of maintaining a substantive position. Respondents indicated that they could not evaluate a representative, not because they did not recognize the name, and not because they didn't know what the representative stood for, but rather because politicians are too instrumental to be associated with a consistently identifiable position or constituency. Take, for example, Ian's evaluation of John McCain:

Also a government guy. I'd need to find out a little bit more, I guess. I don't know who he represents quite yet. I don't think he does either. He's reading for the writers behind the curtain who say "this is what you're going to be representing." He's like "Who do I represent, guys?"

This theme resonated in Don's evaluation of John Kerry:

Can you tell which way the wind's blowing and I'll tell you what he stands for? Well, only based on the fact the he's a Democrat that I would assume

that he believes in stem cell research or the other but I mean, there's a guy that goes in so many directions. I mean, there's a man that I don't particularly like.

Rarely, respondents evaluated elected representatives neutrally or positively, but nonetheless expressed reservations. For example, while evaluating different names of prominent figures in debates over environmental policy, Holly remarked that "politicians have a little bit more of a handle than personally what I think they do," with inflection indicating that this was unlikely. Likewise, Amanda evaluates Al Gore, but with a clear caveat:

I think he's a pretty good guy, and I think he represents the environment. He proclaims to, and he's done a good job publicizing over business and consumer interests. Although he consumes a lot too, don't let him fool you.

Respondents also evaluated elected representatives as unhelpfully beholden to a particular constituency. Most commonly, respondents associated prominent political conservatives with a disproportionately influential business or religious constituency. For example, Scott evaluates George W. Bush in debates about the environment:

So the President, what does he stand for in this debate ...I think his attitude has changed during his administration. I think that he stands for corporations, frankly. He stands for corporations and is interested in preserving the economic viability of companies.

Zoe offers a similar response for debates about sexuality:

I think he's against homosexuality, maybe not preachy, but I can't see him being approving of it. I know that he's religious. I know that's Republican and Republicans are often not too happy with the idea.

Often these strong associations were understood as overriding the elected representative's own interests. Judith, for example, claims that "you don't keep getting elected over

and over without appealing to the religious element," and Sienna thinks that George W. Bush "doesn't personally believe" in an anti-environment position despite being "on the side of big business." But sometimes politicians were discounted for the opposite reason. Jennifer provides an example from debates over stem cell research, where one elected representative is discounted precisely because his political instrumentalism overrode his constituency commitments:

I recognize him. I think on this debate he is — well at first I think he's antistem cell research although I think he actually helped with some of the funding so I'm not sure. I think he represents the fundamentalist, anti-stem cell group although for political reasons, he might have some concessions that he's made over the years on that.

Erika similarly evaluates Bill Clinton:

I think he's -I'd say that he's not gung-ho. I think he hedged his bets there. I think he was trying to cater to a lot of interests and ended up helping no one.

Finally, in one of the most clear reinforcements of the "electoral discount," respondents positively evaluated politicians who left (or were about to leave) office, and used them as examples to illustrate why politicians who still are involved in electoral politics should be evaluated negatively. Sterling makes a more general case for having a former president involved in a committee, saying that a former president would be ideal because they "understood how government worked but had no incentives left because they're done." More specifically, both Anita and Raymond (in separate interviews) neatly illustrate this application of the electoral discount in discussions of George W. Bush and Al Gore, respectively:

Anita: Because of his position I don't think he can just 100 percent show or say what he needs to say. But I believe, and it's just my belief, that deep down in his heart, when he's not wearing the President hat, he'll probably come out and say what he wants to say.

Raymond: I get the sense from Al Gore perhaps because much of his activism has to do with a non-official position that it, therefore, is not bound by some of the duties he is required to perform within an official position, unlike Bill Clinton whose concerns for the environment such as they were stated during his presidency were, perhaps, politicized, that is to say toned down or otherwise altered due to his official station.

Of course people in general are distrustful of government, and of elites more generally (Hetherington 2005). And there is clearly a broad preference for sincerity in public figures that is unsurprising given the particular Protestant-centered configuration of American modernity and its manifestations in public culture (see Trilling 1972, Keane 2002). But the basic finding of the "electoral discount" is that respondents tend to evaluate elected officials more negatively precisely because they are part of the electoral process which is seen to constrain their ability to act sincerely. As elected officials, representatives can get discounted because they are not firmly tied to a position or constituency, either because it is not well known or, more consistently, because politicians are seen as instrumental. However, they can also get discounted because they are tied to a position or constituency, and in particular when a specific constituency is seen to override their ability to act independently. In short, the "electoral discount" is applied to elected representatives because they fall short of the ideal of deliberative public debate.

3.2.4 What Ordinary People Want

Do ordinary people want good debate? Yes. The preference for good debate, defined as deliberation by representatives in public life, holds consistently across a broad range of respondents and evaluative cases. While interview respondents vary in what they look for and how they interpret various indicators, they share a strong preference for, and commitment to, deliberative public debate. I call this the "deliberative frame." Respondents start from the normative position that debate should be open, inclusive,

and ongoing, and then evaluate representatives based on whether or not the representative is likely to realize this normative view. Ordinary persons expect representatives to deliberate in public life.

The most obvious example across debates is what I call the "electoral discount." Interview respondents negatively evaluate elected representatives. Ordinary persons expect that representatives will participate in public life in ways that contribute to deliberative debate. From the perspective of ordinary persons, elected representatives fail to do this. The reasons for apparent failure vary, and not every person evaluates every representative in the same way. Some representatives are discounted for different reasons by different people. But the bottom line is that elected representatives fail to realize the deliberative ideal that ordinary persons expect in public life.

Let me link these two findings together explicitly. The deliberative frame generates the electoral discount. Conflict between what people want and what representatives do creates a situation where representatives are discounted in public life. Note that this is based on understanding, not misunderstanding. Politicians do things that are entirely consistent with winning elections and gaining political power. These strategies are not conducive to, and are sometimes opposed to, good public debate as ordinary persons understand it. The electoral discount is a powerful illustration of what happens when ordinary persons consistently apply the deliberative frame to public life.

3.3 Discussion

The basic insight of this chapter is that public debate is not bad because of a substantive conflict between religion and science, but because of a normative conflict between representatives and ordinary persons. Approaches to representation that do not appear to foster good debate conflict with norms that ordinary persons use to evaluate public

life. There is a "great disconnection" between what representatives do and what ordinary persons want to see.

As the first part of the chapter showed, representatives of all kinds, whether from science, religion, media, or politics, approach public debate in ways that are often inimical to deliberative debate. I focused on three common approaches to representation in these debates. "Public crusade" seeks to advance a personal, political, or moral agenda through avoiding and suppressing debate. "Setting the stage" means converting or excluding participants who do not agree on the grounds for engaging in future good debate. "Elevating the conversation" involves expert contributions to existing debate in hopes that it can be made better. None of these approaches are fully compatible with normative ideals of deliberative debate. But the most visible representatives are more likely to take the less deliberative approaches, such as "public crusade," that most violate deliberative expectations.

If representatives were not influential, this would not matter. But, as I showed in the second half of the chapter, representatives have significant constitutive power to shape the symbolic meaning of these debates through their participation in public life. What people think that debates are about, and what they think about the quality of these debates, depends on which representatives are the most visible in these debates. When the most visible representatives are religion and science representatives, people describe debates as religion and science debates. But when the most visible representatives are religion representatives and gay activists, people describe the debate as a debate between religious people and gay people. In other words, whether or not people think that there is good debate, or that good debate is possible, hinges on their evaluations of representatives who participate in these debates.

Until now, no one has actually studied such evaluations empirically. Surprisingly, and contrary to what scholars of institutional politics would predict, I found that ordinary

persons concur with normative theorists that representatives should be engaged in good deliberative debate. Interview respondents consistently use what I call a "deliberative frame" to evaluate what they see in public life, and to describe what they would like to see in public life. Respondents want public debate over important issues to be open, inclusive, and ongoing. Along every dimension of evaluation, respondents looked for indicators that representatives were good participants in terms of realizing this ideal debate. Similarly, when given the chance to describe their ideal debate and its participants, respondents consistently identified ideal debate as deliberative, and good representatives as good public deliberators.

Given this deliberative preference, normative conflict occurs when representatives display evidence that they are not pursuing good debate, as when they are trying to get their own way or advance their own cause. While some religion and science representatives trigger this conflict by engaging in "public crusade," such conflict is hardly limited to these representatives. For example, the "electoral discount" occurs when ordinary persons evaluate politicians negatively, simply because the representatives are politicians. Without knowing names of representatives, respondents negatively evaluate indicators of formal political activity (e.g. holding or seeking elected office). Even representatives who are positively evaluated on other grounds are immediately discounted once they are indicated or revealed to be politicians. The things that politicians typically do in public life, such as seeking to win an election, or advancing a moral agenda through politics, conflict with the norm of deliberation that ordinary persons consistently hold. To underscore that this particular consequence is specific to politicians, the "electoral discount" goes away when the same representative is evaluated upon leaving office.

If elite approaches of representation are always potentially in normative conflict with norms of evaluation that ordinary persons hold, what does it mean for (and beyond) public debate if they do sometimes conflict? No one has actually considered this as an empirical question. But theory suggests an answer. Representation is constitutive. The point of public debate is to negotiate and manage the changing categories of social life. Representatives are the negotiators, but they are also the exemplars. Negative evaluations of representatives are also negative evaluations of what they are seen to represent. Normative conflict matters particularly since such negative evaluation can occur even when there is substantively positive or neutral evaluation on other grounds. So, in theory, even scientists who agree with Richard Dawkins about evolution might end up thinking that "science in public life" is not deliberative, because they disapprove specifically of Dawkins on normative grounds, and because he is the exemplar who (in part) defines the category of "science in public life."

If this is true, it means a complete rethinking of religion and science in American public life. Rather than religion and science presenting a problem for public debate, instead public debate, and specifically the normative conflict over good debate, could present a problem for religion and science in public life. But is this really the case? Does the great disconnection actually present problems for religion and science in public life?

In the remainder of this dissertation I assess this question as an empirical proposition. In the next two chapters, I examine how normative conflicts shape "religion" and "science" in public life. To be clear, I am not claiming that normative conflicts shape what everyone thinks about religion and science generally. Obviously ordinary persons construct their ideas about religion and science from many different sources, including accounts of their own experiences (e.g. education), interactions with friends and neighbors, and a variety of other media inputs (e.g. science fiction). However, what they think about religion and science *in public life* depends heavily on the normative assessment of the most visible religion and science representatives.

To preview the findings from Chapters Four and Five, normative conflicts in the four debates I describe shape religion in public life as illiberal. What makes "religion" distinctive in public life often generates negative evaluations of religion as violating deliberative preferences and therefore undesirable in the deliberative public sphere. Likewise, normative conflicts shape science in public life as faceless. While science in the abstract is highly supported, scientists who seek to promote science in public life are negatively evaluated as public crusaders, even if they are ultimately seeking good public debate. And while it would seem that exchanging bad representatives for good representatives might easily address these problems, in both cases I find that normative conflict makes challenges to the current structure of public life difficult to mobilize and sustain.

A portion of Chapter Three is forthcoming in revised form as "Who Wants a Deliberative Public Sphere?" in *Sociological Forum* 27. The dissertation author was the primary investigator and author of this material.

Chapter Four:

Religious Credibility in the Public

Sphere

As Chapter Three showed, the approaches that the most visible representatives take in public life conflict with the normative criteria that ordinary people use to evaluate them. The obvious question is, why do representatives do this? If ordinary people want something different, why do representatives act this way rather than that way? To be clear, I seek a sociological rather than a psychological answer to this question. I am not asking about individual motivations. Rather, I am asking why representatives participate in the public sphere at all. Even if there is some special or unique individual motivation for what they are doing, why do it in the public sphere?

This is an uncommon question in public sphere studies. Scholars of the public sphere generally take for granted that people should participate in the public sphere. Drawing on theories of association and public talk dating back to Tocqueville's *Democracy in America*, they present a public sphere whose purpose is self-evident. People participate in the public sphere to come to a "common mind" about what is important and what to do about it (Taylor 2004:83). People talk in public because public talk helps us sort things out with one another. Indeed, the great mystery in literature on the public sphere is why

some people do not participate in the public sphere (see, e.g., Eliasoph 1998, Putnam 2000, Mutz 2006).

Scholars working in the science studies tradition, while not often addressing questions about the public sphere, nonetheless provide a possible answer. People participate in the public sphere because it is an arena of public credibility. In Steven Epstein's influential formulation, credibility is the "capacity of claims-makers to enroll supporters behind their arguments, legitimate those arguments as authoritative knowledge, and present themselves as the sort of people who can voice the truth" (Epstein 1996:3).⁷⁷

Of course people pursue credibility in a variety of settings, both private and public. But the public sphere, and in particular the portion of the public sphere that is realized in mass media, offers a unique arena of credibility. Through mass media, the public sphere provides access to the largest possible number of supporters to be enrolled. It presents the highest-profile arena for presenting arguments. And it offers a level of visibility for individual representatives that is not available in other arenas.

Throughout the science studies literature, scholars show how scientific controversies are settled through contests of credibility, rather than through simple interpretation of (often indeterminate) evidence. For example, Shapin and Schaffer (1985) show how controversy over the air-pump experiment was settled not simply with reference to the experiment or its results, but with reference to a variety of social and political considerations that made one set of claims, and one claims-maker, more credible than the other. Of course, as Epstein (1996) has shown, what counts as credibility is itself open to contestation. But the key point is that seeing such controversies as episodes in the pursuit of credibility provides a better explanation for how and why many controversies are settled.

⁷⁷Some recent work in sociology discusses "authority" in similar terms to "credibility" (e.g. the forthcoming edited volume *Creating Authority*). I do not think that credibility is the same thing as authority. The distinction is actually most clear in the public sphere. You have authority if you do not need to offer reasons to support your claims (see Taylor 1982). You have credibility if the reasons that you offer are seen as legitimate.

It is tempting to see debates in the public sphere as similar contests of credibility to scientific controversies, say by imagining debate over stem cell research as a sort of air-pump controversy unfolding on the pages of the *New York Times*. But to do so would miss a key point: not all attempts to gain credibility are credibility contests between individuals. The pursuit of credibility, even in the public sphere, does not actually require engagement with an opponent. To take an example from Chapter Three, the "public crusade" approach seeks to bolster one's own importance and advance one's own agenda. Being seen as important, and advancing your agenda, can increase your legitimacy and attract supporters, even if you never defeat an opponent in single (discursive) combat.

Thinking about representatives in the public sphere as individuals in pursuit of public credibility helps reconcile what we know about the public sphere (from Chapter One), what we know about the relationship between religion and science in these debates (from Chapter Two), and what we know about normative conflict over good debate (from Chapter Three). Representatives participate in public life to gain a particular kind of public credibility that is not available elsewhere. The pursuit of such credibility, while potentially tied to credibility contests over controversial issues, does not necessarily require direct engagement with any competition in the public sphere. So it is not surprising that there is no encounter between religion and science in these debates. Of course, not all representatives approach public debate in the same way. But the pursuit of public credibility by representatives in the public sphere often ends up conflicting with deliberative norms that people use to evaluate public representatives. This is especially true for the most visible representatives, whose public credibility emerges in no small part from their power to constitute what a given debate is about.

But is the pursuit of public credibility incompatible with good debate? Consider the counterfactual. What would a good religion and science debate look like, based on what respondents suggested in Chapter Three? A good debate would involve religion and

science, but it would also involve many other areas that bring in their own perspectives and concerns. In a good debate the most visible representatives would encounter and engage one another over an important issue of broad concern to ordinary Americans. Moreover, such representatives ideally would bring a variety of perspectives informed by their different backgrounds. For example, a good religion and science debate would not just include one religion and one science representative. Instead, there would several religion representatives, perhaps including someone from the Religious Right, but also including representatives from moderate and liberal religious groups. And there would be several science representatives as well, perhaps including scientists with different or even dissenting perspectives.

In theory, this could happen. In practice, it does not. Why? Why do we not see more moderate or liberal religion representatives in the public sphere? Why do we not see many highly visible science representatives at all?

In this chapter and the following chapter I answer these questions. Surprisingly, the answers are very similar for religion and for science. We do not see these other representatives in these public debates because they do not pursue credibility in the public sphere. This seems very basic. But it is a striking explanation. For moderate and liberal religious figures and for scientists, the dominant model of credibility depends on staying out of the public sphere. Many of the reasons are even similar. For example, mainline religion representatives and scientists alike seek to minimize the appearance of internal dissent, present a unified front, and focus on the credibility of their institutions rather than their individual claims-making. Of course, whether staying out of the public sphere is actually a good credibility model, in the sense that it actually generates credibility, is a separate question. The important point here is that only some people pursue public credibility, and in general, those who do are acting in ways that violate deliberative preferences.

This suggests an obvious route to good debate, which is to simply encourage, on one hand, moderate or liberal religious figures and, on the other hand, scientists, to pursue credibility in the public sphere. But what I show in these chapters is that the historical failure of many possible religion and science representatives to pursue credibility in the public sphere, while consistent with models of credibility that have worked in other arenas, has reconfigured public debate and constrained the possibility of pursuing credibility in the public sphere in the future. By pursuing credibility in the public sphere using approaches that are incompatible with deliberative preferences, highly visible representatives have constituted religion and science in public life as markers of bad debate. This does not mean that they have changed what religion and science mean everywhere. But when people see religion and science involved in public debate, they read such involvement as contrary to their deliberative expectations.

In this chapter I explain why this is the case for religion in public life. We do not see more moderate or liberal religion representatives because they do not pursue religious credibility in the public sphere. For the past several decades, only representatives from the Religious Right have pursued distinctively religious credibility in the public sphere. Of course, this pursuit of credibility, primarily in the form of "public crusade," runs against deliberative preferences. However, due largely to the success of the Religious Right, all attempts to pursue religious credibility in the public sphere, for example by using religious language or reasons, are now interpreted as bad debate.

To preview the more detailed argument, religion becomes identified with bad debate via two paths (see Figure 4.1) as prominent religion representatives work to "own the space" of religion in public life. First, the Religious Right leverages its structural advantage to promote individual representatives who share similar moral agendas. Ordinary persons identify and negatively evaluate these prominent Religious Right figures as public crusaders advancing a specific moral agenda rather than participating in good debate.

Second, prominent Religious Right representatives successfully establish themselves as the only legitimate users of religious language and reasons in public life. Ordinary persons then negatively evaluate any use of religious language or reasons as contrary to good (deliberative) debate because they associate religion talk with the Religious Right, even if such language or reasons come from non-Religious Right figures.

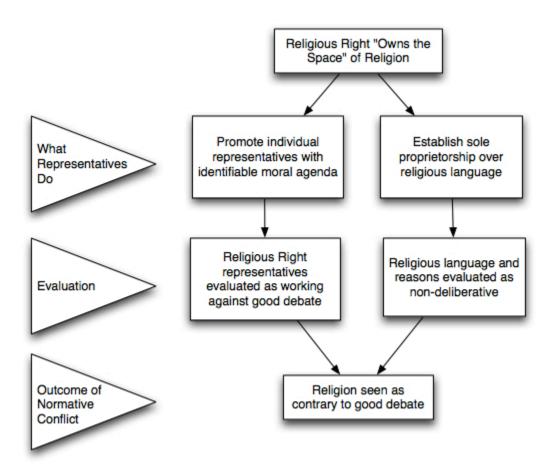


Figure 4.1: How Normative Conflict Shapes Religion

In short, normative conflict over good debate equates "religion" with "bad debate" in American public life. At the elite level, an asymmetric obligation of legitimacy for religious representatives effectively excludes moderate or liberal religious voices from prominence. At the non-elite level, normative expectations on the use of religious lan-

guage and reasons in public debate render even moderate and liberal religious arguments as illiberal. This suggests that the best approach for liberal and moderate religious voices seeking to make religious arguments in American public life may be to avoid making those arguments altogether, rather than trying imitate the recent success of the Religious Right by mobilizing a Religious Left.

4.1 Representing Religion

The incontrovertible fact is that, when it comes to religion, the Religious Right dominates American public life (see Wuthnow 1983, Reichley 1985, Greeley and Hout 2006, Wilcox and Larson 2006, and essays in Green, Rozell, and Wilcox 2003). According to the main cultural narrative, the Religious Right is an apparently unprecedented combination of theological and political conservatism with an elite political movement. This union marks a sea change in American politics away from neutrality and toward the acceptance of distinctively religious language, arguments, and justifications in public debate. Visible leaders such as Jerry Falwell, Pat Robertson, and James Dobson, working from well-funded organizations such as the Moral Majority, Christian Coalition, and Focus on the Family, seem to be dictating the terms of debate on many contentious issues in

⁷⁸I say "apparently unprecedented" because it remains unclear that the Religious Right is a new insertion of evangelical religion into national politics. Lienesch (1993), for example, traces activism back to Federalists such as Jedediah Morse. In the 20th century, certainly the Scopes trial marked the arrival of evangelicalism as a political force through the efforts of William Jennings Bryan. Though Bryan was unsuccessful, it is not clear that evangelicalism went away as a political force only to return in the late 1960s. While most books about the rise of evangelical political activism render the period from about 1930 to about 1960 (or in creationist terms, from the aftermath of Scopes through Creation Science) as a period of retrenchment and renewal (see, e.g. Nelkin, Lienesch, Hunter, Wilcox, etc.), more recent scholarship by, among others, Christopher Cantwell suggests that organized evangelical political activism continued via Bible study fellowships and Sunday schools. That is, rather than the cyclical activism/retrenchment story told by Hunter and others, the story of the emergence of the Religious Right may be less about an "unprecedented" surge of conservative religion after a period of retrenchment, and more about the increased awareness of existing political intervention provided by the emergence of widely-accessible national mass media outlets.

⁷⁹"Neutrality" meaning either formally explicit neutrality toward religious expression or apparent neutrality based on shared religious premises that therefore do not cause division.

American public life. Abortion, gay marriage, stem cell research, and even educational and environmental policy are sites of contention, not just between political parties, but among political interest groups that draw directly on conservative religious language, reasons, and arguments to support political positions. Of course American public life has always had a religious component. But though MLK, for example, could use religious language and imagery to make the case for civil rights, he also could (and did) make arguments for civil rights that did not involve religious language or reasons. What makes the Religious Right unique is that it has opened a space for moral and political argument in public life that operates solely with reference to religious authority.

There are, of course, many variations on this basic narrative. For many scholars of religion and society, the rise of the Religious Right is really the rise of religion generally as a multifarious political dimension in American public life, whether because religion is becoming more public (see Casanova 1994) or because increasing pluralism demands more attention to religious differences (see Herberg 1955, essays in Liebman and Wuthnow 1983). A stronger version of this claim is that the rise of the Religious Right signals a shift in American politics from a generally benign and amenable mainline Protestant public religion to a political arena marked by deep and contentious divides over basic matters of policy that map closely onto divisions in religious belief between liberal/moderate religious groups, such as mainline Protestants and many Catholics, and conservative religious groups, such as evangelical Protestants and conservative Catholics (see Wuthnow 1988, Hunter 1991). In these accounts, it is the "Religious" part that is significant. Today it is the "Religious Right," but with effort, or a change in tactics, or demographic shift, it might well be the "Religious Left" tomorrow.

In a more alarmist form offered by many popular authors, the "Right" part is the most worrisome part of "Religious Right." The rise of the Religious Right in this view is the next step toward an "American theocracy" where a once liberal democratic republic will

be governed by conservative religious zealots who will force everyone to follow their restrictive moral code and/or use the military might of the US to force other countries to follow suit. 80 Such moves would, of course, be entirely anti-democratic and contrary to the spirit of separation between church and state. 81 Thus it is worrisome that candidates for electoral office must not only have policy positions, but also must position themselves in a religious field. In this version of the narrative, when George W. Bush not only gives a speech at CPAC and the American Enterprise Institute, but also at Bob Jones University and Liberty University, it is evidence that we are one step closer to theocratic subversion of American democracy.

Clearly these accounts diverge, most notably in their assessment of the potential problems that the rise of the Religious Right presents. But almost everyone agrees that the Religious Right currently dominates public religion. How this happened is not a source of contention, either. Most scholars agree that the Religious Right is an example of a more or less successful social movement. Like other successful social movements, the Religious Right has been highly effective at resource mobilization (see McCarthy and Zald 1977) in support of its goals. Through the prominent activity of representatives such as Falwell, Robertson, and Dobson in both specialized religious media (e.g. Focus on the Family radio, *The 700 Club* television show) and mass media outlets, the Religious Right organization solicits funds, defines a public moral agenda, and continually expands a common core of like-minded supporters (Hadden and Shupe 1988, Hadden 1993). Through affiliated political organizations (e.g. Family Research Council, Christian Coalition), the Religious Right mobilizes organized political action such as petitions.

⁸⁰There are many variations on this argument. For a "they walk among us" version, see Sharlet 2008. For the "I was one, but I got better" version, see Schaeffer 2007. For an economic version tied to oil resources, see Phillips 2006. For warnings about Christian nationalism (either in generic or Dominionist form) see Goldberg 2007, Hedges 2006, with Scahill 2008 providing a specific argument about private military corporations and conservative religion.

⁸¹This of course resonates with fears in the 1960s about JFK's potentially split allegiance to the nation and the Pope.

letter campaigns, and "get out the vote" efforts for sympathetic candidates (Wilcox and Larson 2006). At the same time, a network of private foundations, think tanks, and faith-based business and political associations links together an "evangelical elite" of conservative Protestants who seek to replace a secular elite in military, economic, and political life with elites raised, trained, and funded within the Religious Right (Lindsay 2007, Sharlet 2008, Teles 2008, Medvetz 2012).

I am less concerned here about the contingent historical circumstances that produced the Religious Right and its representatives. Instead I focus on how the Religious Right continues to "own the space" of religion in American public life. By "own the space" I mean that the Religious Right, particularly through its most prominent representatives, pursues religious credibility in the public sphere by aligning the public definition of "religion" with the Religious Right's specific version of "religion."

"Owning the space" involves distinct but overlapping activities in the public sphere. At the individual level, the Religious Right mobilizes resources to promote specific individuals as prominent representatives. This emphasis on visible representatives in the public sphere ensures that when people think of religion in public life, they think of Falwell, Robertson, and Dobson rather than, say, John Haught or Stanley Hauerwas. At the collective level, the Religious Right establishes "sole proprietorship" over the use of religious language, particularly by excluding or discrediting anyone who uses religious language and reasons but does not agree with the Religious Right's moral agenda. This is particularly important in cases where someone from within the Religious Right attempts to, or appears to, use religious language and reasons to support liberal or secular positions on controversial issues. This emphasis on policing distinctively religious talk ensures that when people see religion talk in public life, they think of the Religious Right as the only legitimate source of such religion talk.

I do not dispute that the Religious Right dominates religion in American public life.

The Religious Right's pursuit of credibility in the public sphere has been successful in that sense. But as Chapter 3 established, approaches that look successful from the perspective of representatives can also provoke unanticipated problems as they conflict with norms of public debate. In what follows I consider the Religious Right's pursuit of credibility as a potential source of normative conflict. To the extent that the resulting approaches to representation conflict with the ideals of deliberative debate that ordinary persons hold, the Religious Right's dominance presents a previously unidentified challenge to good debate in American public life.⁸²

4.1.1 Promoting Individual Representatives

The Religious Right is distinctive in promoting individual representatives in the public sphere. This promotion helps "own the space" of religion by ensuring that the most visible representatives who are distinctively religious are individuals promoted by the Religious Right. As Chapter 2 showed, this promotion has been largely successful. The most prominent religious representatives in public debate are conservative religious figures, primarily (though not exclusively) from the American Religious Right (see Tables 2.1, 2.3, 2.5, 2.7). The Religious Right effectively mobilizes immense resources. It is arguable whether or not resource mobilization is the cause of the Religious Right's rise to prominence in American public life, particularly given the concurrent general retreat of the Protestant mainline from public life (see Evans JH 2009). What is important for this analysis is that conservative religious activism directs those resources primarily toward promoting particular identifiable persons as representatives in public life.

Promoting individual representatives happens through media mobilization and personfocused political activity. Most obviously, media mobilization composes a large part of

⁸²I discuss below some specific challenges previously identified by Hart (1999). However, where Hart grounds his observations in the structural advantages of the Religious Right, I explain how even a shift in this structural advantage must still deal with the residual consequences of normative conflict.

Religious Right success. One key component has been direct investment in specialized religious media infrastructure (e.g. Christian Broadcasting Network, Trinity Broadcasting Network, National Religious Broadcasters) and programming (e.g. *The 700 Club, Focus on the Family, The Coral Ridge Hour*) that provides wide exposure for particular visible figures. Through this religious base of support, Jerry Falwell, Pat Robertson, and James Dobson have become authoritative and legitimate representatives of conservative religion for tens of millions of Americans (and many millions more worldwide, see Blake 2005) who listen to Christian radio or watch Christian television.

Beyond the religious media space, these visible leaders engage in ongoing commentary and spectacle designed to draw general media attention, not just to their shared moral agenda, but to themselves as the persons who represent that agenda. This component involves being the available religious person for journalists to cover or consult, whether for political commentary, the "religious perspective" on controversial moral issues, or radical public prophecies of danger and terror that provoke viewers to watch for what will happen next. Religious Right representatives are so successful at this that a recent study of media coverage of religious figures (Media Matters 2007) had to remove Falwell, Robertson, and Dobson from the study sample because their dominance across all media was so complete that it made comparison pointless.

Religious Right political activity also promotes individual representatives. Conservative religious movements emphasize electoral change (sometimes called "don't change the policy, change the politician") or, more broadly, replacement of existing elites seen as hostile with elites that are friendly to conservative religious perspectives (see Lindsay 2007).⁸³ For example, organizations like the Family Research Council offer endorsements of specific electoral candidates based on candidate compliance with a slate of po-

⁸³A related point is that electoral mobilization is a bit easier for conservative religious movements, because conservative religious people actually go to church, so it's fairly easy to find them on Sunday morning if you want to tell them something (see Smidt 2007).

sitions that align with the Religious Right's common moral agenda.⁸⁴ At the same time, private networks such as The Fellowship, which puts on the National Prayer Breakfast, bring together and provide pastoral and financial support to highly-placed politicians who are committed to linking religious beliefs to political power (Lindsay 2006, 2007, Sharlet 2008).

Promoting particular individuals in public life may seem like something that everyone does. But this is perhaps because the success of the Religious Right has naturalized such activity as normal. Liberal and moderate religious groups do not generally employ the strategy of promoting individual representatives. In fact, for a variety of reasons that resist disentanglement, liberal and moderate religious groups tend to avoid direct participation in public debate entirely. As John Evans (2009) discusses, one of the key reasons is that there is a general unwillingness to advocate positions that might aggravate or expose division within mainline denominations, resulting in an emphasis on persuasion and consensus rather than potentially divisive public advocacy. While there are issues where liberal and moderate religious groups might be expected to have strong policy positions, these issues (e.g. poverty) are not the "culture wars" issues that drive media attention. And perhaps most importantly, Evans also points out that the Protestant mainline engaged in "self-immolation after the emergence of the Christian Right," as the very idea of advocating for particular values or positions in the public sphere came to be seen as a violation of mainline Protestant values about consensus.

Whatever the ultimate reason or reasons, the resulting situation is that liberal and

⁸⁴For numerous examples, see "Endorsements" on the FRC Action PAC website, last retrieved 26 June 2010 from http://www.frcaction.org/endorsements.

⁸⁵Two notable exceptions are Jesse Jackson and Al Sharpton, who are often considered liberal or moderate religious figures and who are very prominent in media coverage (Media Matters 2007). However, this is very issue-specific. If you sample media coverage based on finding religious figures, Jackson and Sharpton will show up prominently (see Media Matters 2007:5). But if you sample media coverage based on particular issues, you will find that they show up a lot on some issues (e.g. issues around race, poverty, and education) and not at all on others. They do not show up prominently on the debates I discuss in this study.

moderate religious groups generally do not promote particular individuals in public life, even though there are sometimes available resources to do so. 86 For example, the Lilly Endowment controls several billion dollars (US), but distributes that money to regranting agencies, such as the Louisville Institute at the Louisville Theological Seminary, or the Lilly Fellows program at Valparaiso University, that support productive conversations among academic researchers, local church leaders, religious colleges, and denominational officers (see Lindsay and Wuthnow 2010). And in contrast to the Religious Right's focused efforts to install "faith in the halls of power," (Lindsay 2007), liberal and moderate religious political activity is conceived and executed through lobbying, either through denominational offices or through identity or issue-driven small lobbying groups, such as Sojourners or the Religious Coalition for Reproductive Choice (see Olson 2007). The main point of liberal and moderate political activity is to change the minds of the politicians who are in office, not to exchange them for politicians developed and trained within a particular religious tradition.

To put this into terms of public credibility, the Religious Right, unlike the Religious Left, pursues religious credibility in the public sphere by promoting individual representatives who are visibly religious. By doing so, the Religious Right takes seriously the constitutive functions of representation in public life. As discussed in Chapters One and Three, representatives in public debate serve a sort of cartographic function by mapping the debate for non-participants. Such representation is key to mobilizing a supportive constituency (see Mueller 1983), and helps force opponents to organize a response to the policies and positions being represented (see Fetner 2008). So promoting individual representatives is one key aspect of "owning the space" of American public religion. The success of such promotion is measured not only by the prominence of religious rep-

⁸⁶To be clear, the Protestant mainline churches have nothing close to the resources of the Christian Right to spend on political and social activity.

resentatives in the public sphere, but by the extent to which ordinary people (whether or not they are religious or conservative) recognize prominent representatives in public life and associate "religious" with one set of representatives (in this case those from the Religious Right) rather than another set of representatives (such as liberal/moderate religious leaders).

Prophetic Leadership: The Case of Pat Robertson

The confusing part about the Religious Right's promotion of individual representatives is that representatives are both perpetrators and product of such promotional activities. To illustrate this process, I turn to the example of Pat Robertson. In Chapter Three I discussed Jerry Falwell and James Dobson as representatives engaged in the "public crusade" strategy. Like Falwell and Dobson, Pat Robertson is a religious conservative. While Robertson is notable for being a failed presidential candidate, he is probably best known for two things. First, Robertson founded the Christian Broadcasting Network (CBN) and its flagship syndicated show *The 700 Club*. ⁸⁷ Second, Robertson founded the Christian Coalition, a political advocacy organization drawing on conservative Christian doctrine for policy guidance. In both cases, Robertson used (and uses) all available resources to promote specific individuals as representatives in public life.

Pat Robertson enjoys wide prominence in general audience mass media. While Pat Robertson only appears in the top 10 for one debate in this study (environment), he is actually very close to breaking the top 10 for other debates (see Table 4.1). Robertson is not only highly visible, but he is highly visible in each debate. When someone sees an

⁸⁷Despite being a controversial conservative religious show, *The 700 Club* airs regularly on the ABC Family channel at the time of this writing. The Family Channel was originally a channel spun off by Robertson's media group when it made too much money and threatened the nonprofit status of the core CBN organization. When News Corp bought The Family Channel to create Fox Family Channel, one of the conditions of sale was that *The 700 Club* would continue to air twice a day on the channel. This condition persisted through later sale of Fox Family to Disney and subsequent rebranding of the channel as ABC Family.

explicitly religious representative in any of these religion and science debates, they are more likely to see Pat Robertson, an obvious religious conservative, than to see many other explicitly religious figures. This is true (with minor variations) no matter which debate they engage.

Table 4.1: Articles Mentions by Debate, Pat Robertson

Person	ОН	CR	SC	EN
Pat Robertson	12	≥ 80	74	48

Pat Robertson promotes both himself and other similar representatives by attracting visibility in multiple ways from different (though sometimes overlapping) audiences. First, as host of *The 700 Club*, Robertson promotes himself within the conservative Christian community. Despite the name, *The 700 Club* is clearly the Pat Robertson show, and has been since its inception. According to Robertson's biographer, David John Marley, fellow televangelist and one-time co-host Jim Bakker departed the successful show and network precisely because Robertson kept taking over the show with his own commentary rather than focusing on "the workings of God." *The 700 Club* serves as the media base for Robertson's ongoing prominence, and its success has made Robertson one of the most prominent figures in the world of conservative Christianity. For Robertson, the public crusade is personal:

I don't really think about the stature in the conservative world. What I think about is, how effective can I be in leading people to the Lord and blessing people. And you know I'm a pastor of a flock of a million people who watch my show every day, and maybe 18 billion in the course of a month. Plus overseas, we talked to the 300 million people. And we've been successful in leading about 410 million people to faith in Jesus Christ since the fall of Communism. So am I doing success? I really think so. Because that's why I'm here. As far as what anybody else thinks about me, that really is immaterial.⁸⁹

⁸⁸Quoted in Marley 2007: 31.

⁸⁹Ouoted from Braver, "Pat Robertson: An Interview."

Second, Robertson engages in outrageous public talk. Whether this is a deliberate attempt to draw attention is not clear. But consistently, and on a wide range of issues, Robertson says things that draw attention to himself and to his mission not only from his viewers, but from a general audience who are provoked or even offended by his religious commentary. For example, in Chapter 1 I quoted Robertson's warning to the city of Dover about God's judgment on them for rejecting Intelligent Design in the classroom. But Robertson does not confine his commentary to religion and science debates. When the city of Orlando, Florida decided to put up rainbow banners during "Gay Days" at Disney World, Robertson prophesied that God would bring judgment in response:

I would warn Orlando that you're right in the way of some serious hurricanes and I don't think I'd be waving those flags in God's face if I were you. This is not a message of hate; this is a message of redemption. But a condition like this will bring about the destruction of your nation. It'll bring about terrorist bombs, it'll bring earthquakes, tornadoes, and possibly a meteor.⁹¹

Third, Robertson engages in political activity designed to promote himself and those politicians of whom he approves (and who, in turn, bring more attention to Robertson). The clearest example of Robertson's personal promotion in the political realm is his unsuccessful 1998 U.S. presidential campaign. In running for office on an explicitly religious platform, Robertson presented himself as the paradigm of a Christian in politics. Yet in terms of long-term success in achieving public prominence for Robertson, this campaign is less important for its electoral outcome than for the political organization that it spawned: the Christian Coalition. As Robertson describes it:

My race for the Presidency. I didn't do all that bad for an amateur, you know. I beat the sitting Vice President in a number of states. But nevertheless, when

⁹⁰For a sampling of the range of outrage that Robertson provokes, see the entry "Pat Robertson Controversies" on Wikipedia: http://en.wikipedia.org/wiki/Pat_Robertson_controversies, with items ranging from "Scotland and homosexuals" to "calls for Hugo Chávez assassination" to "leg press claims."

⁹¹Quoted from *The 700 Club*, 8 June 1998 episode.

it was all over with, I had mobilized 300,000 plus people in about 35 states. And that became the core of the Christian Coalition, which in turn became a very highly visible part of the Republican Party, and perhaps has been major influence in winning the Congress for the Republicans and maybe putting a born again Christian in the White House. So I was sort of a forerunner of a group that was given a voice.⁹²

With the founding of the Christian Coalition, Pat Robertson leveraged his personal fame and religious legitimacy to promote not only himself, but also other individuals in politics who conformed to his moral agenda. The Christian Coalition pursued an explicit strategy of replacing existing politicians with visibly religious individuals committed to changing politics based on their personal beliefs. With the Religious Right becoming a potent force in Republican and national politics, Robertson gained even more media prominence as a legitimate representative of that influential sector of society. Promoting other individuals and promoting himself were two sides of the same coin. Asked to reflect on the Christian Coalition and his later departure from it, Robertson phrased his answer accordingly:

We had a 10 year set of goals. And we got every one of them. The only one we didn't get is the Supreme Court, and we're only one judge short of that. (LAUGHTER) So I think – the Congress conservative, a majority of governorships conservative, a born again Christian in the White House – I had done what I set out to do. And I went back to more important work, which is leading people to the Lord. ⁹³

Though no longer affiliated with the Christian Coalition, Robertson continues to leverage his religious legitimacy among conservative Christians to anoint particular candidates who he sees as consistent with his moral agenda. Conservative candidates for national electoral office (e.g. George W. Bush, Mitt Romney) regularly appear on *The*

⁹²Quoted from Rita Braver, "Pat Robertson: An Interview," originally aired 9 April 2006 on CBS News Sunday Morning, transcript last retrieved 28 June 2010 from

http://www.cbsnews.com/stories/2006/04/07/sunday/main1481775.shtml. Edited for clarity.

⁹³Quoted from Braver, "Pat Robertson: An Interview." Edited for clarity.

700 Club to build credibility among conservative religious voters. Robertson also continues to promote others, usually drawing on claims of religious authority. For example, when Paula Zahn of CNN asked Robertson his thoughts about the 2004 presidential election, he replied that God had chosen George W. Bush:

Well, I just think – he loves him. I mean, George Bush is a man of prayer. He talks to the Lord. He tries to get his direction from the Lord....I just said, I think God's blessing him, and I think it's one of those things that, even if he stumbles and messes up – and he's had his share of goofs and gaffes – I just think God's blessing is on him. And you remember, I think the Chinese used to say, you know, it's the blessing of heaven on the emperor. And I think the blessing of heaven is on Bush. It's just the way it is.⁹⁴

The case of Pat Robertson as I have presented it here provides one illustrative example of how the Religious Right pursues credibility in the public sphere by promoting individual representatives. Mostly Robertson promotes Robertson. But he also promotes individual politicians who align with his moral agenda. While he is involved in public crusade, his crusade rests on his multi-dimensional pursuit of religious credibility in public life. He is prominent for many reasons to many audiences. To some he is the visible host of *The 700 Club*. To some he is the crazy "false prophet" who predicts destruction as God's punishment for moral infractions. To some he is the kingmaker who can help elect a president. That these audiences sometimes overlap only reinforces Robertson's visibility.

Of course visibility does not necessarily mean approval. Robertson has undoubtedly been successful in gaining prominence as a religion representative across many kinds of issues in public life. That Robertson has gained credibility as a legitimate public representative of religion is not necessarily good for Robertson or for religion. But whether it is good or bad, it is not accidental. It is the result of a deliberate pursuit of credibility

⁹⁴Quoted from "Interview with Pat Robertson and Bill Maher," *Paula Zahn Show*, originally aired 19 October 2004 on CNN, transcript last retrieved 28 June 2010 from http://transcripts.cnn.com/TRANSCRIPTS/0410/19/pzn.01.html.

focused on promoting individual representatives in public life, supported by the mobilization of significant resources. If it wasn't Robertson, it would probably be someone else from the Religious Right. Thus Marley (2007:284) notes that "the evangelicals who tend to be the most critical of Robertson…are the very ones who are trying to take his place as the head of the Christian Right."

Unlike liberal and moderate religious groups, the Religious Right emphasizes representation in public life as a primary element in advancing a moral agenda. Thus key actors such as Jerry Falwell, Pat Robertson, and James Dobson (among others) draw on the resources of the Religious Right to gain and maintain visibility and recognition in public life as representatives of religious groups and positions. When people encounter religious representatives in general audience mass media, they are far more likely to encounter conservative religious figures such as Falwell, Robertson, and Dobson rather than moderate or liberal figures such as John Haught, Jim Wallis, or Richard Cizik. This is not just because conservatives have more resources, but because they use those resources to promote individual representatives in public life.

4.1.2 Making Religious Language Proprietary

Promoting individual representatives is a key component in "owning the space" of religion in public life. But this component has an obvious weakness. In theory, someone could come along and replace Robertson, Falwell, and Dobson with other religion representatives. Of course in the current situation this would take immense resources and organization. But if "owning the space" depended entirely on promoting individual representatives, someone else might conceivably do it better, realigning the public version of "religion" with their own particular version and displacing the Religious Right in public life.

"Owning the space" thus involves a second component of pursuing credibility in the public sphere that is focused on making religious language proprietary. By "making religious language proprietary" I mean that the Religious Right works to exclude anyone who uses religion talk in public life but who does not align with the Religious Right's common moral agenda. This active policing of religion talk enforces the boundary of "religion" so that it is only Religious Right figures who use religion talk in public life. Like the effort to promote individual representatives, making religious language proprietary bolsters religious credibility in the public sphere by aligning the public version of "religion" with the Religious Right's version.

Perhaps surprisingly, the active policing of religious talk in the public sphere is mostly unnecessary with regard to moderate and liberal representatives. Even if, for some reason, moderate or liberal religion representatives achieved prominence in public life, it is unlikely that they would use distinctive religion talk in public life (see Evans JH 2009). While moderate and liberal religious persons sometimes offer religious reasons and arguments, such religion talk tends to be either confined to private settings or deployed only in conjunction with general moral arguments that secular interlocutors can engage (see Hart 2001). So not only is it unlikely that the Religious Left would (or could) promote an individual representative, it is doubly unlikely that such a person would then use religion talk to participate in public debate. Put another way, while it is possible for the Religious Left to pursue credibility in the public sphere, such activity would not be (easily) recognizable as distinctively religious. The only representatives who are actively pursuing religious credibility in the public sphere, as distinctively religious representatives using identifiable religious language and reasons, come from the Religious Right.

Potential challengers to the pursuit of religious credibility do not come from the Religious Left. The danger actually comes from within the Religious Right. Individual

challengers who can draw on some of the Religious Right's resources, but who might present an (apparently) moderate or liberal religious alternative to the Religious Right's common moral agenda, present a clear threat to the Religious Right's ownership of the religion space in public life. As part of the "public crusade" approach, successful representatives such as Falwell, Robertson, and Dobson engage in the presentation and packaging of multiple moral positions into a coherent (though not always logically consistent) conservative moral package. But not every person contributes to the goal of aligning the public version of religion with the specific moral package that the Religious Right promotes. If different persons draw on religious language and reasons to deliver different packages in public life, even if those packages are similar in some respects, the (slightly) different versions of "religion" compete with each other for dominance of the public definition of religion. "Owning the space" then becomes difficult or even untenable as space is parceled out among competing moral agendas.

In public religion and science debates, this threat manifests as "moral entrepreneur-ship" (Becker 1963) originating from within the Religious Right. Less prominent representatives deviate, usually on one issue, from the legitimate moral package established by more prominent representatives, for example by taking a contrary position on the environment or on the origins of the world. On other issues they may align perfectly with the Religious Right's moral package. These moral entrepreneurs at least initially draw on the resources of the Religious Right to shift debate in a way that favors their own moral agenda. As they originate in the Religious Right, these entrepreneurs have no problem using religious language and reasons in public to describe and justify their arguments. They may even be some of the individuals that the Religious Right promotes

⁹⁵I discuss the notion of "moral entrepreneurship" below, but one of the key points Becker makes is that the specific content of the norm yields to the impulse toward enforcement over time. To the extent that this is true, it makes little sense to attack conservative moral religious packaging on the grounds that the positions conflict in principle. The point is not the principle underlying the norm, but enforcing the norm itself.

(as described above). But from the perspective of the Religious Right, deviance from the legitimate moral package confuses public debate with similar, though not identical, versions of "religion" that do not align with what Falwell, Robertson, and Dobson have established.

Excluding Moral Entrepreneurs: The Case of Richard Cizik

To illustrate how this occurs, I take an example from the sample of elite representatives that I also used in Chapters Two and Three. From 1990 until late 2008, Richard Cizik served as a staff member at the National Association of Evangelicals (NAE), most recently as Vice President of Governmental Affairs. NAE is an umbrella organization for conservative Protestant collective action. By bringing together many different conservative Protestant resources and channeling those resources into political and social action, NAE has become one of the most influential evangelical organizations in the notoriously decentralized world of conservative Protestantism. Most conservative Protestant organizational infrastructure emerged from, and continues to be influenced by, NAE. For example, NAE founded both the National Religious Broadcasters organization, which supports Christian television and radio, and the Mission Exchange, which is the largest missionary organization in the world.

As the Vice President of Governmental Affairs, Cizik directed NAE policy development and helped decide how best to use NAE resources to intervene in politics or, as NAE puts it, to "bring biblical values to the political sphere." Though an official spokesman for NAE, Cizik rarely shows up in the religion and science debates in this study (see Table 4.2). Cizik primarily worked to mobilize conservative Protestants by formulating NAE's policy statements and supporting political action on issues such as abortion, homosexuality, pornography, and capital punishment.

⁹⁶See NAE Government Affairs description at http://nae.net/government-affairs.

Table 4.2: Articles Mentions by Debate, Richard Cizik

Person	ОН	CR	SC	EN
Richard Cizik	0	3	12	30

For more than 20 years Cizik faithfully promoted the Religious Right's moral agenda. But sometime around 2003, Cizik started endorsing and promoting the idea of "creation care," which claims that the Bible specifically contains instructions to take care of the world. In contemporary political terms, "creation care" requires that we should recognize global warming as real, subject to human stewardship, and a problem not only worthy of everyone's attention but essentially a religious obligation to address.⁹⁷ For Cizik, environmental responsibility is necessary to avoid God's judgment:

The Bible clearly says in Revelation 11:18 that "God will destroy those who destroy the earth." It's very difficult to comprehend the full ramifications of this Bible verse, but I can tell you it's a warning: Destroyers beware. Take heed. It was by and for Christ that this earth was made, which means it is sinfully wrong – it is a tragedy of enormous proportions – to destroy, degrade, or despoil it. He who has ears, let him hear.⁹⁸

In 2004, the NAE, under Cizik's direction, released the comprehensive policy document "For the Health of the Nation: An Evangelical Call to Civic Responsibility" (NAE 2004), which summarized its policy positions on major issues. While most of the policies (e.g. opposing abortion, promoting the family) aligned with the moral agenda of the Religious Right, the environment issue stood out as both new and different. In the section titled "We labor to protect God's creation" the NAE report offered a position that deviated from the Religious Right's moral agenda:

God gave the care of his earth and its species to our first parents. That re-

⁹⁷For example, Genesis 2:15 (KJV): "And the LORD God took the man, and put him into the garden of Eden to dress it and to keep it."

⁹⁸Quoted in "Cizik Matters: An Interview with green evangelical leader Richard Cizik," by Amanda Little, *Grist* magazine, originally published 5 October 2005, last retrieved 1 July 2010 from http://www.grist.org/article/cizik/.

sponsibility has passed into our hands. We affirm that God-given dominion is a sacred responsibility to steward the earth and not a license to abuse the creation of which we are a part...Just as we show our love for the Savior by reaching out to the lost, we believe that we show our love for the Creator by caring for his creation.⁹⁹

With the promulgation of the "Health of the Nation" report, Cizik's personal convictions about the environment became official NAE policy. Cizik became a moral entrepreneur on the environment issue. In interviews he made clear that he was trying to use Religious Right resources to move away from the established moral agenda, at least on this one issue:

Our membership is 30 million strong, with 45,000 churches, 7,000 megachurches, some with billion-dollar budgets. We represent 40 percent of the Republican Party. There is a saying that "as evangelicals go, so goes the West" – meaning our community sets trends. Is everybody in our community ready to support a creation-care agenda? Certainly not. But conservation is conservative at its roots, and they can be regrown. 100

Cizik's moral entrepreneurship presented a serious challenge to the Religious Right's established public version of "religion." Unlike outsiders who rarely used religious language and who could not mobilize the kind of resources available to the Religious Right, Cizik was an insider who held the reins of one of the most important infrastructural resources in conservative Protestantism. Cizik's move to promote himself as a moral entrepreneur on the environment issue, and to take a position in public that was clearly not a conservative position, set him against established leaders such as Dobson and Robertson. It also positioned him to influence non-elite conservative Protestants, as his NAE credentials provided important legitimacy to his claims (see Djupe and Gwiasda 2010). Outside of conservative Protestantism, Cizik gained some attention by being named one of *Time* magazine's 100 most influential thinkers and scientists in 2008, in part because

⁹⁹Excerpted from NAE (2004:11-12.)

¹⁰⁰Quoted in Little, "Cizik Matters."

few expected that a powerful conservative Protestant would agree with scientific consensus and would take a public position against established leaders.

By using religious language and drawing on religious resources to promote a position that most observers would consider as moderate or even liberal, Richard Cizik threatened the Religious Right's conservative ownership of the religion space in public life. ¹⁰¹ Prominent Religious Right representatives quickly worked to regain sole proprietorship over religious language in public life. First, they condemned Cizik in public. Despite his credentials as a long-time servant of evangelical Protestantism in America, and despite his consistency with conservative Protestant leaders on many other important moral issues such as abortion and capital punishment, Cizik was almost immediately censured in public by other religious elites as not sufficiently conservative. James Dobson and several other signatories called for Cizik's resignation in an open letter published and quoted widely throughout religious and even general audience mass media, saying:

The liberal media has given wide coverage to Cizik's views and has characterized them as being representative of the NAE member organizations. We are not aware of any evidence to support that assumption. More importantly, we have observed that Cizik and others are using the global warming controversy to shift the emphasis away from the great moral issues of our time, notably the sanctity of human life, the integrity of marriage and the teaching of sexual abstinence and morality to our children. In their place has come a preoccupation with climate concerns that extend beyond the NAE's mandate and its own statement of purpose.

The letter successfully drew a distinction between the established individual representatives of the Religious Right and Richard Cizik in public life. But Cizik kept his job. NAE ignored the call for Cizik's resignation, possibly because, as the letter noted in its first sentence, "[W]e, the undersigned, are not members of the National Association of

¹⁰¹As discussed in Chapter 2, such classification of a different position on an issue as a "side" in a debate, following journalistic conventions, amplifies the apparent threat. Variation from the Religious Right moral packaging immediately moved Cizik into the same "side" as liberals and even secular scientists.

Evangelicals." Public censure by Dobson and his supporters helped clarify their relative position in public life, but did not succeed in separating Cizik from his resource base. Cizik thus remained a moral entrepreneur whose deviance from the Religious Right's moral agenda threatened to move the public definition of "religion" away from the Religious Right's version of "religion."

Had Cizik deviated only on the single issue, it is possible that his moral entrepreneurship eventually might have become seen as adding to, rather than deviating from, the established moral package offered by the Religious Right. Obviously enough of the NAE's member organizations held differing positions on the (less well-established) environment issue to allow Cizik to stay in his job. Even from the perspective of dissenting established representatives, the issue of the environment could be marginalized as a distraction from, rather than a direct challenge to, the Religious Right's existing moral agenda. However, Cizik's moral entrepreneurship appeared to be expanding beyond environmental policy to the issue of same-sex marriages. When asked in an NPR interview whether he had also changed his mind on same-sex marriages, he replied:

I'm shifting, I have to admit. In other words, I would willingly say I believe in civil unions. I don't officially support redefining marriage from its traditional definition, I don't think. We have this tension going on in our movement between what is church-building and what is nation-building. And I lean in this spectrum at times, maybe we should concentrate on building our values in our own movement. We have become so absorbed in the question of gay rights and the rest that we fail to understand the challenges and threats to marriage itself, heterosexual marriage. Maybe we need to reevaluate this and look at it a little differently. 102

Cizik's interview response gave established Religious Right representatives the opportunity to cut Cizik off from the resources of NAE. Unlike the environment issue, which could be seen as simply an added distraction from the established moral pack-

¹⁰²Quoted from "Rev. Richard Cizik on God and Global Warming," interview with Terry Gross, NPR's *Fresh Air*, episode aired 2 December 2008.

age of the Religious Right and therefore tolerated by some of the conservative religious base, openness to support for same-sex marriage ran directly against longstanding policy positions and scriptural justification for outlawing, banning, and suppressing homosexual activity. Allowing same-sex marriage was no different, in terms of the Religious Right's moral agenda, than allowing abortion. If Cizik's position on the environment was a deviation, his position on same-sex marriage was an opposition. NAE president Leith Anderson announced Cizik's resignation shortly after the interview aired:

[I]n a December 2, 2008 broadcast interview on National Public Radio, Richard responded to questions and made statements that did not appropriately represent the values and convictions of NAE and our constituents. Although he has subsequently expressed regret, apologized and affirmed our values there is a loss of trust in his credibility as a spokesperson among leaders and constituents. Richard and I have recently met together and mutually concluded that his resignation is a difficult but appropriate decision...[O]ur NAE stand on marriage, abortion and other biblical values is long, clear and unchanged.¹⁰³

The case of Richard Cizik illustrates the danger of allowing competing versions of "religion" in public life. Cizik emerged from within the Religious Right as a moral entrepreneur, drawing on substantial NAE resources to legitimize his claim that environmental policy presented a religious obligation to conservative Protestants. By using religious language and reasons to support a public position on an issue that deviated from the Religious Right's moral agenda, Cizik threatened to confuse the space of public religion with an alternative that did not align with established representatives such as Falwell, Dobson and Robertson. A two-part response ensued to exclude Cizik as a legitimate representative of "religion" in public life. First, public censure ensured that Cizik would be seen as unacceptably deviant from existing Religious Right representatives on the environment issue. Second, when Cizik presented a more direct challenge on the

¹⁰³Quoted in "Washington Update," *NAE Insight* newsletter, Winter 2008/09 issue, p. 4.

issue of same-sex marriage, cutting off his NAE resources ensured that any challenges would be seriously disadvantaged against established Religious Right representatives. The Religious Right worked to maintain sole proprietorship over the use of religious language and reasons in public life by excluding Cizik from religious resources and public legitimacy.

4.1.3 Religion as Public Crusade

For largely contingent historical reasons, the Religious Right has become prominent in American public life as a distinctive and recognizable version of "religion." The goal of the Religious Right is to align the public definition of religion with the specific moral agenda that the Religious Right advances. I do not dispute the scholarly consensus that the Religious Right is able to mobilize more resources than other movements that might offer competing versions of "religion." But as previous chapters have shown, there are also potential challenges arising from normative conflict between strategies of representation and norms of evaluation. What seems like success in terms of resources and prominence may not be successful in terms of normative conflict.

The Religious Right pursues credibility in the public sphere by working to "own the space" of religion in public life. There are two key components to this pursuit. First, "owning the space" of religion in public life involves promoting individual representatives who use religious language and reasons consistent with conservative Protestantism. Unlike moderate or liberal religious movements, the Religious Right focuses substantial resources on making particular individuals prominent in public life. These activities populate the public sphere with visibly religious representatives who advance the Religious Right's moral agenda. When ordinary persons see a visibly religious representative in public debate, they are far more likely to see representatives from the Religious Right,

such as Robertson, Dobson, and Falwell, rather than other religion representatives.

Second, "owning the space" of religion in public life means excluding unapproved representatives who use religious language and reasons but who do not align with the Religious Right's moral agenda. This is not generally necessary for liberal and moderate representatives, who tend to use generic moral language or secular reasons in public life. Rather, it is necessary to check the progress of moral entrepreneurs from within the Religious Right who draw on Religious Right resources and legitimacy to deviate from the established moral agenda toward more moderate or liberal positions in the public sphere. These boundary-maintaining activities give the Religious Right "sole proprietorship" over religion talk in public life. Representatives who attempt to use religion talk are censured publicly and cut off from Religious Right resources. When ordinary persons hear religion talk in public life, they are far more likely to hear the Religious Right's version of religion.

In terms of achieving prominence in public life, the Religious Right has so far been remarkably successful. But for this study, it is equally important to think in terms of achieving good debate. From the perspective of good debate, "owning the space" is just another way of saying "preventing good debate." Promoting individual representatives means using resources to support elite actors who eschew debate in favor of advancing a moral agenda and converting others to their point of view. As discussed in Chapter 3, such "public crusade" runs against the norms of good deliberative debate that ordinary persons hold. Likewise, excluding potential challengers in order to maintain "sole proprietorship" over religion talk in public life runs completely against the ideal of deliberative debate. Preventing participation by other representatives militates against the encounters and engagement that produce deliberation. Good debate actually marks a total failure to "own the space" of religion in the public sphere.

4.2 Evaluating Religion

Throughout this dissertation I have emphasized that representatives exercise constitutive power simply by virtue of being visible in public debate. In Chapter Three I referred to this as cartographic power to set the boundaries of what a debate, or debates, involve. Representatives of the Religious Right are the only religion representatives who explicitly pursue credibility in the public sphere. Yet, as I showed in Chapter Two, the manner of this pursuit violates deliberative expectations that ordinary Americans have of the public sphere. Given the constitutive power that representatives wield, and in particular the power to establish boundaries of what is possible within a particular debate, such activities should, in theory, constrain how people understand religion in public life (though not necessarily religion more broadly).

In the remainder of this chapter I examine this proposition as an empirical question. Does this normative conflict emerge in evaluations of religion in the public sphere? And if so, how does it matter? To answer these questions I analyze how interview respondents evaluate what "religion" and "religious" mean in the religion and science debates in this study. I show that religion in the public sphere, no matter what the source, is commonly seen as a marker of bad debate by interview respondents across a variety of evaluative dimensions. "Religion" means "bad debate."

Respondents understand religion in public life to violate deliberative preferences in two ways. First, prominent individual representatives from the Religious Right, whether religious figures or politicians, are recognized and evaluated negatively as public crusaders whose efforts work against good deliberative debate. Similarly, respondents are more likely to use religious identification for politicians of whom they disapprove either wholly or partly, even though most American politicians identify as religious. In contrast, ordinary persons suggest as ideal representatives persons who are seen as open-

minded and willing to engage in considered, deliberative debate, such as respected local ministers, friends, or neighbors.

Second, and more broadly, the Religious Right's efforts to "make religious language proprietary" prompts negative evaluation of any religion talk as contrary to good debate. Because of the Religious Right's success in "owning the space" of public religion, respondents expect that religion talk, whatever the source, indicates opposition to good debate. When respondents evaluate typical statements and resumes stripped of identifying information, they evaluate religious language of any kind, even when uttered by moderate or liberal religious figures, as inhibiting rather than contributing to good debate. This normative conflict holds across respondents despite substantive agreement or disagreement with the particular claims that representatives make in these debates.

In two separate ways, the conflict between the Religious Right's pursuit of religious credibility and the normative preferences of ordinary persons for good debate ends up defining religion in public life as contrary to good debate. On one path, individual representatives are evaluated as "public crusaders" more interested in advancing a moral agenda than participating in good debate. On the other path, ordinary persons evaluate public religious language and reasons as contrary to norms of good deliberative debate. The result is that in public religion and science debates, no matter which path is followed to the conclusion, "religion" means "bad debate."

4.2.1 Evaluating Individual Representatives

As shown in Chapter 3 and the previous section of this chapter, Religious Right representatives are prominent in religion and science debates. But visibility does not guarantee that ordinary persons recognize the various figures in American public debate. Nor does it guarantee that ordinary persons will evaluate such figures favorably if they

do recognize them. Gaining visibility in public life is not, in itself, sufficient to "own the space." In fact, respondents do not always recognize these persons, nor do they always have an idea of who in particular might represent religion in public life.

Table 4.3: Percentage Recognition, Religion Representatives

Person	Percentage	
George W. Bush	100%	
Bill Clinton	100%	
Pope John Paul II	100%	
Al Gore	100%	
Arnold Schwarzenegger	100%	
John Kerry	98%	
Mitt Romney	96%	
Jerry Falwell	90%	
Pat Robertson	78%	
James Dobson	60%	
Bill Frist	34%	
Sam Brownback	20%	

Table 4.3 reports selected recognition percentages¹⁰⁴ for some of the same persons who figure prominently in the four debates under consideration.¹⁰⁵ Certainly successful

¹⁰⁴ Due to the structure of the interviews, not every respondent had opportunity to recognize or identify (by name) every person in the top 10 of each debate. The percentages here are calculated by dividing hits (clear recognition) by opportunities. So for George W. Bush, 61 respondents had the opportunity to recognize him by name, and 61 did so successfully. For Pat Robertson, by way of contrast, 51 respondents had the opportunity to recognize him by name, and 40 did so successfully. Successful recognition here means that they were able to generate a brief description that mostly matches known information about the representative. If someone said "yeah, Pat Robertson, the car dealer" I would not count that as recognition, but if they said "yeah, Rev. James Dobson, from Focus on the Family, I listen to his radio show" I would mark it as recognition even though Dobson is not an ordained minister.

¹⁰⁵Let me anticipate two methodological critiques. The first is about sequence, and the possibility that I primed respondents by asking questions about specific names first, thus creating an association that is showing up here rather than finding an association that already existed. To be clear, then, I asked questions about anonymized resumes and statements of putative representatives first, then later asked about recognition of particular names. The second anticipated critique is that variation in recognition is just a function of whether or not people pay attention to the news (or vary importantly in how they get it), particularly since I am using general audience mass media (newspapers) that people may actually never see. The broader response to this critique is found in previous chapters about specific debates, and that response is based on the notion of general audience mass media as the "master forum" rather than the specific sources of specific positions by specific persons. A more specific response is that I did not see any significant association between a person's news sources (I asked this question specifically)

politicians appear to be more recognized than others, but recognition is not automatically connected to visibility in public debates. For example, Arnold Schwarzenegger's name recognition is more likely attributable to his many years as a successful actor in blockbuster Hollywood movies than his recent career as the elected governor of California. Similarly, recognition can occur based on inhabiting a recognized office rather than individual promotion. For example, the late Pope John Paul II served as the Supreme Pontiff of the Catholic Church for more than 26 years. Even if most people do not recognize him by his birth name (Karol Wojtyla), most people understand that there is a pope and that the pope is a church leader. So while Pope John Paul II is a significant religious leader with 100% recognition, probably anyone with the title "Pope" will have high recognition as the leader of the Catholic Church.

The other three religion representatives in Table 4.3 vary considerably in terms of recognition. Falwell, while neither a successful politician or otherwise famous (e.g. not a former actor), nonetheless has high recognition, with nine out of ten respondents recognizing him successfully as a conservative religious figure. Pat Robertson has substantially less recognition, with about three out of four respondents recognizing his name. James Dobson is only recognized by about three out of five respondents. Despite their success at becoming prominent representatives in the public debates I have identified here, recognition of these Religious Right figures is far from universal. They are more widely recognized than many others, to be sure, but such recognition is far from guaranteed. 106

and their approval or disapproval of moral issues. For example, even among my conservative Protestant respondents, few watched Fox News, or at least only Fox News. Most people like sitcoms and reality TV, it turns out, and I cannot easily ascribe patterns in the data to variation in entertainment TV tastes.

¹⁰⁶"Top of mind" surveys that ask respondents to name a particular person show even worse results. A recent Barna Group study asked a sample of Americans (not just religious) to name "the most influential Christian leader." 41 percent of respondents said "not sure," "no one," or "none," while the top name, given by 19 percent of respondents, was evangelist Billy Graham. See report results at http://www.barna.org/culture-articles/536-us-lacks-notable-christian-leaders.

More interesting than the top-level recognition percentages are the ways that respondents recognized representatives, and how they evaluated such representatives when they recognized them. The general finding is that respondents consistently link "religion" with "conservative." This happens in three ways. First, when respondents recognize Religious Right representatives as religious, they negatively evaluate such representatives as "conservative" public crusaders. Second, respondents only recognize conservative politicians as religious, even though almost all American politicians are nominally religious. Third, when respondents suggest ideal representatives for good debate, they name persons who either are not religious, or who do not use religious language in public life. In short, there is no link between "religion" and "liberal" or "moderate" when it comes to representatives. It is only the "conservative" members of the Religious Right and their apparent associates who are recognized (and evaluated negatively) as religious representatives.

Recognizing Religious Representatives

Clearly not all prominent representatives are recognized equally. But when prominent religious representatives are recognized by name, they are recognized as conservative. For example, respondents either recognize Pat Robertson as a conservative religious figure or do not recognize him at all. There are no instances of someone thinking that Pat Robertson is a liberal or moderate religious leader. The same is true for Jerry Falwell and James Dobson.

Such recognition as conservative tended to be immediate. For example, Lydia quickly pegged Jerry Falwell: "Super conservative. Just so 'hell fire and damnation.' He's Jonathan Edwards." Jennifer had a similar evaluation of Falwell as conservative: "I think he's an evangelical preacher, right. So he would be the Republican right wing." Religious conservatives were also grouped together consistently by respondents and seen as

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largely interchangeable, for example in Timothy's evaluation of Jerry Falwell followed

by Pat Robertson:

Timothy: I've never heard him speak explicitly about this, but I'm sure he's on the more right-wing side of the debate that – maybe, and extremely so.

Interviewer: [listing next name] Pat Robertson.

Timothy: Ditto.

Similarly, Ernest identified common ground between Falwell and Dobson, placing them at one extreme of a left-right continuum:

Interviewer James Dobson

Ernest: Yeah, he's way off to the right. And that's the Focus on the Family

guy, right?

Interviewer: Jerry Falwell.

Ernest: He's probably his best friend – he's got to be way over to the right

also.

Such recognition of Religious Right figures is generally accompanied by disapproval. Recognition is rarely based on positive evaluations. While I do not go into detail here, I note that this is as true for evangelical Protestant respondents as it is for others. Being evangelical does not predict approval or disapproval of religious conservatives. Falwell, Robertson, and Dobson in particular are evaluated as exemplars of what not to do or be in public life. When asked about Pat Robertson, Daniela provided an especially memorable, though not atypical, example:

Oh God, he's even worse [than Jerry Falwell]. Pat Robertson is one of the most frightening men, I think, in the United States. Have you ever seen *The 700 Club*? We wound up watching this show by accident, because I was like, "Oh, it's a news show. Let's see what's going on in the world, right?" And so we started, and I have never been so offended in my life. I mean this was right, I think, when we were first about to invade Iraq, right? And, I mean, his view was like let's go kill all these God damned Muslims, and

it scared the hell out of me. I was like, how does someone like this get on television? I mean [with reference to environmental issues], Pat Robertson would say not only should drive your SUV, but you should try to hit a couple Muslims on the way.

However, respondents did not generally use "conservative" to mean strictly theological or political conservative. Recognition did not map on neatly to respondents' own religious commitments. Table 4.4 reports some interesting variations in recognition for Falwell, Robertson, and Dobson across major religious categories. Falwell's recognition is fairly consistent across respondents, regardless of their religious identification. James Dobson's recognition among evangelicals (conservative Protestants) is almost universal, but drops off significantly for mainline Protestants and even more for Catholics and Other/Nones. And Pat Robertson seems to be better recognized by the persons in the dominant religious traditions (in America) than by Other/None persons.

Table 4.4: Recognition by Religious Category, Selected Religious Conservatives

Person	Mainline	Evangelical	Catholic	Other/None
Jerry Falwell	91%	95%	83%	87%
Pat Robertson	100%	82%	75%	62%
James Dobson	64%	95%	33%	33%

Even among evangelical Protestant respondents, who might be expected to know all about these figures, there was not consistent recognition of, or knowledge of, the Falwells and Dobsons of the world. Persons from other religious groups varied greatly in the extent to which they recognized the most prominent religious representatives in public debate. (This is true in both directions, as more mainline Protestants than conservative Protestants recognized Pat Robertson.)

¹⁰⁷See Methodological Appendix for sample details.

¹⁰⁸As I use the category, Other/Nones include atheist, agnostic, disaffiliated, so-called "other theology" such as Unitarian Universalism, and the small minority religious groups such as Judaism, Islam, and Buddhism. In this sample it is primarily atheist, disaffiliated, and "other theology."

So recognition of religion representatives as "conservative" is not simply disagreement based on substantive similarities or differences. The term "conservative" also implies that these religion representatives are working against good debate. Specifically, the descriptor "conservative" marks religious public crusaders seeking to impose their moral agenda on others. For example, when I first brought up the issue of the origins of sexuality, Arthur, a mainline Protestant, gloomily predicted that Jerry Falwell would eventually show up in our discussion, since Falwell is "just always being the advocate of, you know, family matters and all of that." And in Raymond's opinion, such representatives are not even capable of such debate:

I have to say that for guys like Falwell, and by guys like Falwell I mean those who are sort of public and frequently televised with their evangelical preachings and so on, I have a boundless degree of cynicism regarding anything that comes out of their mouth. So even if he were to say things pertaining to environmental management, protection, sustainability, I would not trust it any further than I could throw the guy, but I haven't heard him say anything about that.

There are a few exceptions to the negative evaluation of Religious Right figures. Nicole, a Catholic, "likes the way [Jerry Falwell] talks" and thinks he has "some valid points." Felix, a fundamentalist, thinks that both Falwell and Robertson are "good, sound fundamentalists" whose "thinking is from the biblical standpoint." And sometimes good intentions count for something, even if respondents disapprove of the representative in other ways. For example, Teresa, a Catholic, says that she thinks that James Dobson is "a good man and a loving man, but I think he's definitely very traditional in his view of marriage and family." But by and large respondents tended to recognize the names of Falwell, Robertson, and Dobson in particular as religious conservatives who exemplify what is most disagreeable about religion in public life.

Only Conservative Politicians are Religious

Another important pattern is that respondents of all religious backgrounds only recognize conservative politicians as "religious." In the American political context, almost everyone running for higher elected office is nominally religious. For example, George W. Bush is United Methodist. John Kerry is Roman Catholic. Bill Clinton is Baptist. Al Gore is (or perhaps was) Baptist. Mitt Romney is Mormon. Sam Brownback converted from United Methodist to Roman Catholic while in office. There is a wide range of possible religious identifications for politicians in public life, and everyone running for higher office could be identified legitimately as "religious." 110

Yet it is conservative politicians who are recognized as "religious."¹¹¹ For example, Damien, an evangelical Protestant, offers this evaluation of George W. Bush:

The – yeah. I guess just – and I don't know that so much of what people paint on him, you know, but I would say he represents the conservative right. The religious conservative.

Identification of politically conservative representatives as "religious" is not simply meant to indicate position on a left-right continuum. Respondents link "religious" and "conservative" to indicate a particular kind of politician who remains committed to a position and is not open to other positions. "Religious" shares with "conservative" the

¹⁰⁹I say this because an interview with the *New Yorker* in 2002 offers this quote from Gore: "The influx of fundamentalist preachers have pretty much chased us out with their right-wing politics." See http://www.newyorker.com/archive/ 2004/09/13/040913fa fact.

¹¹⁰Though not as prominent in this data set because of his fairly meteoric rise to national politics in a short period of time, Barack Obama is an interesting case, not because of the denominational affiliation (UCC), but because his specific congregation (Trinity, UCC's largest) is known for activism, as several widely-distributed quotes from pastor Jeremiah Wright suggested. Note that this means that the conservatives were able to portray Obama to some extent as less religious because his church was "really" about political activism, not religion.

¹¹¹A methodological note: Identification as religious could be explained as the result of priming based on the presumption that people in "religion and science" debates should be evaluated in "religious" terms. But this does not suggest a direction for that evaluation. Thus it is less interesting that the word "religious" is used at all, and more interesting that it is used primarily to describe conservatives and not moderates or liberals.

implication that these are bad representatives because they work against good debate. For example, Charles discusses George W. Bush's position on the origins of sexuality:

I do recognize him. My impression of him is that while he probably wouldn't go gay bashing, he probably wouldn't directly associate with homosexuals either, or knowingly anyway. And if he did, it might be for a photo op, but I don't imagine that he's inviting many members of PFLAG over to the Crawford ranch. I think it's because his view of people is so archaic because it's based on like such a fundamentalist view of religion. It's so rooted in that that he doesn't deviate from that at all, do you know what I mean?

Similarly, Anita, an evangelical Protestant, thinks that Mitt Romney opposes stem cell research "because of his religious background," as does Summer, a Catholic, who points to Romney's "religious beliefs and his conservatism." Even Crystal, a mainline Protestant who claims to be "kind of ignorant of his religious background" and thinks that Romney's "business kind of persona as being more dominant anyway," nonetheless considers Romney's religious background as something possibly relevant, even if she ultimately rejects it as causal. And Don says:

Well, I mean, I know Mitt Romney is a Mormon and I know that Mormons don't believe in - I don't know where they stand in stem cell research. I haven't ever asked the kids that but I would think that they don't believe in abortion.

While not every respondent describes politicians in religious terms, sometimes referring instead to their economic interests or alliances with corporations, or to their personal ambitions, the important pattern to note here is that when respondents do consider religious affiliations and motivations to be important, it is almost always in their descriptions of conservative politicians such as Bush, Romney, Frist, and Brownback. Such use of "religious" indicates not only political affiliation, but a negative evaluation of these politicians as bad representatives in public life.

What is almost entirely missing from interviews is recognition of non-conservatives as "religious." This is striking. Take, for example, John Kerry, who is known to be Catholic and even had confrontations with various Catholic leaders over his positions on abortion and stem cell research, notably prompting at least one prominent leader to call for his excommunication. Yet despite being given the opportunity to evaluate Kerry and discuss his position on stem cell research and the environment, respondents almost universally either did not know his position, or assumed that as a Democrat he supported stem cell research and was also pro-environment. Put another way, his political identity as a Democrat was the only salient characteristic. The fact that he is Catholic did not come up in most interviews at all, even among interviews with Catholic respondents. The single exception occurred in an interview with Laura, an evangelical Protestant, who nonetheless discounts Kerry's religion as a factor:

Well, I think that John Kerry is Catholic. I know he's from the east coast. I used to live in Boston. I know that he is a Democrat, and I know that he is liberal minded, and so if I had to stereotype by putting those different types of factors all together I would probably guess that he would be on the scientist's side. It's not to say that he isn't religious, because Catholicism, completely valid religion, I just don't think that he would put that at the forefront when dealing with an issue. I think he would keep religion as something personal and private, and that he would mostly be focusing on the environmental issue as something that affects everybody and kind of just leave the religious stuff out of it.

Similarly, despite many opportunities to discuss Bill Clinton and Al Gore, respondents simply did not bring up religion as salient for these representatives, nor did they identify them as "religious." With the one exception in Laura's interview, it is conservative politicians who are "religious."

Ideal Representatives are not Conservative

The existence of moderate or liberal religion representatives is not only an empty (or unrecognized) space in current religion and science debates. It also seems to penetrate to respondent imagination of possible debates. Part of the interview schedule included soliciting suggestions for possible ideal participants in each of these debates. Granted, it is sometimes difficult for people to mobilize any specific name. But when respondents suggested good representatives who would produce good deliberative debate, they rarely suggested public religious conservatives. Respondents sometimes suggested liberal or moderate "religious" figures who were personal acquaintances (e.g. pastors, friends). They also suggested non-conservative (along, say, political dimensions) public figures who were not clearly identified as "religious." Most commonly, though, they described the religion representative that they would like to see, but for whom there was no obvious public exemplar.

Respondents often suggested religious figures whom they knew personally, whether or not they agreed with them substantively. As before, respondents want good debate, and they understand conservative religion representatives in public life to be inimical to good debate. Respondents thus have to look to their personal lives and connections to find examples of good religion representatives for ideal debate on religion and science issues. Vicki suggests one of her former spiritual mentors:

One of my [mentors] who is gay and went through leaving the Methodist church because he could no longer be a pastor there, given the circumstances and joined the Episcopal church, but he is not serving in a pastoral position there. I just can't bring any of the Focus on the Family guys in. I just can't.

This selection of private rather than public figures happens even when respondents are themselves religious conservatives in the theological sense. Damien, an evangelical Protestant, suggests his pastor for debates on the origins of sexuality because of his

pastor's willingness to deliberate rather than just put forward his own point of view. Even though Damien is "conservative" in the religious sense, his ideal representative is someone from private life, not public life:

I think I would put my pastor in there. I'd put him in there because I think he's absolutely willing to engage in the talk and also like – also be like – not seek to punish or to treat homosexuals as outcasts or anything by any means. I think there's a certain sense of whatever, it doesn't matter there's everyone – everyone is equally fallen, everyone needs God, so it's not to – there's no sense of condemnation or anything like that, and I think – to me that's a really important thing.

Similarly, Morgane, an evangelical Protestant, suggests the president of a local conservative faith-based ministry as a good representative. For Morgane, this person would be a good representative precisely because she is able to engage without forcing a favorable outcome. This is important on issues where uncertainty drives debate:

I would have her, because she recognizes that on very difficult issues there are not going to be – there may never be an answer, and so we're going to debate it in prayer and trust that God is wise and in control. I just think that's the life perspective that I have on some difficult things that I can't wrap my brain around.

Respondents sometimes suggested as ideal representatives leading religious figures who do not generally participate in public debates. Lydia, for example, suggested the Dalai Lama, who is the spiritual leader of Tibetan Buddhism, because he would "straighten out" the other religious representatives who Lydia sees as closed-minded:

I'd put the Dalai Lama. (Laughter). Well, it's just because it's like, your tendency is to pick people out of your political viewpoint, so you start laughing because you gotta really now like, get more global here and you gotta be more open-minded. So I would pick the Dalai Lama because he'd straighten everybody out.

Put another way, the Dalai Lama is a safe choice because he is not distinctively religious. People know that he is Buddhist, but beyond that he does not participate in contentious public debate.

While few other respondents named specific figures like Lydia named, they did offer descriptions of ideal representatives. In most cases, these descriptions sketched a picture of an ideal representative who might be religious, but who is committed to open debate. Sometimes this showed up as a commitment to ecumenism. Connie, for example, suggests something like the leader of the World Council of Churches:

I don't know what the correct title is, but the, I know there is a, and correct me if I'm wrong, there is somebody who represents both the Christian and the Jewish religions. There's somebody that heads that up. So yeah, I would want somebody who has the diversity of, of that.

More specific to religion and science debates, respondents sometimes described ideal representatives as religious elites who would be open not only to other religious points of view but to scientific views that could inform the discussion. For example, on the issue of human origins, Shannon, an evangelical Protestant, suggested that he wants a theologian who would be:

someone who – someone fairly conservative but not conservative to the point where they think that science doesn't have a right to exist apart from religion. They're willing to give equal footing to both. Even if they just don't necessarily – they maybe don't necessarily have to believe in evolution or not, they just have to believe that religion and science can co-exist and do their own thing, see distinctions between them.

In evaluation of individual representatives in public religion and science debates, respondents link "religion" and "conservative." When respondents successfully recognize individual religion representatives, they recognize them as conservative. Similarly, respondents recognize many prominent politicians, but only conservative politicians are

recognized as "religious" and evaluated in terms of how their commitments to their positions resist deliberative participation in public debate. Conversely, given the chance to offer names or descriptions of ideal representatives in public debate, respondents either referred to people that they knew in private life, or described ideal religious representatives as persons capable of moving beyond their religious commitments, either through ecumenism or through more general openness to potentially conflicting perspectives.

The success of the Religious Right in promoting individual representatives appears to have a strong constitutive effect that links "religion" in the public sphere to "conservative." For respondents, this triggers a negative evaluation of religious representatives, as conservative religious representatives (e.g. the Religious Right) are seen as working against good debate through their public crusade approach. The result is that only those religious persons who violate deliberative expectations in the public sphere are seen as distinctively religious. But the constitutive effect extends to the imagination of future good debate as well. Respondents have difficulty imagining any moderate or liberal religious figure who would pursue credibility in the public sphere. Taken by itself, this finding suggests that "promoting individual representatives" from moderate or liberal religious groups might be a simple (though not easy) solution to achieving good debate. But is this really the case?

4.2.2 Evaluating Public Religion

Certainly the prominence of Religious Right representatives might explain the link between "religious" and "conservative" in evaluation of specific individual representatives. However, in interview exercises that did not depend on naming specific individuals, respondents still displayed a strong tendency to read religious indicators, such as denominational affiliation on resumes or "God talk" in statements, as markers of bad de-

bate. Respondents appear to be *de facto* Rawlsian, in the sense that the use of religious language is seen to be counterproductive to public debate and therefore undesirable. Respondents engage a "deliberative frame" when evaluating resumes and statements, wherein recourse to religion or religious language is seen as closed-minded and contrary to norms of public debate as open, ongoing, and being in principle willing to change one's mind.

Respondents link "religion" to bad debate in three ways. First, respondents negatively evaluate religion indicators because religion is seen to work against good deliberative debate. Second, respondents understand religion talk to be what conservative religious representatives do. This evaluation of religion talk as conservative even extends to use of moral language more generally. Third, respondents categorize religion talk as conservative even when it (really) comes from liberal or moderate religious figures, or they reject such talk as not distinctively religious. Even without the touchstone of individual Religious Right representatives to guide evaluation, ordinary persons understand "religion" as contrary to good debate.

Religious Markers Indicate Opposition to Good Debate

Consistently, respondents from a range of religious backgrounds evaluated the use of religious language in statements (e.g. "God") or religious attributes in anonymous resumes (e.g. "Christian") as useful indicators of closed-mindedness, contrariness, and other forms of opposition to good debate. In general, respondents displayed a preference for deliberation that recourse to religion, either as an attribute of persons or an attribute of language, is seen to violate. For example, Elaine understood a statement about environmental harm being an offense against God to indicate harsh extremism:

¹¹²This is a different claim than "religious language should not be used" (the normative Rawlsian/Audi claim). As John Evans (2010) has found, people see the ability to use religious language as important and necessary, which he partly attributes to a preference for sincerity in discourse (see also Trilling 1972).

[reading statement aloud] 'To harm this world be environmental degradation is an offense against God.' Um, I think this is pretty harsh. This is someone, again, an environmentalist, and I can see, this is an aside, but I can see someone with this attitude being very like you know, throwing rockets at whaling ship kind of things.

With regard to the role of religion in public life, most respondents are Rawlsian in practice. By "Rawlsian" I mean that, like philosopher John Rawls (2005), ordinary respondents understand public debate to be an arena where religion has no legitimate place. In normative terms, religion should remain private, since it is a source of conflict over prior commitments rather than a universally shared basis for deliberation. Of course respondents do not explicitly describe themselves as Rawlsian. But respondents consistently evaluate the use of religion in public life to be inimical to good debate. While religion might inform one's opinion, it should not ground public talk or arguments.

So when religion does appear, either as an attribute of persons or language, it is evaluated as contrary to good public debate. For example, Holly evaluates a religious affiliation on a resume as indicating involvement in public crusade:

Just the background. Just the basic background and his religious affiliation, and being a founder of a Christian university. I mean I would definitely think that obviously since he's...found a Christian university he feels as though his morals and values are so important that he needs to impose that on somebody else.

Respondents do not often distinguish between various forms of religion. Most did not understand the theological significance of particular denominational affiliations. For example, on the anonymized resume for a representative affiliated with the Church of the Nazarene, respondents tended to say that they had no idea what that meant. But that

¹¹³Of course I simplify Rawls to illustrate what respondents are doing. Rawls (1971, 2005) is more concerned with how to underpin a theory of justice. Since religion is not accessible to every citizen (that is, not everyone shares the same commitments or prior beliefs), it cannot serve as a basis for public reason in a pluralistic society. It is unfair to include religion, so it is unjust. Of course religion can remain as "background culture."

did not prevent negative evaluation. Instead, respondents tended to treat any religious language or affiliations as indicating some form of public crusade. Ian, for example, was not bothered by his lack of theological knowledge. When he saw something that indicated religion, he immediately reacted with revulsion and said "I don't know why, but even any religion, any time I see evangelical I just scream like I hate being pushed for anything. I just scream internally." Likewise Vicki indicated that religion talk indicates unreasonable commitment to a particular viewpoint:

I think it's true that there are people who are so caught up in defending the notion that there is a Loving God who created everything that they're afraid of what any other form of understanding would open them up to.

In some cases, respondents recognized that they were mobilizing a negative stereotype of "religion." Whether religious or not, sometimes respondents said things like "I shouldn't say this" or "this is probably just a stereotype, but ..." when evaluating apparent religious attributes or language. For example, Zoe responded to an anonymized statement by Jerry Falwell by saying "Well, my first reaction is that this person's a nut. Most of the time, I keep that information to myself."

But as respondents describe debates in response to open-ended questions (e.g. "who do you think is debating this issue?"), respondents often describe "religion" as the reactionary "side" in a bad public debate. On one side of the issue, whether environmental policy, origins of the world, origins of sexuality, or stem cell research, are a complex mix of actors and interests, while on the other side are religious conservatives (or the Religious Right, or whatever). One side uses religious language, while the other does not. Sienna typifies this approach. When asked to describe who is arguing in debates over origins of homosexuality, she said:

Mostly, it is like the religious/conservative side versus – I mean versus the gay community; but there's also people who aren't in the gay community who agree with them. So more the liberal, social liberals.

Crystal, a mainline Protestant, discusses how being a religious conservative might disqualify a person from participating in public debate over the origins of homosexuality. Without being exposed to people who do not talk in the same way, it is difficult to move beyond religion talk to engage productively:

I really think that this debate is frequently between people who haven't looked at the other side. Much more so than the stem cell research one. I think that, I think that the people who fall on the far Right, stereotypically Right conservative Christian side really don't have any friends that are gay, and I think that that's certainly, I mean I think there's, there's a real lack of exposure and that bringing people with these very multi faceted different perspectives into a room together kind of I think does allow for, for kind of a —I think it would allow for more progress. I mean I think that that's just sort of exposure to all of the different aspects of it does sort of move this issue forward, and I think that's kind of the trend, and that's, hopefully that's the trend that we're kind of as a society moving into.

For Sienna, Crystal, and many other respondents, religion means stubborn opposition. There are many instances where "liberals," "scientists," "the educated," "the intelligent," and so forth are part of a wide array of people joining forces on one side of the issue, while the other side are the "conservatives" and "religious" people who are single-minded, uncomplicated, and united in opposition based on religious language and arguments. Even if, as Crystal notes, such opposition is grounded in ignorance rather than ill will, it is still contrary to the deliberative norms of good debate.

Only Religious Conservatives use Religion Talk in Public

One of the most persistent notions among respondents is that only religious conservatives use religion talk in public. There are several instances where, for example, a description of a representative as "founder of a Christian university," or even any indication of involvement in politics, means that they are seen as conservative. For example, Yuri, an evangelical Protestant, says this when looking at a resume: "Hm, host of a Chris-

tian news and talk program, that scares me because a lot of times Christian news and talk programs could be way, way conservative or just very, very just off." Similarly, Dwight understands religious broadcasting to be the purview of religious conservatives:¹¹⁴

Okay, leading religious broadcasting company. I'm not really sure. I mean I can guess. Actually, I can guess who it might be, but I am not absolutely sure at all who it is, so I don't know. That's tough. The time frame, his age and the time frame makes me think he might be relatively fundamentalist, well Christian in this case, in terms of his approach to taking the literal word of the Bible, but it's hard to say for sure. It's the leading religious broadcasting company that gets me.

Sometimes a respondent who shared religious affiliation with an (anonymous) representative would nonetheless identify that religious affiliation as conservative, precisely because it is mobilized in public debate. For example, in evaluating a resume of a psychologist participating in debates over the origins of homosexuality, Sienna immediately pegged him as "a religious conservative" because of his affiliation with a Catholic psychology clinic. As Sienna is herself Catholic, I asked what that meant specifically to her. She replied "I guess we mostly all tend to – everyone thinks we're all very conservative. So you would just say that they all are conservative." For Sienna, while Catholicism in private could be varied and complicated, anyone emphasizing their Catholicism in public is probably conservative.

Such evaluation is not restricted solely to pure religion talk. Respondents also understand public talk about morals more generally to be the purview of religious conservatives. Such moral talk is seen as raising unresolvable problems that get in the way of reasonable debate. Josefina (an atheist) said that a declarative statement that we shouldn't

¹¹⁴This is true in some respects, notably that some of the most famous scandals involve conservative televangelists (see Buddenbaum 2009). However, I note that one of the biggest religious media networks is actually EWTN, the 24/7 Catholic television network. Moreover, many religious cable channels are, on one hand, sufficiently eclectic in their programming to avoid an automatic "conservative" label, and, on the other hand, completely indeterminate in their political orientation (e.g. Joel Osteen's policy of refusing recognition to any political candidates who visit his church).

talk about the "global warming controversy" because it "shifts the emphasis away from the great moral issues of our time" must have come from (in her terms) the "conservative religious right." When I asked her to explain, she said "Just that somebody's concerned about the moral issues of our time, the integrity of marriage and teaching of sexual abstinence are definitely conservative religious morals."

In the more expansive version of this association between "religious" and moral issues, several respondents evaluate mention of moral issues as indicating several objectionable dimensions of religious life at once. Judith, for example, barely suppresses her outrage in evaluating the same statement about the "great moral issues of our time":

Good grief, Bible belt, Bible thumper, uneducated or middling educated. Not to say never; they've taken a couple of classes someplace in a night school I suppose. They live in the town they grew up in. Go to church, think Bush is the greatest guy that's ever been around. Will [Mike Huckabee] run, gotta vote for him, waiting for him to be in office. This is just – [expressing exasperation] they've actually brought integrity of marriage into the debate of the environment.

And to reinforce the link between public religion and conservative religion, when respondents expressed ambiguity or uncertainty about various "religious" indicators, the complicating factor or confounding exemplar usually came from their private lives rather than from examples of liberal or moderate religion in public life. For example, Barry, an atheist, did this when evaluating the resume of a genetic scientist participant in debates over homosexuality, despite his initial association of "religious" with "conservative:"

They're associated with the Presbyterian Medical Center. In my experience religion fosters a more conservative attitude towards the gay community but I'm not going to assume that because I've had a lot of friends myself who are very religious yet very open to the gay movement.

For respondents evaluating statements from religion and science debates, religion talk is something that only conservatives do in public. Using religion talk in public

is the mark of the Religious Right, which is negatively evaluated as contrary to good debate. So is talk about moral issues, which is seen as an extension of religion talk that conservatives use to confound good debate over important issues. Even when there is ambiguity or uncertainty over religion talk, it is because respondents refer to counter-examples from their private lives. If religion talk is public, it is probably working against good debate.

Solving the Riddle of Non-Conservative Public Religion Talk

Yet liberal and moderate religious representatives, though not prominent in public life, occasionally use religion talk. When respondents encounter religion talk that is obviously not conservative, it presents a conundrum. Respondents resolve this conundrum in two ways. First, they find a way to describe such use of religious language as somehow not distinctively religious. Second, they evaluate such use of religious language as conservative, even though it comes from liberal or moderate religious figures.

In the first instance, religion talk is not treated as religion talk, but evaluated as something else that is neither distinctively religious nor necessarily conservative. Such talk "could be anything." For example, when evaluating the statement "To harm this world by environmental degradation is an offense against God," Amanda, a mainline Protestant, says:

I would say this is one of those rare cases were you have a religious yet liberal leaning person, but I could be wrong, and I know that even the Catholic church, they put out new sins all the time, and you can get updated lists and I know that environmental harm is even there as being sinful now. So, it could be anybody, I'm having a hard time saying for sure, but I do agree with it for sure.

Solomon evaluates the same statement by pointing to religion talk as a common language for communicating unusually powerful (in the emotional sense) experience.

Anyone sufficiently moved might use religion talk in this way. An apparently religious statement could be made by:

...somebody who was religiously, some religious based opinion, or could be from somebody who isn't necessarily a religious person but came from a very deep sense of a heart-felt statement, if you will. A heartfelt statement that you would hear when again, something of the magnitude of a hurricane, or 9/11 would happen, and even those who had never said the word God would say the word God.

In Ken's evaluation of the same statement ("To harm this world by environmental degradation is an offense against God"), religion talk that is not obviously conservative might instead be a kind of translation from one kind of language into another. Moderates, liberals, or even the non-religious might use religion talk in order to argue their point in public:

This is a hard one, for me at least 'cause it could come from a Christian with very strong environmental views. It could come from an environmentalist who has no religious – any religious beliefs who wants to use the Bible as evidence for why the environmental case is so important. I'd have hard time – I have a hard time really pegging – or not pegging, but even generalizing where that might – someone might say this statement.

The second way that respondents resolve the apparent conundrum of non-conservative religion talk is simply to evaluate it as conservative and contrary to good debate. In these cases, respondents see religious references as conservative even when the statements (really) come from liberal or moderate sources. So for example, when John Haught, a Roman Catholic who supports evolution, says that beneath all the arguments of Intelligent Design advocates "there lies a deeply human and passionately religious concern about whether the universe resides in the bosom of a loving, caring God or is instead perched over an abyss of ultimate meaninglessness," he becomes a public crusader to Holly, who evaluates his (anonymized) statement as conservative:

I don't agree with this statement at all. I think this person is more emphatic Christian based and I just don't agree...[He] represents the more affluent Christians that are emphatic and think that only their viewpoint is correct.

Richard Cizik's use of religious language to discuss the environment ("To harm this world by environmental degradation is an offense against God") also prompts evaluation as conservative, even though this is the one issue where Cizik deviates from the Religious Right. Sterling, for example, evaluates the statement as though it came from a religious extremist, even though he agrees with the substance of the claim:

Yeah, this would have been made by probably an evangelical, who was not so much an environmental extremist, but more evangelical bible-bleeding person would be my opinion on this. And I would agree with this statement.

Penny similarly evaluates Cizik's use of religion talk, objecting even to the use of religion talk to make a point in public debate as unreasonable and appealing to emotional intimidation:

And I don't – I mean that's such a – such a powerful statement. And yet we do it every day so it's like if I'm constantly degrading the environment by just being present, and yet God still loves me because God doesn't make any junk then I don't know. That's very – it's a very shaming statement. It's a very shame and fear based to say.

In some cases where liberal or moderate figures use religion talk, respondents evaluate such talk as not distinctively religious. Though religion words are used (e.g. "God"), respondents understand the use of these words to be conducive to good debate. Because it is not distinctively religious, such talk can serve either as a language of expression or translation even for those who are not themselves religious. However, in other cases where liberal or moderate religious figures use religion talk, respondents evaluate such talk as conservative and contrary to good debate, against the intentions of the representatives who use such talk.

4.2.3 Public Religion and Good Debate

In general, respondents understand public religion to be contrary to good debate. This happens in two ways. First, respondents negatively evaluate individual representatives who are seen as "conservative" in public life. When respondents recognize Religious Right representatives as religious, they negatively evaluate such representatives as public crusaders intent on advancing a moral agenda. Respondents also recognize conservative politicians, but not other politicians, as religious. As with the religion representatives, political representatives evaluated as "religious" are seen to be advancing a particular moral agenda through politics. In both cases respondents use "religious" to mark representatives who are seen to be engaged in public crusade and therefore opposed to good debate. Reinforcing the link between "religion" and "public crusade" in this sense, respondents suggest as alternatives ideal representatives who are either not religious, or not engaged in public life.

Second, respondents negatively evaluate religious attributes and language in public life, even when they share religious commitments with the representative being evaluated. Respondents are *de facto* Rawlsians who understand religion in public life to be unfavorable to good debate. In evaluating resumes and statements, respondents evaluate religious markers as indications of closed-mindedness and unwillingness to consider alternative perspectives and conclusions. Further, respondents understand religion talk in public life as something that only conservatives engage in, and only as part of advancing a moral agenda. While respondents pointed to examples of friends, family, neighbors, and others in their local social networks that complicated their evaluation process, the realm of public religion talk is generally understood to be the purview of conservatives. Even religion talk from liberal or moderate representatives is evaluated either as not distinctively religious or, more commonly, as conservative regardless of its actual source.

The Religious Right has succeeded in "owning the space" of religion in American public life. The pursuit of religious credibility in the public sphere has, in this sense, worked. But from a normative perspective this success has resulted in constituting religion in public life as contrary to good debate. Respondents mobilize a normative preference for deliberative debate that conservative religion is seen to violate. Yet to ordinary persons, it is only conservative religion that operates in public life, either in the form of individual religion representatives or in the form of religious arguments and reasons.

The result is that ordinary persons understand religion in public life as something that is opposed to good debate. The Religious Right not only owns the space, but in doing so has exercised the cartographic power of representation to define what counts as the space of "religion" in the public sphere. The boundaries are set, and they appear to be durable, as they are reproduced even within the imaginations of respondents from a variety of religious backgrounds. This raises grave concerns about the possibilities for good debate in the future.

Chapter Five:

Scientific Credibility in the Public

Sphere

One of the most striking features of the religion and science debates in this study is the lack of prominent scientists across debates in public life. While several representatives make claims based on scientific authority, few of these representatives are actually scientists. And when scientists appear, they tend to be confined to one issue. This is strange. As previous chapters pointed out, the public sphere, particularly through mass media, provides an important arena for pursuing credibility. And as many scholars of science have shown, the pursuit of credibility is central to the scientific enterprise. Yet the most prominent representatives pursuing scientific credibility and making claims based on scientific authority are not actually practitioners of science.

So where are the scientists? Why are scientists not more visible in the public sphere? Many people think that they should be. For example, recent book called *Unscientific America*, by bestselling author Christopher Mooney and Sheril Kirshenbaum, argues that we are unable to deal properly with many current problems because of general scientific illiteracy. According to the authors of the book, a big reason for this illiteracy is that science loses out in public debates because its apparent opponents, in particular Ameri-

can religious conservatives, are simply better than scientists at gaining and keeping the attention of ordinary Americans. Despite the rise of many new media efforts (e.g. blogs) dedicated to popularizing science, Mooney and Kirshenbaum (2009:125-130) claim that "the bloggers cannot save us" and that what we really need is "Renaissance scientists" who can "tell stories" and "appeal to the interests of broader audiences." Or, in other words, what science needs is its own version of the Religious Right, in the form of a few visible science representatives who will carry the banner for science in the public sphere, no matter what the issue or concern.

In this chapter I use findings from media analysis and interview data to explain why there are few such science representatives in the public sphere. Like most science studies scholars, I start from the position that science is a multidimensional cultural institution whose existence and authority depends on maintaining credibility in public life (Shapin 1995, Epstein 1996, Gregory and Miller 1998, Gieryn 1999). What counts as science, scientists, or scientific authority does not derive simply from fact or truth claims, or from a clearly-demarcated set of rules for producing the knowledge that drives such claims (e.g. "the scientific method," see Kuhn 1996, Feyerabend 1975, Latour 1987) but from the apparatus of credibility that surrounds such claims. Many different actors, including (but not limited to) scientists in the lab, social activists, university administrators, corporate accountants, government regulators, school boards, lawyers, and judges, engage in "boundary work," the "strategic practical action" that negotiates the particular boundaries of science in a given place and time (Gieryn 1983, 1999).

My explanation is that the dominant model of scientific credibility involves scientists avoiding the public sphere. This is analogous to what the Religious Left does to pursue religious credibility. As scholars of science and technology have repeatedly shown (see, e.g. Shapin 2008), this model of scientific credibility is supported by a public narrative that defines credible scientists as dedicated seekers of knowledge who manage an uncer-

tain enterprise by being consistently virtuous. From this perspective, pursuing individual credibility in the public sphere is a signal that the virtuous scientist has been corrupted by (the pursuit of) money, fame, or power rather than pursuing scientific truth. So active scientist participation in the public sphere is undesirable and even fatal to scientific credibility.

Thinking about the public sphere as an arena of credibility helps clarify what is at stake. Efforts to mobilize some scientific version of the Religious Right, or to recruit a new Carl Sagan, are not just efforts to introduce new science representatives into the public sphere. They are efforts to replace a model of scientific credibility that avoids the public sphere with a model of scientific credibility that intervenes in the public sphere. As the example of the Religious Right showed, such an approach can be successful in terms of gaining visibility in the public sphere. But, as the example of the Religious Right also showed, such visibility does not automatically translate into approval by ordinary persons evaluating representatives in public debate.

In what follows I demonstrate that, for science as for religion, efforts to establish credibility in the public sphere often run afoul of deliberative preferences for good debate. In interviews, I find consistently that ordinary persons negatively evaluate science representatives in public life. This negative evaluation is not due to opposition to science or "anti-science" attitudes. Contrary to what scholars in the "epistemological conflict" tradition would claim (see Chapter One), almost all respondents expressed support for science, despite various religious commitments, even when its process or products violated their moral preferences.

Rather the negative evaluation is due to general support for the model of scientific credibility that imagines scientists as credible in part because they do not seek public attention or attempt to intervene in public debate. This "faceless" model of public credibility, drawing on historically resonant notions of virtuous scientists (Shapin 2008) and

promulgated through science journalism and a complicit public educational system (see Rudolph 2002) generates widespread public support for science in the abstract (see NSB 2008, Evans 2012). But the process that successfully generates "faceless" public credibility for science reinforces the notion that good debate does not have scientists involved.

So when science representatives emerge into the public sphere, ordinary persons evaluate them negatively on normative grounds. Ordinary persons negatively evaluate participation by recognized science representatives as aggressive, inappropriate, and generative of unhelpful conflict. Of course, such negative evaluations sometimes happen because a scientist, for example Richard Dawkins, explicitly acts and speaks in ways that look like public crusade. And sometimes negative evaluations happen because a representative who is making scientific claims is objectionable on other grounds (e.g. as politics). But more generally, ordinary persons negatively evaluate science representatives as violating (deliberative) norms of good debate by using expert knowledge or scientific authority to stop debate rather than contribute to it.

In the model of scientific credibility that ordinary persons hold, there can be good debate, and there can be scientists in public life. But there cannot be good debate when scientists are participating in the public sphere. If a science representative is participating in public debate, it is a marker of bad debate. This normative conflict clearly limits how science can participate in the public sphere. In this sense the common model of scientific credibility is a victim of its own success.

5.1 Representing Science

Unlike the case of religion, where the Religious Right clearly dominates American public life, it is actually difficult to say what science representatives are. Who represents science? The obvious answer is "scientists." But as Tables 2.1, 2.3, 2.5, and 2.7

report, prominent scientists in public life are rare. Lonnie Thompson, an Ohio State University-affiliated climatologist, is among the top ten in environment debate (see Table 2.5). Michael Behe, a Lehigh University-affiliated biochemist, and the late Stephen Jay Gould, a Harvard and NYU-affiliated paleontologist and evolutionary biologist, each show up prominently in human origins debate (see Table 2.5). And Dean Hamer, a U.S. National Cancer Institute-affiliated geneticist, shows up in the top ten representatives in debates over the origins of homosexuality (see Table 2.3). In each case, when scientists show up prominently, they show up only in a single debate. In the religion and science debates in this study, no scientists show up across debates consistently. And even this limited sort of prominence is unusual. Certainly many different scientists show up in general audience mass media articles, but they tend to do so as local authorities for individual news stories rather than as prominent representatives across debates. Many scientists are mentioned once, but few are mentioned often.

But we know from "science communication" literature that science in public life is not limited to the activities of scientists (see Burns, O'Connor, and Stocklmayer 2003 for overview). While there are a few scientists who actively seek prominence in public life (e.g. the late Carl Sagan), science in public life involves much more than the simple "scientist tells world" model. Many different actors play a part in producing science beyond the academy, laboratory, or field site. For example, specialized magazines such as *Popular Science* and *MAKE*, or television shows such as *Mythbusters* and *It's Effin' Science*, communicate and frame science facts, methods, or findings for a broader audience of interested persons. Science journalists write stories for general audience mass media newspapers that summarize the results of scientific findings and "translate" these findings for a popular audience, though such translation is often criticized (see e.g. Bell 1994, Corbett and Durfee 2004). Science museums organize collections and exhibitions that show particular aspects of scientific discovery and invention, often in idiosyncratic

ways that bring together many different kinds of social worlds and link science to other domains of social life (Star and Griesemer 1989, Gregory and Miller 1998). And of course many public figures draw, or at least attempt to draw, on the authority of science in order to bolster their claims in public life. Science in public life is not limited to scientists in public life.

Yet even with a more generous definition of science representatives as "persons who draw on scientific authority in public life," there are few prominent science representatives in these debates. Most are representatives affiliated directly with a research institution (e.g. Michael Behe, Julia Parrish). Some are also scientists who write (or wrote) for a popular audience, such as Stephen Jay Gould and Richard Dawkins. And some are persons active in public life who advance their agenda by calling on scientific authority, whether they are themselves scientists (e.g. Behe) or not (e.g. Gore). Many different science representatives show up, and for many different reasons. But unlike the situation for religion (see Chapter 4), there is no obvious set of representatives that persists across debates. Science in the public sphere is not obviously tied to a coherent set of practitioners. Science does not have the equivalent of the Religious Right.

Good debate is supposed to include a variety of contributors. Good debates involving science should involve, at a minimum, some prominent scientists who can contribute to public deliberation. So, as with the religion representatives in the previous chapter, this strange distribution presents an obvious question. Where are the highly visible science representatives? And, perhaps even more important, why are the most highly visible science representatives across debates not actually scientists (e.g. Al Gore)?

5.1.1 Avoiding Public Debate

The answer is deceptively simple. Scientists are doing other things instead. Like members of the Religious Left, scientists are not prominent in the public sphere because they generally do not seek prominence in the public sphere. While scientists communicate with mass media elites to varying extents, it is highly unusual to seek prominence in the public sphere. This phenomenon is widely noted in a variety of literatures, from history of science to science communication and even in many popular books. Everyone basically agrees that scientists generally do not seek prominence in public life.

But not everyone agrees on why this happens. Sociologist Robert Merton, for example, famously attributed this reticence to internal scientific norms (e.g. disinterestedness, see Merton 1973), that mark the scientific profession as a distinct approach to knowledge production. Like Merton, social historian Steven Shapin points to characteristics of the scientific profession. But unlike Merton's attempt to identify enduring and essential values, Shapin attributes avoidance of public prominence to a shift over time from thinking about science as personal genius versus impersonal method (Shapin 2010). Communication scholars, meanwhile, regularly suggest that it is not reticence, but a lack of competence, that restricts scientist prominence in public life (e.g. Gregory and Miller 1998, Mellor 2010). For example, Kirby (2003) shows that scientists tend to focus on the accuracy of particular factual points in communication, which sometimes derails the communication process.

The interesting thing about these (and many other similar) explanations is that they are not exclusive explanations. They could all be true. Certainly there is evidence to support each of them. Each academic approach (history, sociology, communication) finds the same thing, and explains the finding in terms of their disciplinary conventions. However, these different disciplinary descriptions of the phenomenon are not actually

different explanations. These observations are consistent because they are all practical implications of a more fundamental explanation. Each of these observations describe one aspect of an underlying model of scientific credibility that depends on separating the credibility of science as an institution from the credibility of any particular scientist.

As many science studies scholars have observed, the public credibility of science is problematically linked to the inherent uncertainty of the scientific enterprise. Certainty engenders confidence, but science is an uncertain business (Star 1985). Cases that work in the lab do not always travel successfully to the field (Mol and Law 1994), or even to other labs (Collins 1974). Requirements and regulatory constraints change expectations and structure possibilities (Metlay 2006). Technical equipment fails, or never quite works as expected (Collins 2004). This not only produces uncertainty in the process of science, but in the results. While there are undoubted scientific successes, there are also many failures and many unfulfilled promises.

The challenge of credibility is to take an uncertain enterprise and render it trustworthy. Science needs resources, and getting these resources depends on being seen as something worth supporting. The obvious response to this challenge is to minimize (the appearance of) uncertainty and to focus on significant successful results that vindicate science in the face of uncertainty (see Shackley and Wynne 1996). But while scientists attempt to minimize (the appearance of) uncertainty through various work-arounds, for example by writing lab reports that leave out failures and dead ends (Latour 1987, Gooding 1990), this is not a robust solution. After all, workarounds can fail, too (Star 1985). And to the extent that credibility is linked to the kinds of material successes that occur infrequently, such as developing a cure for polio or achieving human spaceflight, every failure to achieve something equally impressive (e.g. flying cars, cures for cancer or HIV/AIDS or Alzheimer's) reduces the public credibility of science.

5.1.2 Credibility Narratives in the Public Sphere

Because it cannot reliably depend on other kinds of evidence for building credibility, the public pursuit of scientific credibility relies on the power of narrative. Narrative, as I use the term here, is a "version of reality whose acceptability is governed by convention...rather than by empirical verification and logical requiredness" (Bruner 1991). Building credibility through narrative means telling stories that establish and reinforce the notion of scientists as virtuous inhabitants of a credible profession. For example, basic science textbooks often tell a story about the measurement of stellar magnitude (the brightness of stars) as a continuous journey of scientific progress through 2000 years of recorded history (Evans MS 2010). The point of the story is not really that the actual daily practices of today's astronomers resemble what Ptolemy did 2000 years ago. Empirically, they do not. Nor is the point that Ptolemy and (e.g.) the astronomy professor at the local community college are making equally significant contributions to human knowledge. A quick check verifies that they are not. Rather, the point of the story is that current astronomers are credible precisely because they are one of those kinds of people who successfully did amazing things in the past.

Such "credibility narratives" move uncertainty from a source of weakness to source of strength. As the story goes, precisely because science is inherently uncertain, it requires a special kind of person to deal directly with that uncertainty and produce reliable knowledge. Credibility narratives emphasize the virtues of scientists as trustworthy and moral judges of knowledge and inquiry in the face of uncertainty (Shapin 2008). This approach shifts the source of credibility from questions of truth or accuracy or track record to questions about who is to be believed and why (Shapin 1994). But this does not mean simply "promoting individual representatives," as in the case of the Religious Right in public life. Instead, "credibility narratives" define the scientific profession as a vocation

that attracts a particular sort of person who can be trusted precisely because their virtues and moral commitments equip them to produce reliable scientific knowledge despite the uncertainty of science's processes or practices (Shapin 2008). Scientists are credible because they are a particular kind of person, not because they are necessarily more able to minimize uncertainty in practice or consistently produce successful results (Shapin and Schaffer 1985).

In the public sphere, credibility narratives about science are perpetuated through mass media journalism. Journalists perpetuate credibility narratives because they fit narrative conventions of popular media. They make good stories. Of course, as indicated by Bruner's (1991) definition, narrative power is governed by convention. Not any story will do. Stories about scientists cannot merely be stories about people who do mundane technical work in laboratories, even if that is (often) empirically the case (Knorr-Cetina 1981, Latour 1987). Instead, compelling stories about scientists instantiate appealing and accessible cultural tropes. For example, popular writing portrays scientists as detectives, providing an "interpretive repertoire" for understanding the otherwise boring aspects of inductive reasoning as exciting crime-solving (Curtis 1994). Likewise, journalists leverage local, regional, or patriotic elements to portray scientists as the embodiment of national or ethnic ideals (e.g. in the Hwang affair, see Kim 2009).

Scholars of science communication and public understanding of science often point to such reliance on journalistic conventions as a problem for science communication. Scientific findings are not simply related, but transformed, by the media, a process that has been termed "medialization" (Weingart 1998, see also Peters et al. 2008, Schäfer 2009). An extensive literature on "framing" raises concerns about differences between what scientists actually find in their research and what various media actors say about them (e.g. Nisbet and Lewenstein 2002, Nisbet et al. 2003, etc.). While scientists are regularly in contact with media actors (Peters et al. 2008), and report that they are inter-

ested in communicating science to the public (Besley and Tanner 2011), empirically it seems that media actors are in control of credibility narratives, even though many science communication scholars seem to think that scientists should be in control.

But what seems like a problem for science communication is actually a direct consequence of pursuing public credibility through narrative rather than through seeking public prominence for particular scientists. The obvious drawback of credibility narratives is that you cannot tell them about yourself. As Shapin (2008) recently observed in tensions over "entrepreneurial science," part of the virtue in the scientific profession resides precisely in not doing such things. Presenting one's own narrative is seen as self-serving or, more generally, as something that scientists just don't do. As evidence that scientists themselves believe this, look no further than the example of Carl Sagan, whose increasing prominence in the public sphere corresponded directly to decreasing approval and respect from other scientists (Mooney and Kirshenbaum 2009).

To put this into more concrete terms, scientists do not pursue public credibility by directly seeking prominence in the public sphere. Instead, the public credibility of science is maintained by other actors who produce and reproduce "credibility narratives." This places the control of such narratives into the hands of other people, such as journalists, science teachers, and popular authors of various fiction and non-fiction genres, who are sometimes prominent in public life but not themselves scientists. But it maintains the central image of the scientist as a virtuous inhabitant of an uncertain profession, whose virtue in part depends on avoiding public life in favor of concentrating on producing true knowledge.

5.1.3 Representing and Intervening

Science representatives are not seeking to "own the space" of science in public life. Scientists actually seem more similar to the Religious Left in their avoidance of the public sphere. This is not so say that science representatives never show up. But science in the public sphere is not quite like religion in the public sphere. No equivalent of the Religious Right exists for science. Even with an expanded definition of science representative as a "person who draws on scientific authority in public life," few science representatives are prominent, and it is rare for a science representative to feature in more than one debate.

In terms of achieving prominence in public life, individual science representatives are not very successful. But for this study, it is equally important to think in terms of achieving good debate. From the perspective of good debate, avoiding prominence in the public sphere is simply a way to institutionalize bad debate through the voluntary exclusion of potentially useful participants. Historical cases suggest that this approach has successfully insulated the institutional credibility of science from the (highly variable) credibility of individual practitioners. Science is credible in part because its inhabitants do not attempt to become prominent in the public sphere. But by defining credible scientists as persons whose virtue resides partly in avoiding public life, this approach reinforces the expectation that scientists are simply not contributors to good debate. So while science representatives might draw on scientific authority, the presence of a scientist in public debate is grounds for suspicion.

What are the implications for good debate? The case of the Religious Left showed that possibilities for good debate are fully entangled with norms of deliberative debate in the public sphere. A shift toward good debate, that is, toward inclusion of Religious Left representatives as visible participants in these debates, runs afoul of the definition

of "religion" in public life that has been constituted by the dominant Religious Right in public sphere debates. In a sense, the Religious Left, simply by being religious, is mistaken for a contributor to bad debate, rather than to good debate. Even if members of the Religious Left changed course and started pursuing religious credibility in the public sphere, the norms of the public sphere would limit their participation.

In contrast, a shift toward good debate for science, that is, toward inclusion of scientists and additional science representatives as visible participants in these debates, runs afoul of the very model of public credibility that makes science a respected source of credible knowledge. The dominant model of scientific credibility, in theory, prevents good debate from occurring. But is good debate simply a matter of changing internal scientific practice and getting scientists more involved in the public sphere, as science communication scholars suggest? Or, as is the case with the Religious Left, do the norms of the public sphere limit the ways that science can participate in public life?

Put another way, are deliberative expectations entangled with scientific credibility? If so, what we should see is that ordinary persons negatively evaluate scientists who show up in debates in this study. However, this negative evaluation should not reflect a general disapproval of science, since the public credibility of science is dependent on public narrative rather than on individual scientists. We should also see that ordinary persons apply deliberative preferences in distinctive ways to science representatives. Of course, when science representatives violate deliberative preferences in other ways (e.g. through politics) this should be negatively evaluated regardless of scientific status. But we should also see negative evaluation of scientists simply for participating in public life at all. As I report below, this is exactly what we find.

5.2 Evaluating Science

Are deliberative expectations entangled with scientific credibility? Do ordinary persons link scientists to bad debate? To answer these questions I analyze how interview respondents evaluate what "science" and "scientific" mean in the religion and science debates in this study. I show that science in the public sphere is respected in the abstract, as an institution that is worth supporting even under circumstances that may violate substantive religious or moral preferences. However, this support for science does not translate into approval of scientists.

Respondents understand scientists in public life to violate deliberative preferences in two ways. First, ordinary persons understand scientists to be virtuous in part because they do not participate in public debate. Respondents understand such participation to be inappropriate. While scientific expertise is recognized as important, ordinary persons tend to conceive of "scientist" in terms of a role with interchangeable inhabitants rather than in terms of individual distinction or prominence. Even when respondents think that scientific advice is necessary for debate, they rarely name an individual scientist and simply describe a category (e.g. "biologist" or "scientist") of participant. On the rare occasions when science representatives do show up in public debate, respondents either evaluate them in terms that distinguish scientists from non-scientists (e.g. Al Gore as politician), or negatively evaluate them as scientists who are inappropriately involved in politics. From the perspective of ordinary persons, the proper role of scientists is to be faceless inhabitants of science as an institution.

Second, respondents negatively evaluate the use of scientific authority to settle debate. There is a strong preference for science to inform debate in various ways, but in practice science is often seen as a conversation-stopper that violates deliberative expectations. This is particularly a problem when some science representatives are seen as leveraging their scientific authority to attack other, more deliberative, participants. Notably this is true whether or not respondents actually agree with the substantive claims or argument of the attacker. On the rare occasions when respondents suggest an individual scientist as an ideal participant in public debate, the suggestion is invariably a scientist who takes a deliberative and open-minded stance toward alternative sources of authority. To the extent that science representatives draw on scientific authority to limit good debate, ordinary persons think that science should be faceless.

5.2.1 The Myth of Religious "Anti-Science"

Before proceeding to the analysis of how respondents evaluate science representatives in public life, it is important first to address the pervasive claim in scholarly and popular literature that religion makes ordinary persons "anti-science" in various ways. From this perspective, religious beliefs and commitments inhibit support for science. In some versions, this is because religious truth claims and scientific truth claims conflict (e.g. over human origins) and this contributes to "anti-science" attitudes (Lawson and Worsnop 1992, Verhey 2005, see also overview in Evans and Evans 2008). In other versions, this is because religious persons have moral objections that surface with regard to science (e.g. Ellison and Musick 1995, Evans and Evans 2010). And in a less direct version of the argument, religious persons are less educated (or less able to be educated), and therefore less exposed to the scientific knowledge that would compel support (e.g. Sherkat 2010, see also Beyerlein 2004). Whatever the mechanism, if it is the case that religion inhibits support for science, the implication for this study would be that positive or negative evaluation of science representatives in public life simply reflects the extent to which religion has caused respondents to be "anti-science."

The religious "anti-science" claim is one attempt to resolve an apparent paradox in

findings about support for science in American society. On one hand, major surveys such as the General Social Survey and National Science Board Science and Engineering Indicators consistently find that people express general support for science and scientific research. As the National Science Board recently noted, "Americans consistently and by large margins endorse the past achievements and future promise of science and technology. This support has been evident in surveys conducted since 1979" (NSB 2008, see also Pew Research Center 2009). Yet on the other hand, ordinary persons regularly express resistance or opposition to science as it is currently practiced, prompting the accusation from scholars and popular authors that ordinary persons are often "anti-science" (see Holton 1993 for overview). Such "anti-science" includes limiting funding to certain scientific research programs, pushing for changes in science curriculum to include (e.g.) Intelligent Design, and expressing skepticism about scientific findings such as climate change (see Forrest and Gross 2004, Mooney 2005).

Explaining the paradox fully is well beyond the scope of this chapter (see Epstein 1996, Locke 1999, Wagner 2007, Gauchat 2010, and Evans 2011 for various approaches). But we can address the proposed explanation based on religion inhibiting support for science. On its face this explanation seems improbable in the American case, since approximately 80% of Americans are religious in some form (see ARDA summaries at thearda.com), and surely some of them are also among the 90% of Americans who show support for science in national surveys (NSB 2008). Of course religious commitments vary and could therefore vary in their support for science. For example, some studies indicate that conservative Protestants in particular are less likely to support science (Ellison and Musick 1995). But if religious backgrounds and commitments do inhibit support

¹¹⁵To say anything more specific than this without additional data runs afoul of the ecological inference problem (see King 1997), but as long as one quantity cannot fit into the remainder of the other quantity (with reference to the same population), there must be some overlap between people who are religious and people who support science in that population.

for science, then this could easily outweigh the effects of normative conflict over good debate. So it is important to address this possibility before proceeding.

But figuring out whether religion inhibits support for science among respondents is not straightforward. To the extent that underlying commitments have power, it is because people invoke them in particular ways for particular reasons. Asking "what" questions, such as "do you support science?" or "do you believe in evolution?" fails to, on one hand, specify what is at stake and, on the other hand, expose the reasoning behind respondent answers (see also Rughiniş 2011). To get at the "how" and "why" aspects of this problem, that is, to get at the reasoning processes and not just the outcomes, I asked respondents to respond to the following scenario about a (fictional) proposed 10-year moratorium on basic scientific research:

Let's say someone proposed a 10 year long moratorium¹¹⁶ on basic scientific research. Their reasons are 1) we need to assess our current data, 2) we need to get consensus on policy positions resulting from research findings, 3) we need to think about the moral or ethical implications of science. Would you support such a plan?

Given the provocative nature of the scenario, I expected first that respondents would actually respond rather than deflect, and second that the responses would help clarify the conditions under which they would support a moratorium (if at all). Because there are many available discursive resources for talking about scientific research, I anticipated a wide range of responses. Respondents might seek clarification at an issue level rather than answering the general question. They might suggest that the deliberative process is working and that intervention is unnecessary. They might take a principled stand about freedom that has little to do with substantive scientific content of research. They might see moratoria as interfering with scientific progress. And given the religious distribution

¹¹⁶I sometimes used the term "ban" rather than "moratorium" for the sake of those respondents who were unfamiliar with the term "moratorium." However, I made clear that the "ban" would be time-limited, which would technically be a moratorium.

of the interview sample, they might use religious language or express specific forms of opposition or support grounded in religious commitments.

But the summary finding is that in almost every case, respondents oppose moratoria for reasons that align with support for ongoing scientific research. This is consistent with general public opinion research as described above. In probing further, however, I find that this support holds even when faced with objections that align with respondents' own opinions and beliefs about moral or ethical issues. When confronted with arguments or contrary evidence that undermined their initial reasons, respondents moved among multiple reasons as required to maintain their position of support for ongoing scientific research. The bottom line is that respondents maintain a commitment to ongoing research that exceeds their commitment to any single objection, reason, or justification, whether from religious commitments or from any other source.

Initial Responses Oppose Moratorium

Out of 62 respondents, 60 immediately rejected the moratorium as initially proposed. The most common reaction to the scenario as presented was surprise that anyone would want to limit science, despite having been primed with reasons why such limitation might be helpful. Susanne and Bonnie (in separate interviews) showed indignance and disbelief, respectively:

To stop all scientific research just to catch our breath is absurd...I just cannot imagine stopping research. I mean, that's like saying, "Everybody turn off your brain for a little while." –Susanne, 51, homemaker, atheist

It's such a fundamental 'no' that I'm having trouble putting the 'why' into words. Who knows what we would miss during those ten years? Who knows what we could have have discovered that would have saved lives that were lost in those ten years? Why would we ever want to stop learning? -Bonnie, 32, software engineer, evangelical Protestant

Most respondents were more measured in their responses, but still did not support limitations on science as initially proposed. The vast majority of objections fell into two analytical categories: "impede progress" and "not necessary." Of course the analytical process involves condensing a wide range of codes into higher-level categories, so there is some range within each category. For example, one respondent might say it is unnecessary because we already have good oversight in place, while another might say it is unnecessary because scientists are inherently good.

The most common reason for rejecting the proposal was an expressed connection between scientific research and human progress, such that limiting science might even be harmful to society. Solomon, for example, offered a typical explanation for why we should not limit science, even for good reasons:

At first, again this is an interesting question. As you started to ask the question, I thought gee, it makes sense, let's stop there and assess what we have. But I think that we are in a day and age in which there are so many possibilities, so many exciting things being discovered now as we speak and being studied that I would not want that stopped. I think we would regress instead of move forward. –Solomon, 43, artist, Unitarian

Charles echoed Solomon's concerns about progress:

I wouldn't support that because I think that that would really, I mean obviously that would set so many things back a decade. Think about how many things have been discovered in the last decade, how many important things have been discovered and looked at and researched ...I mean imagine going into 2000, but only having the technology of 1990. I mean, the world would look so different. —Charles, 28, non-profit program manager, non-religious

And for Josefina, limiting scientific research would get in the way of solving important problems:

I think we should keep doing [scientific research] because, I mean, there's other countries that are in need of aid and that in those ten years we can, we can help them, which is why we're having environmental issues right now, right? –Josefina, 41, sales, non-religious

Put another way, most respondents linked opposition to a moratorium to reasons based on support for scientific research, not on objections to the act (based either on principle or characteristics of the act itself) or to the scenario as presented. The core point here is that respondents overwhelmingly see a moratorium as an impediment to ongoing scientific research, which they see as desirable for many different reasons. While the commitments to particular reasons differed in the initial responses, the commitment to ongoing scientific research held across respondents. This is consistent with higher-level survey results that indicate a general support for science.

Mobility of Reasons Resists Moral Concerns

As previously described, part of the interview process was to probe and push back against whatever reasons a respondent offered, in order to find out the limits of commitments and determine under what conditions a respondent might support a moratorium. After the first several interviews, however, it became clear that the specific content of responses was less interesting than the tactics that respondents used when they were challenged. In almost all cases, respondents continued to oppose a moratorium on scientific research. What is more interesting is that respondents invoked and then moved among multiple reasons, values, and narratives in order to find ways to continue their support for science, even when faced with possible dilemmas by the followup questions. Take, for example, Holly's mobilization of her personal experience when I proposed an alternative one year break from scientific research:

No, not even. Never. Because why, why take a cure from somebody, you know? My, my grandfather had a heart attack and he had arteriosclerosis and they came up with a cure the next year. He died in 1969, and in 1970 they came out with something that would clear out the arteries. You know had that been available to him, he would have been alive still. –Holly, 33, waitress, Roman Catholic

For Holly, scientific benefits are tangible, and her assessment of science reflects its the alignment of scientific benefits (in this case a medical cure) with her own personal experiential concerns about the value of human life and health. Other respondents mobilized more abstract reasons to continue in the face of moral concerns. Lydia, a lifelong performer and teacher, discusses why she thinks science ought not to be limited:

Because it's the creative process. I'm an artist, and science is still the creative process. In the questioning, the constant questioning. The constant problem solving. The constant data collecting. Something new is revealed. Don't cut off the pipeline. You do not know ... So, you just have to be courageous in the face of "don't know." –Lydia, 59, dance instructor, spiritual

Given the scenario's explicit discussion of moral objections, one of the more interesting responses to challenge was when respondents did not directly address moral or ethical issues, then when pressed on this point, offered different ways that moral concerns either do not or should not matter to evaluating science. Initially, Susanne did not engage the objection about moral or ethical issues, focusing instead on how moratoria would limit the growth of human knowledge (see "absurd" quote above). When pressed on the possibility that scientific research has moral or ethical implications, she confidently replied "If education is done correctly, there won't be a moral or ethical issue, and if there is, it can be solved." A similar response came from Damien, a high school chemistry teacher. When pressed about limiting science for moral or ethical reasons, he also detached the scientific process from moral accountability:

A: I think that the cool thing about science is – so much of it isn't through our efforts. Like meaning I think the vast majority of science discoveries are purely accidental ...I think in terms of the real discoveries in science, you know, like – people just do stuff and then something goes wrong and that's a huge discovery all of the sudden. So I'm – because of the scientific process I would say let science continue.

Q: Even if there's something bad that comes out of that?

A: Even if there's something bad that comes out of it, yes. –Damien, 32, high school chemistry teacher, evangelical Protestant

Another common tactic was for respondents to begin by suggesting that moratoria would limit progress, then when pressed on this point, to respond by saying that even if it would not, that you could not, or should not, stop science anyway. For Zoe, debates should be avoided precisely because they might lead to limitations on science. When I pushed her on the possible moral concerns raised by those who might oppose science, she replied:

A: ...I know that's a tough one, but...

Q: Why is it tough?

A: Because then somebody might say "Why not stop?" Cuz, you know, it's just depending on which side of the debate you're on. –Zoe, 18, student, atheist

Both Peter and Grace (in separate interviews) recognized that moral and ethical concerns are important, but provided reasons that a moratorium could not happen anyway. After I pressed Peter on whether or not a scientist should have to think about moral or ethical implications, he replied:

A: They never have. That's not in their nature generally. I shouldn't generalize about people, but yeah, that's not generally in their nature. They want to know how something works at all costs. We could talk about the atomic bomb, that the atomic energy thing was not meant to be a bad thing at first, but anything that has the potential to become a weapon becomes one regardless.

[...]

Q: So science is going to go on regardless [of any restrictions]?

A: Yeah; well it will. It would be like Prohibition. If somebody's really a scientist he isn't going to listen to rules like that anyway ...So you can't stop science now. –Peter, 32, private music teacher, non-religious

Grace offered a more sweeping version of this argument, employing a broad definition of science to defend her position that moral and ethical concerns could not be addressed:

Well, science is everywhere, you can't stop it. I mean, you can't – you eat food, that's science. I mean, you have babies, that's science. You have, you know, everything is science. You cannot stop science, I mean, it just happens. Bad people and good people doing science are going to happen no matter what. You can't stop it. -Grace, 46, student/tutor, evangelical Protestant

Perhaps the most striking outcome of this mobility of reasons is that some respondents expressed agreement with moral and ethical concerns to the extent of offering reasons why scientific research might be stopped, then when faced with the prospect of limiting research based on those reasons, immediately suggested that they should be disregarded so that research could continue:

Q: What's a good reason to stop [doing scientific research]?

A: Things that injure people. I think that the sanctity of life is really important, and I think that any time that that might be compromised, that's a good place to stop.

Q: But don't you think that we should stop and figure that out first? We should wait until it happens and then stop it?

A: Sometimes you just have to, sometimes you don't, sometimes people have differing opinions on things, and so you just – I don't know, I still think you should go forward. -Chantal, 27, human services, evangelical Protestant

Respondents in this study mobilized many different explanations and reasons, but they did so to support science, offering examples of how scientific research should continue despite expressed concerns. They also discounted and dismissed moral or ethical concerns about science as valid reasons to limit science. Finally, multiple respondents found ways to exempt scientific research from moral considerations, even if that meant overriding the moral concerns they had expressed themselves.

Underlying Commitment to Ongoing Research

The finding that there is an underlying commitment to ongoing scientific research (rather than just opposition to the use of moratoria) is further reinforced by the few cases where respondents were open to the use of a moratorium. Erika rejected the initial proposal, but offered a five-year moratorium as a counter-proposal. While she acknowledged that we might lose out on something coming out of everyday lab work, she recognized the importance of the concerns in the proposal. Yet even this concern had limits. When asked why five years would be okay but ten years wouldn't, she cited concerns over losing an educational generation of future scientists:

Well because I think – well I don't think five years is long enough to examine all that's there, but I think after five years you have a whole new group of students coming out of schools, and they're gonna want to research things and they'll probably have lots of really good ideas. –Erika, 51, librarian, unaffiliated

Even after expressing sympathy for moral and ethical concerns, Erika's support for a moratorium depends on the future ability to do more science. And she added immediately thereafter "I don't think there should be a moratorium on invention," signaling that even her support for a moratorium may not actually have been intended to stop research. In a similar vein, when pressed for a shorter time limit, Bernard makes his commitment to ongoing science part of his support for a shorter moratorium:

To take a deep breath and step back, and make sure the research was better directed, better funded, better understood, better outcomes, make decisions on the ethics and moral side of it in that shorter period of time, yeah, I could support a couple years. -Bernard, 60, retired executive, mainline Protestant

And Dwight emphasizes that the only legitimate reason to limit research is if available resources are scarce:

I would not support [a moratorium] as an overarching policy statement, any period of time basically. If, during the debate about where resources are allocated, and we're short of resources or there's just nobody really interested in doing it or something like that, then yes, I can see that happening and would support [a moratorium] to that extent. -Dwight, 49, consultant, Unitarian Universalist

Only a few respondents were willing to use any version of a moratorium, even when continually pressed with reasons to do so. Other than the two respondents discussed below, none supported the original proposal. And even though some respondents agreed that a shorter moratorium on scientific research might be acceptable, their reasons did not reflect concern, moral or otherwise, about science. Rather, the proposed limits depended on commitments to continued scientific research.

The Exceptions

There were, however, two respondents who had no qualms or hesitation about a ten-year moratorium as initially proposed, and who did not immediately offer reasons to support science. When presented with the scenario, Felix, a 77-year old retired accountant, immediately responded "Sure. I would support that." Norma, a 59-year old purchasing agent, similarly replied "Yeah, it sounds reasonable to me." What distinguishes Felix and Norma from a sampling perspective is that they are fundamentalist Protestants. Here, for example, is Felix's rationale for supporting a moratorium:

Well, like I indicated, I think society has gone off from a wrong foundation that we have now a society that doesn't accept that there is a God creator. Without that as the base, all of the decisions following that I feel are all wrong. So any moral or policy issues would have serious implications for me. Red flags as I see them, because I think all of the debates, all of the issues, are flowing from the initial concept that there is no God creator.

On its face, this finding seems to support the largely discredited idea that there is epistemological conflict between religion and science (see Evans and Evans 2008). But

than ten percent of the overall population. These anomalous cases illustrate by contrast an interesting feature of the responses to the moratorium scenario. Throughout the sample, religious respondents (including all other evangelicals/conservative Protestants) consistently mobilized reasons and arguments to support science. And some respondents explicitly drew on religious commitments to support, rather than oppose, scientific research. For Phoebe, science should continue without limitations because we will work out the right things to do over time:

I just think it's funny because, you know, God gives us free will and we as humans will take things as far as we can. We've got this new thing, like stem cell research, we want to see how far we can go with it. I can't tell you where that will be, but I think that God gives us free will and then it just takes us a long time to learn, you know, but we do eventually. -Phoebe, 45, stay-at-home mom, Catholic

Likewise, Meg sees scientific research as a part of what we are supposed to be doing:

I just cannot imagine living in a world where you weren't exploring, where you weren't questioning, where you weren't learning. You'd almost be going back into the Dark Ages. It would be like a ban on living. I think God gave us the inquisitiveness that we have. We just have to be careful how we use it. -Meg, 63, retired, mainline Protestant

Instead of illustrating how religion interferes with support for science, the two exceptions seem by contrast to show how aligned the other 60 respondents are in their support for science, despite having a wide range of religious commitments. Put another way, unwavering support for science binds together evangelical Protestants, Catholics, mainline Protestants, other religious believers, spiritual-but-not-religious, and non-religious

¹¹⁷Note that fundamentalist Protestants are distinct from the broader category of evangelical Protestants, in which they are often counted because of the conventional emphasis on denominational membership rather than theological commitments. See the Association of Religion Data Archives at http://www.thearda.com for a wide range of estimates.

Americans in the interview sample. What distinguishes Felix and Norma, then, is not specifically that they are religious, but that they totally reject the assumptions that are shared by 60 other respondents.

The key here is to see that Felix's answer is not just a reference to God or religious beliefs, but rather a fundamental critique of modernity as something that has "gone off from a wrong foundation." For some scholars of religion (e.g. Marty and Appleby 1991) it is precisely this critique of modernity that defines fundamentalism, rather than any particular religious commitment (hence there can also be Islamic fundamentalists, Hindu fundamentalists, and so forth). As the exceptions in this study, Felix and Norma illuminate how very uncommon it is to oppose science, and how such opposition is not grounded simply in religious commitments, but rather in a fundamental critique of the entire apparatus of modernity, of which science is a primary product. Ultimately, even Norma acknowledges that science will probably continue:

I think everybody is just out there to find answers and we don't want to stop and you know, we're pursuing to find answers and maybe we can't even find the answers, but we don't want to stop because there is always the possibility that you'll find the answer. -Norma, 59, purchasing agent, fundamentalist Protestant

With the exception of two genuine fundamentalists in this study, religion or religious commitments did not usefully predict support for, or inclination to limit, science. Rather, what I see in almost every interview is an extraordinary faith in science. This faith and confidence in science trumps differences in religion, education, race and ethnicity, age, and gender. Likewise, the reasons offered by religious persons are not distinct from those offered by non-religious (or differently religious) persons in the sample. For example, no matter what their background or experience might indicate, respondents do not understand moral or ethical concerns to be legitimate reasons to support a moratorium. To the contrary, they mobilize multiple reasons and values to justify ongoing scientific

research, even when confronted with arguments that suggest that these values should be in conflict with science. Whether religious or not, and despite significant heterogeneity of religious characteristics, respondents basically draw on the same default responses, provide the same reasons, and resort to the same strategy of switching among reasons as necessary to support their conclusions. The religious "anti-science" claim simply does not hold up.

Perhaps more importantly, these findings show that ordinary persons distinguish between the credibility of science and the credibility of its practitioners. This is, of course, consistent with a variety of other findings in sociology indicating a distinction between opposition to science and opposition to, e.g., the apparent moral orientation of scientists (Evans 2011). However, as I show below, negative evaluation of scientists, and of science representatives more generally, extends beyond specific religious moral objections. This is due to conflict with deliberative preferences that many people from many different backgrounds hold, and not simply to moral conflict over specific issues.

5.2.2 Evaluating Public Science as Participation

Nobody knows Lonnie Thompson. As Table 5.1 reports, nobody knows Dean Hamer, either. Every respondent recognized Charles Darwin, Al Gore, and Arnold Schwarzenegger, and only one did not recognize Galileo Galilei. But after those figures, recognition of prominent science representatives drops off sharply. Science representatives rarely emerge as prominent representatives in these debates. But as Table 5.1 shows, those that do show up prominently in the four debates in this study go largely unrecognized. The highest recognition percentages go to dead scientists and live politicians who draw on scientific authority to make claims (primarily about climate change). The lowest go to living scientists in various current debates.

Table 5.1: Percentage Recognition, Science Representatives

Person	Percentage
Charles Darwin	100%
Al Gore	100%
Arnold Schwarzenegger	100%
Galileo Galilei	98%
Stephen Jay Gould	33%
Michael Behe	13%
Joseph Nicolosi	2%
Eugenie Scott	2%
Dean Hamer	0%
Lonnie Thompson	0%

To be clear, this lack of recognition is not due to special ignorance of mass media, or science issues specifically, among respondents. Almost 70% of respondents "studied scientific subjects" in some form, usually in high school or college. About 1 in 4 respondents (26%) claim to read about, or watch media specifically related to, science issues (including science fiction). Most respondents follow the news in some form, whether through cable news shows, nightly television news, magazines, or internet news sources. So respondents in this sample are not obviously less informed, educated, or interested than other American citizens, either generally or specifically with regard to science issues. Certainly they had few problems recognizing many other prominent individual representatives, as reported in Chapter 4 (see Table 4.3).

Table 5.1 illuminates a key challenge to understanding how ordinary persons evaluate science in public life. Unlike the case with religion, there are not many prominent and distinctive science representatives. In what follows I consider respondent evaluations of prominent science representatives where possible, but such data is not generally available. So much of the supporting data in this section relies on other kinds of evaluations from interviews. For example, respondents viewed and evaluated résumés with scientific indicators, and viewed and evaluated statements that science representatives

made in public. These résumés and statements came from a range of representatives, not just the most prominent. Respondents also regularly suggested and discussed science representatives for their ideal committees for the various debates. Much of the evaluation of science in public life that I report below comes from what respondents would like to see from scientists in public life as described in their responses to the committee questions. In short, the evidence reflects the objective conditions of science representatives in public debate. There simply are not many opportunities to encounter or recognize representatives who are not already prominent for reasons disconnected from science.

By the same token, the recognition data in Table 5.1 does not indicate why (e.g.) Lonnie Thompson goes unrecognized, even though he may be a science representative as I have defined it and as journalists have presented him. In the case of the Religious Right, respondents can say how and why they know about (e.g.) Jerry Falwell or Pat Robertson, for example by indicating they they read a book or saw an episode of *The 700 Club*. But asking a respondent "why don't you recognize Lonnie Thompson?" is neither productive nor helpful. After realizing that simply getting a series of "no" answers to the recognition question wasn't actually telling much about why, I started following up that question with a joke about how I would rename my project "No One Knows Lonnie Thompson." This technique often generated further reflection from respondents about why they might not recognize someone in a particular debate. Elaine's response ultimately proved to be the key to unlock the question of why no one knows Lonnie Thompson:

Then he's probably like somebody who really knows what he's talking about (laughing). If I had to guess since it's not a name that I recognize it's probably somebody who like knows facts, and knows both sides of the issue, and has information to back up his statements, and isn't looking to get elected for something.

Elaine's musings about why no one knows Lonnie Thompson capture a neat distinc-

¹¹⁸ Luker (2008) describes a number of similar interview techniques for eliciting out-loud thinking from respondents about why something is not happening or not working.

tion among science representatives between scientists in public life and participants in public debate. This distinction shows up across all aspects of evaluation from respondents. As shown earlier in the chapter, most respondents hold very favorable views of science and its value to society. This favorable "default setting" extends partly to cover scientists. Throughout interviews, scientists appear as respected and valued contributors, particularly on committees to discuss and decide policy issues.

But respondents consistently defined this role in very specific and circumscribed terms that preclude broader participation in public debate. Scientists are an important source of expertise who can be informative in an advisory capacity on issues where such expertise is seen as relevant. But scientists are not considered to be general experts who gain in usefulness through broader participation. Scientists are even considered interchangeable, in the sense that any appropriate scientist can act in a specific advisory capacity. Yet respondents considered scientists as only one kind among many possible legitimate contributors. Finally, scientists are potentially informative and useful science representatives because of what they are not: self-interested or, more broadly, political. Affiliation or other indications of economic or political interests are seen as corrupting and disqualifying in public life (as noted in Chapter 3 generally). In sum, the specific normative expectations on scientists in public life mean that participation in public debate beyond the expected role constraints results in negative evaluation of such representatives.

No matter what the context of evaluation, respondents leave no doubt that scientific expertise is important. For example, 85% of respondents suggested some variant of "scientist" as an important contributor for at least one committee. I quote Vicki's thoughts on her stem cell research committee at length, as it captures much of the reasoning that other respondents used to bring scientists into public debate:

I would like some people doing stem cell research ... scientist or doctors do-

ing stem cell research. I would like ethicists, very important to sort of be able to keep on track how far is too far against the gene or with the cloning types of things, but should there be a limit to some of what is possible? And I think so. There would be ethical questions become very, very important and I guess I would make that a religious/ethicist. I guess besides the research part of, yep, let's say its two scientists, one of whom is also medical, although they're probably both medical. It's always good to have healthy debate within the scientific community. And then I'd to see somebody from the medical community who is actually involved in the practical, interacting with the Pete's patients and interacting with Alzheimer's patients, you know that kind of physician. And I'd like to see an activist from within the Parkinsonism or the Alzheimer's community, you know, a Michael J. Fox type, whether it's him, specifically or not, I don't know if he's the best candidate, but someone who is struggling with one of these diseases and kind of can bring the perspective of why it would be valid to be able to pursue stem cell research and apply those things.

For Vicki, as for most other respondents, scientific contributions to public debate are important. Where respondents did not select some variant of "scientist," it was usually because they did not think of scientific expertise as relevant to the issue, not because they think scientists have nothing to contribute. That scientists are considered key contributors is thus probably unsurprising in discussions of public debates defined in terms of religion and science involvement.

But Vicki's response also captures some key elements of other respondent answers. First, respondents tend to conceive of "scientist" in terms of a role with interchangeable inhabitants rather than in terms of individual distinction or prominence. Only 33% of respondents ever suggested a specific scientist by name. Even when respondents think that scientific advice is necessary for debate, they rarely name an individual scientist and simply describe a category (e.g. "biologist" or "scientist") of participant. In these cases, any scientist (who meets the basic criteria) will do. For example, Miley offers a typical response to the committee question for human origins debate:

Okay, well I don't know specific people, but I don't know. I'm not even really sure. I'd probably try to have it as even as possible, maybe two re-

ligious people; I'm not exactly sure who. Two scientists, scientific people that have studied evolution and have all the evidence for it then maybe one kind of neutral – not so much neutral, but who could get facts from both.

Second, "scientist" does not mean "universally useful expert on all topics." While scientists are interchangeable to some extent, they are considered to be topic matter experts rather than sources of final authorty. Vicki's answer (above) may indicate "scientist," but she further specifies a particular kind that is relevant to that debate due to expertise in stem cell research and medical intervention. Similarly, respondents did not just pick "scientist" for every debate. Miley's answer above indicates that her generic scientists must have studied evolution. Likewise, Crystal resembles Vicki in indicating that stem cell debate needs stem cell researchers and experts:

So, if embryonic little persons could talk, I would put one on the committee. I would put leading research scientists that can speak to all the different parameters that, you know how do they treat stem cells and different things like that. I would put, probably put a leading theologian who could kind of talk to the ethical issues. I would put somebody on the medical side of things who deals with the diseases and things that are impacted by research.

Third, Vicki's response shows that scientists are an important source of expertise, but not the only source. For Vicki, scientists contribute one kind of practical expertise among many on the issue of stem cell research, with other contributors including ethicists, practitioners, and even patients or patient activists. Crystal's quote above similarly indicates that many participants are legitimate contributors, not only scientists.

However, respondents consistently indicated that scientists are expert contributors among many others, not just the messengers for a particular viewpoint in a standardized debate. Discussions of committees, statements, and résumés often pivoted on distinctions between legitimate contributors of scientific perspectives and others, such as

¹¹⁹Incidentally, this suggests that one of the reasons that social movements can successfully redefine scientific credibility to include "lay expertise" (e.g. as described in Epstein 1996) is that this approach aligns with preferences that ordinary persons already hold.

politicians, who might provide a similar point of view from a non-expert perspective. For example, Sienna distinguishes scientists as a category of expert on relevant subject matter rather than politics or religion in her selection of a committee on human origins:

Okay, I could probably do that. I would do like, you know, leading scientists, I guess, evolutionary scientists. Probably, you know, a couple religious people, one maybe. Jeez, I don't know. I don't know if I'd wanna put politicians in there or not. Probably not. Yeah, I don't know. I guess I'd just say a little – like people from both sides of the debate who are experts.

Likewise, given a statement from Al Gore that used scientific language to discuss global warming, Holly says that the statement obviously doesn't come from a scientist because it is too "dumbed down:"

Well yeah I agree with this statement. I, I think that there's a little bit of lacking of science. It's basically dumbed down as well about how global warming works. ...I don't believe that this person represents a scientific community at all, because it's so dumbed down. But this person definitely has read what's out there.

Respondents rarely suggest scientists by name when discussing participation in public debate. Given the limitations of the data, it is impossible to say definitively whether respondents do not suggest scientists by name because they do not know of any scientists, or because they do not think that any given scientist matters more than any other. What is clear is that ordinary persons think that "scientists" are important for informing debate. Notably this is not because scientists are universally useful contributors. Rather, respondents see scientific experts as constrained participants among a range of stakeholders.

At the same time, respondents carefully circumscribe the role of expert scientists, especially in debates that also include non-experts who might also make claims based on scientific authority. Whether choosing representatives on a committee or evaluating résumés and statements, respondents define the proper role of a scientist in part by

defining inappropriate behavior and inappropriate representatives. Consistent with the expectations that scientists are virtuous inhabitants of a credible profession, respondents point out motivations that disqualify persons from public debate, such as self-interest or political gain. It is not enough simply to be an expert scientist. A science representative must also conform to expectations about why and how they are participating in public life.

On a few occasions, respondents expressed anti-intellectual sentiments that seem to be simple condemnation of scientists. Meg, for example, evaluates an anonymized version of Richard Dawkins' résumé as the résumé of an "intellectual who thinks he probably knows it all, and probably liked to have everybody else think he knows it all, too." This is obviously a personal judgment about "know-it-alls." But it is also an evaluation of probable motives for participating in public life. For Meg, this scientist appeared to be someone who would be participating for selfish reasons, namely to effectively show off his knowledge rather than inform good debate.

Such negative evaluation of apparent or potential self-interest showed up consistently. Often, like Meg, respondents remarked on possible indications that participants were in debate for their own purposes. For example, Pamela "would like people who are able to digest and understand scientific evidence and studies, and the whole overall topic" for her ideal debate over stem cell research. Expertise is important. But at the same time, Pamela "would eliminate anybody who has any chance to profit, or have personal gain as a result of whatever it is that the committee goes through, or decisions that they make, or laws they come up with, or whatever." While expertise is important, it does not supplant or override questionable motives for participation, particularly self-interest.

But while respondents consistently evaluated self-interest negatively as a motive for participation, they clearly had different expectations about self-interest and other ques-

tionable motives depending on the (potential) participant. For example, when I asked Don whether or not he recognized Arnold Schwarzenegger by name, Don indicated suspicion of Schwarzenegger's motives. But even so, Don did not evaluate him negatively:

Don: I think he's an environmentalist and I think he's going to make money on it with this windmill farms.

Q: Do you think that's why he's an environmentalist?

Don: I don't know but whether it's just occurred to his convictions and he's willing to put his money where his mouth is.

Respondents expect politics in debates where science is involved. And where there are politics, there are politicians. As Chapter 3 demonstrated, ordinary persons consistently discount politicians for being self-interested, instrumental, and inimical to good debate. But like Don (above), respondents expect politicians will be this way. In fact, they are surprised when politicians are not entirely self-interested. Timothy calls Gore "a crusader" who "represents the most concerned elements about the environment." Penny says that Schwarzenegger is "surprisingly pro-environment" given "how he got his start in politics." In these cases respondents have already applied the electoral discount.

The more interesting point is that respondents often shape their evaluations of science representatives differently based on whether they see such representatives as scientists or as politicians. On the rare occasions when science representatives do show up in public debate, respondents sometimes evaluate them in terms that distinguish scientists from politicians, or negatively evaluate them as scientists who are inappropriately involved in politics. Respondents expect scientists not to be "political." Arienne, for example, distinguishes between one résumé from a state official in charge of ecology as a "politician" and a résumé from an academic zoologist who "is going to represent the non-political agenda, or the people who want to save the earth." For Arienne, this distinction is a difference between legitimate and illegitimate contributors to public debate.

But having already applied the electoral discount, respondents generally did not make this distinction to pile further rebuke upon politicians. Rather, respondents made the distinction between science and politics in order to separate legitimate and illegitimate modes of participation for scientists in public life. For example, I showed Ken the statement "I just don't see how we can turn our backs on [stem cell research]. We have lost so much time already. I just really can't bear to lose any more." Ken immediately showed a negative reaction and identified the statement as coming from "a kind of scientist with a political agenda or just a politician 'cause it's making a very emotional plea" that is not informative but rather "seems to be forcing other people to agree with them." For Ken this political mode is an illegitimate mode for a scientist. Any scientist who engages politics in this way must have a political agenda.

The distinction between legitimate and illegitimate modes of participation is important because, for respondents, politics corrupts science. In some cases this shows up as a personal corruption where politics limits what a representative can and cannot say or do, even though such representatives might be substantively aligned with scientists on an issue such as climate change. For example, when I asked Arthur about Arnold Schwarzenegger, he remarked that Schwarzenegger is "a Republican, so he definitely, I think, is beholden to small government and corporate interests," but that "it is good that California has been taking the lead in some environmental policy like those extra stringent emission standards." For Arthur, Schwarzenegger's achievement of passing California emissions standards are an unusual exception to an otherwise predictable corruption of science for political gain.

In other cases respondents think that politics corrupts science at the institutional level. Specifically, political involvement in the institutions of science makes affiliation with those institutions suspect. Leo, for example, indicates that ordinarily he would think that an NSF-affiliated scientist would advocate based on scientific consensus. However,

in looking at the employment history on one scientist's résumé, he said that "it might be kind of a toss up on this one because I know that the Bush administration staffed the NSF with people who didn't believe in man-centered climate change or even that it was occurring." For Leo, political involvement in scientific institutions such as the NSF changes the calculus for how a scientist's participation in such institutions might be evaluated. Similarly, Oscar indicated that scientists participate in stem cell debates for their own financial and political gain. When I pressed him on this, he replied that scientists might not be entirely after the money and that "maybe their driving force is true, they want to do the advancement of science and you know ..." He quickly added, "but I think it's all driven by money. If they were doing it for free I don't think they'd be so enthusiastic about it." For Oscar, even if scientists are not always personally motivated by political or financial gain to participate in public life, their institutional position makes their science inseparable from those concerns.

For respondents in this study, politicians are not just subject to the electoral discount, though that is certainly a consistent finding. In addition, politics transforms science by corrupting its inhabitants and institutions, changing science from an independent source of knowledge to an instrument of power. Of course, respondents expect that politicians will simply use "science talk" just to get their way, whether or not they believe in the scientific claims themselves. For example, Laura describes Bill Clinton as "gifted with rhetoric" and says that if "he were like Al Gore and he were speaking about the importance of stopping global warming" that he could get everyone on his side, because "he could play up religious stuff in one venue, and play up scientific stuff in another venue." But the more important point is that, while politics may be a legitimate (if objectionable) mode of participation for politicians, it is an illegitimate mode of participation for scientists in public life.

Scientists are acceptable participants in public life as long as they are informative and

largely interchangeable. Respondents tend not to suggest individuals, either because examples are not plentiful or prominent, or simply because it is not easy to remember names of representatives generally. So respondents describe an interchangeable category of "scientist" or, more specifically, "biologist" or "stem cell researcher." "Interchangeable" here does not mean interchangeable in terms of expertise. A physicist is not a relevant expert for debate over stem cell research. But scientists are interchangeable in the sense of "faceless." There is rarely a preference for a specific science representative. Rather, science representatives are, and should be, generic scientists who inform debate as one (or more) representatives in an array of relevant stakeholders. At the same time, they are potentially informative and useful science representatives precisely because they are not self-interested or, more broadly, political. Indicators of such corrupting influences are consistently evaluated negatively by respondents.

5.2.3 Evaluating Public Science as Deliberation

Of course some scientists do appear in public life. Sometimes credibility narratives populate public debate with exemplars, and sometimes scientists break the rules. While science representatives rarely achieve prominence, they do occasionally show up, even if the overall impact is much less than that of the Religious Right either within or across issue debates. Likewise, while most respondents treat scientists as "faceless" when they suggest ideal participants in public debate, a small minority of respondents nevertheless suggested a specific science representative at some point. 120

In all of these cases, however, respondents evaluate and suggest scientists based on deliberative norms. Respondents reiterate their deliberative expectations by suggesting

¹²⁰Note that respondents had multiple opportunities to suggest representatives in each interview. Only 37% named any person at any point, and many of these did so only on a single occasion. In other words, even when a respondent suggested a name, it was often the only time they did so despite multiple opportunities within the interview.

science representatives who not only are informed experts in a given field, but also are open-minded participants who recognize the multi-sided nature of public debate and are willing to listen to a wide range of other participants. Ideal science representatives are deliberative. But actual participation by specific scientists in these debates is seen to be non-deliberative and therefore in conflict with the deliberative expectations that ordinary people hold. In deliberative terms, scientists who actually show up in religion and science debates fall well short of expectations. Sometimes this is because they are obviously uncivil and aggressive. But a more subtle objection from respondents is that scientists in public life are innately more likely to be non-deliberative, as experts tend to use expertise to limit or end debate rather than inform a broad conversation.

Evaluating Individual Scientists

As respondents tended to suggest categories of ideal participants rather than names, it is not surprising that few scientists ever showed up as ideal participants in public debate by name. However, on those few occasions when respondents suggested individual scientists by name for a committee, they did so with reference to deliberative norms. Respondents recommended individual scientists who (they believe) take a deliberative and open-minded stance toward other debate participants and other sources of information. Likewise, respondents recommended excluding individual scientists who do not.

Individual scientists who do show up as positive suggestions are uniformly scientists who appear to be deliberative. Damien, for example, says simply that he "feels comfortable" picking Michael Behe for a committee on human origins because he is a "sort of moderate who listens to both ends" and hasn't been "completely discounted [by] one end or the other end." And Walter struggles a bit to name the "NIH director during the time of the human genome" who has "written books about things like intelligent design," but after I suggested "Francis Collins?" continued with "Yeah, yeah. Collins …somebody

who was at least open to discussing both the scientific and religious aspects of this debate."¹²¹ So individual scientists are not entirely absent from interviews, but those who show up are those who have demonstrated a willingness to be deliberative.

Even so, respondents indicated that such scientists are exceptional, either because they are willing to go against what might be scientific consensus, or because they are uniquely insightful examples of what scientists are. For example, Phoebe chooses "the guy who invented the atom bomb, Oppenheimer" because "after the bomb was used and he realized what his science had done and the impact it had and would he have done it again and he's not sure he would have, and I think that kind of insight is what is needed." Similarly, Max, who earlier in the interview had remarked on the scope and openness of Michio Kaku's book *Parallel Worlds*, suggested Kaku on multiple committees because "he's phenomenal ...the modern day Carl Sagan" and "he would be able to help lead and say 'Hey, listen, we gotta think about this. We gotta think about that." For Phoebe and Max, these individual scientists would make good contributors because they are uniquely conscious of a wide range of concerns.

Not all individual scientist suggestions are positive. When I asked Kyle to suggest an ideal committee on human origins, he expressed a preference for deliberative participants, then ran into problems when trying to suggest an individual scientist who was capable of such deliberation. He started to name specific examples but stopped and said

or "priming the respondent." Of course, as Luker (2008) points out, this kind of criticism makes some faulty assumptions about the agency of interview respondents. Luker points out how "leading questions" often get push-back from respondents, either because they fail to capture the meaning that the respondent intends, or more basically, because they are incorrect suggestions. In these interviews, I sometimes suggested names to keep the conversation going when I thought that I understood that the respondent had a person in mind AND wanted my help with the name. But even in these cases, if I guessed the wrong name, they would say so. For example, I once suggested the wrong UN secretary-general name, suggesting Boutros Boutros-Ghali, and the respondent looked at me like I was an idiot and said "no, the Korean guy," meaning Ban Ki-Moon. So while I understand the potential criticism about "leading questions" or "priming the respondents," as an interviewer I am keenly conscious of when such suggestions cross the line, and given the ability and willingness of respondents to suggest that I am some kind of idiot, I do not omit the use of such questions or suggestions on principle.

"I don't know if I'd want the more outspoken evolution[-supporting] critics. I mean, I'm sure that Richard Dawkins is a good scientist, but I don't know if I'd want him involved in that debate." I pressed Kyle to say why not, to which Kyle replied, "just from what I've read of him, his treatment of religion and religions, and just his spirit I think is a bit unfair, even though he might be an excellent scientist."

Kyle's suggestion to exclude Dawkins is a specific instance of a more general disapproval among respondents of anyone appearing to leverage their scientific authority to attack other participants. Perhaps no single representative exemplifies this problem better than Richard Dawkins. While respondents varied in their assessment of his (anonymized) résumé, many evaluated it positively. Connie, for example, noted that the résumé indicated "atheist" as religious affiliation, and says that in debates over human origins that a person with that résumé would "be kind of neutral" and "gray in his thinking" in a positive way. Connie didn't "think he would come out and specifically sit back and say I'm, I'm for it because of my religious affiliation." Instead, Connie indicates that he is well-informed and educated enough to "give a very good argument on both sides." In terms of his résumé, Dawkins seems like an ideal expert for informing public debate.

Yet when faced with what Dawkins actually says, respondents consistently identify Dawkins as "harsh," "arrogant," "overstated," "strident," "acerbic," "rude," and "angry." Like many other respondents, Connie strongly and negatively evaluates what he says about people who do not believe in evolution by saying "I totally disagree with this statement. This is definitely the kind of statement you would see someone who is a nonbeliever and who thinks he's right." This negative evaluation of Dawkins' statements occurred even when respondents otherwise agreed with the substance or truth claims in those statements. For example, I showed Charles the same statement that Connie saw (in a separate interview). Charles immediately responded "I agree with it ...evolution

does make a lot of sense." But nevertheless he denounces the statement as "a little harsh, a little judgmental" and "a really far leaning extreme point of view" that "doesn't really allow for different points of view." By being aggressive in public life, in this case calling people who do not believe in evolution "ignorant, stupid, or insane," Dawkins moves from the legitimate role of an informed participant in public life to the illegitimate role of a scientist who uses his scientific credibility in non-deliberative ways, whether to attack others or to end debate. 122

In contrast to Dawkins' attacking statement, non-attacking statements by scientists are evaluated positively. A statement from Dean Hamer, one of the few prominent science representatives (sexuality debate), suggests that sexuality is not simply genetic, and that "clearly there is a lot more than genes just going on," which is "the same for every human behavior." Respondents consistently evaluated this statement positively. Samuel, for example, describes the person who made the statement as "someone that's sort of in the middle, isn't picking sides, wants to understand more and just try to provide other options to come up with a conclusion versus being on one side or the other." Or, in other words, deliberative.

However, it is Dawkins's language, rather than Hamer's language, which is seen to exemplify the participation of actual scientists in public life. Even respondents who are themselves scientists make this claim. Daniela, a biotech researcher, discussed her frustrations with Dawkins and other mad scientists as she thought out loud about what she might do to change debate:

¹²²Let me anticipate an obvious methodological criticism, which is that I somehow selected a statement from Dawkins that is atypical and therefore skewed respondent answers away from a fair assessment. I have two responses. First, having looked at the many polemical things that Dawkins has said in interviews and written for public consumption, my personal judgment is that this statement is typical. Second, Dawkins himself points out repeatedly that "hostility" toward religion in particular is necessary if one is to intervene in public life successfully (Dawkins 2006, see especially ch. 8). One might still say that Dawkins does not intend to sound as harsh as he sometimes does, but like any other public speaker, his intentions are evaluated through his words, not separate from them.

Yeah, I think, again, trying to educate my fellow scientists into not galvanizing this debate too much, and not demonizing. I think that the scientific community, we have shot ourselves in the foot in the way that we have framed this debate, and the way that we have made these people out to be ignorant and to be stupid. And what winds up happening is a lot of general Americans get clumped into that, where they really don't belong, right? Just because it becomes – and this is a problem with all of America today right now. It's us versus them. And we need to stop doing that. And if you're not one of us, you're one of them. If you're not so sure we should be cloning humans, then you're some crazy religious zealot.

Though less often encountered in these interviews, individual scientists do show up. When scientists are suggested for committees or evaluated positively, it is usually because they are seen as deliberative, even if such deliberative tendencies are considered unusual or exceptional. But individual scientists who are seen as leveraging scientific credibility to attack other representatives are consistently evaluated in strong negative terms. Such behavior violates normative expectations, not only of representatives in general, but specifically of scientists in public life. This creates a particular kind of bind for scientists in public life who attempt to defend science or engage in various forms of public boundary-work (Gieryn 1983, 1999). When representatives draw on scientific credibility to attack other people in public life, they violate deliberative norms. In this sense, public boundary-work is highly risky. While it may have some benefits for the credibility of science as an institution, any particular scientist engaging in such activities runs afoul of normative expectations.

Expertise as Limitation

The findings I have related above indicate that there is a highly constrained role for scientists in public life that must simultaneously be informative and deliberative. In theory, respondents are not opposed to scientists in public life altogether. Of course, sometimes scientists violate normative expectations by attacking other representatives

in public life, as described above. But a bigger problem is that, for many respondents, there is something about science as site of knowledge production that makes it especially difficult for its inhabitants to meet respondents' normative expectations. Though respondents have a strong preference for science to inform debate in various ways, in practice science is often seen as a conversation-stopper that violates deliberative expectations when brought into public life by scientists.

Across interviews, respondents express deep concern about commitment to prior positions for those entering public life. Scientists in public debate are seen as coming in with preconceived positions and commitments that limit the scope of debate. While such commitment is characteristic of scientists, it is not characteristic of deliberative representatives. Take Bernard, for example. While Bernard is not one of the more loquacious respondents in this study, he nevertheless provided an important insight on this point. In selecting a committee on environmental policy, Bernard wanted to "make sure the scientific community was represented." But he clarified that the representative should be "an open-minded communicative scientist" and not "one with positions." Bernard's response neatly illustrates both the narrow range of acceptable participation by scientists in public life, and the concerns that ordinary persons have. For Bernard, "a scientist is alright" as long as that scientist does not have "positions."

Perhaps unsurprisingly, given the substantive topics under discussion in interviews, one of the most common "positions" that generated concern from respondents is a commitment to opposing religion. This might at first seem to belie the findings earlier in the chapter about religious support for science. Note, however, that the distinction I am describing is not about science, but about opposition to religion. Even though religious persons and non-religious persons alike support science, they see any explicit opposition to religion as undesirable not because it is scientific, but rather because it violates deliberative norms.

Respondents consistently expressed concern that scientists, especially from an academic setting, might participate in debate in non-deliberative ways precisely because religion is somehow involved. Summer, for example, in discussing who might be included or excluded from committee about human origins, described herself as "not somebody to be out in front and confrontation" but thinks it is important to "remind people that it's possible to be faithful and scientific" because "there's a pretty significant arrogance out there with even people in academia often towards anything that smacks of religion." And Chantal, while saying that debate over human origins is "not, like, the biggest thing in the world," nonetheless thinks that "it's important that there is at least a debate going one, and that the academic world doesn't just shut out different ideas."

For Bonnie, like many other respondents, the ability to listen is an important requirement for deliberative participation. Though Bonnie wants "people with a strong scientific background," she requires that they must "have shown a pattern of being able to listen respectfully without necessarily being swayed unreasonably." And like many others, Bonnie pinpoints hostility to religion as a possible source of contention. "At least one or two" of her scientist participants "should probably have some kind of religious background, because it helps with listening respectfully to people who also have a religious background." However, her overriding concern is about deliberation rather than just hostility to religion. A religious background is not "an absolute requirement if they've clearly demonstrated an ability to listen and understand what's important to the people they are listening to." What is bothersome about the prior commitment is more that it would interfere with deliberation, not specifically that the commitment goes against religious beliefs or positions.

Non-religious respondents also raise the potential issue of scientific anti-religion commitments. Jennifer adds theologians and her own mother to one committee in order to give "some of the openness to the background of people who do have religious

beliefs" to "professors and teachers that would be normally teaching from a really structured 'if you don't believe evolution you're stupid' kind of standpoint." As a strong supporter of science, Jennifer thinks that such openness is necessary so that scientists "can present scientific ideas in a way that does not belittle people who do hold religious beliefs" and beyond public debate, "so they can have students in their classroom who are not feeling threatened by their exposure to scientific ideas." Again, while Jennifer expresses a concern in terms of religion, the motivating concern is over the ability to deliberate effectively and thereby contribute usefully to public debate without alienating other participants.

A few respondents indicated that scientific expertise entails holding positions that make good debate impossible. Larry, for example, had just finished telling me about a book he had just read by Karl Giberson called *Saving Darwin: How to Be a Christian and Believe in Evolution*. When he described his understanding of the debate, he expressed concern about anyone, especially scientists, entering debate with too much commitment to one particular position. While he acknowledged that "people in all forms of religion" might also present a problem, he emphasized that "there's just a lot of people in the scientific community [who] are convinced of their convictions and beliefs." Larry also pointed out that, scientific or not, "there's a lot of people on both sides that are more vocal and wanting to influence and change people on the other side."

Similarly, Teresa expressed concern about non-deliberative tactics that inevitably result when prior commitments encounter an otherwise deliberative space. Teresa thinks that "the whole global warming thing is really overblown" because "as a scientist" she doesn't "see that it's supported by scientific evidence." Her concern is not only that (other) scientists are somehow wrong, but also that the prior commitment might preclude useful approaches to solutions that everyone would support. As she put it, "whether there's global warming or not, being more careful with our resources and having less

pollution and all of us doing are part in that is certainly a good thing to do." Pushing people to make changes through what she calls "scare tactics," then, reflect a prior commitment that not only subverts good debate, but might actually be counterproductive in achieving useful solutions.¹²³

Perhaps the strongest reactions came in response to my request to evaluate a statement by Arnold Schwarzenegger that "the debate is over" and that since the science is settled then we should proceed to mitigate climate change. Like many other respondents, Teresa "pretty much disagree[d] with the whole thing" and said that, based on a "lot of reading" that she had done, that "a large body of scientists" think that climate change is "a normal shift" that is not caused by human activity. Note, however, that Teresa is consistent in her approach. The Schwarzenegger statement effectively validates her concerns about closing debate by claiming scientific authority. In this Teresa is hardly alone. Josefina, for example, also had a strong reaction to the Schwarzenegger statement because "they start out saying I say the debate is over, [but] I don't think the debate should be over." Like Teresa, Josefina is not "100% absolutely convinced that we're destroying the earth and that global warming isn't part of a natural cycle." But also like Teresa, Josefina mostly objects to the closing of debate rather than the specific truth claim. She continues by saying "there are things we can change, but whether it will change global warming or not, it's still good for the environment, it still should be looked at."

Whether considered as individuals or as faceless inhabitants of a scientific occupation, science representatives are often evaluated negatively. In some cases, such as that of Richard Dawkins, this is simply because the representatives who show up and talk in public are saying things that are unkind or uncivil. Such attacks are obviously not deliberative. But respondents also indicate a deeper concern that scientists, as experts, are especially susceptible to non-deliberative activity. Respondents value expert

¹²³Though, to be sure, Teresa indicated that this is a problem that other scientists have.

information in debates, but they worry that too much commitment to prior positions subverts good debate more than it benefits good debate. While this concern showed up often specifically as a concern of anti-religion commitments, different kinds of evaluation nonetheless reinforced the finding that the underlying concern is actually about any kind of prior commitment. For respondents in this study, any attempt to use expertise to close or limit debate, even if it comes from an expert source, violates normative expectations about deliberative participation in good debate.

5.2.4 Public Science and Good Debate

In general, respondents evaluate science representatives in public life in a manner that is entirely consistent with the model of scientific credibility that links the credibility of science as an institution to the avoidance of public sphere prominence by individual scientists. First, respondents express widespread and persistent support for science as an institution, even when it might otherwise violate their substantive religious or moral preferences. While they may disapprove of scientists in the public sphere, they see science generally as credible. In expressing this approval, they reach for the very reasons and stories (e.g. national progress) that are part and parcel of the public narrative of scientific credibility that is perpetuated in mass media.

Second, ordinary persons imagine scientists in public life to be largely anonymous rather than individually distinctive. Anonymity in this case does not indicate a lack of importance. Ordinary persons recognize that scientists, as topic matter experts, have much to contribute to public debate. But there is a clear and consistent conception of "scientist" as a role with interchangeable inhabitants. Respondents describe their ideal participants in anonymous terms. More importantly, they distinguish between science and politics. On one side of this distinction, science is anonymous and informative. On

the other side, politics is what happens when individuals try to get their way in public however possible (e.g. through emotional appeal or selective use of science talk). Respondents express concern that politics, as an individual activity designed to seek public attention for one's own purposes, corrupts science. The result is that one side of the distinction contains many possible science representatives (on the broader definition) who are actually considered "politicians." By contrast, the only proper science representatives are the "faceless" inhabitants of science as an institution, who are so virtuously anonymous that they cannot be charged with self-interest or seeking political gain.

Third, ordinary persons express dissatisfaction with actual scientists participating in actual debate, as they are seen to subvert good debate. Respondents prefer the anonymous informing expert over the actual individual scientists that they encounter. Part of this dissatisfaction resides in the obvious violation of deliberative expectations by representatives who attack other representatives or otherwise behave in ways inconsistent with good deliberative debate. In these cases ordinary persons would rather have someone else speaking for science in public life. But part of this dissatisfaction also resides in the concern that scientists might be inherently incapable of participating in public life without subverting good debate. The ideal of a deliberative scientist might be unachievable precisely because scientists, as experts, import strong commitments that override any commitment to good debate. Such prior commitments (e.g. anti-religious sentiments), are seen as limiting the possibility for good debate and negating any potential benefit of having expert informants. Respondents prefer no involvement by scientists to bad involvement that subverts good debate.

The evidence from respondent interviews suggests that the pursuit of scientific credibility is fully entangled with the deliberative norms of the public sphere. Certainly scientists generally do not seek prominence in public life, as they see such activities as inconsistent with the credibility of science as an institution. What the interview data

show is that ordinary persons see things the same way. However, as with the case of the Religious Left, this understanding of scientific credibility is expressed in terms of good debate and deliberative expectations. And like the case of the Religious Left, it seems that the possibilities for science to participate in the public sphere in the future depend not only on the flexibility of institutional conventions or practices, but also ultimately on a fundamental reorientation toward what ordinary persons want to see in public debate.

A portion of Chapter Five is forthcoming in revised form as "Supporting Science: Reasons, Restrictions, and the Role of Religion" in *Science Communication* 34. The dissertation author was the primary investigator and author of this material.

Chapter Six:

Conclusions

Imagine a longstanding sports rivalry. For illustrative purposes, let us say it is the rivalry between the New York Yankees and the Boston Red Sox. How would we explain such a rivalry? We could point to historical instances where the relationship between these two teams has seemed especially contentious (e.g. the 1919 sale of Babe Ruth to the Yankees, or the one-game playoff in 1978 that gave the Yankees the division title despite an identical win-loss record). We could point out that the two teams offer competing claims to an exclusive prize (e.g. the American League championship). We could even point to a deeper division between the two cities these teams nominally represent, a proposition supported by similar rivalries between basketball teams (Knicks vs. Celtics) and American football teams (Giants vs. Patriots). If we take a myopic view of the rivalry as only what happens between the two teams, each of these explanations for the rivalry makes some sense.

But if we take a more synoptic view, the idea of an enduring and essential rivalry seems, well, a bit silly. Treating the teams as essentially the same throughout history is implausible. The Red Sox and Yankees of today do not much resemble the Red Sox and Yankees of Babe Ruth's era, and virtually none of the same people are alive, much less involved. Even if we did take the long view, the unpalatable truth is that the Red Sox

and the Yankees rarely have encountered one another on the field of play. Throughout the course of a 162-game season, something like 85 to 90 percent of their games are against other teams. Even when they do encounter one another, as is often the case on Opening Day, most of the games are no more meaningful in competitive terms than any other game of the season. To the extent that we look at the Red Sox and Yankees as two participants in the broader game of baseball, the only remarkable thing about the rivalry is that it exists at all.

How do we reconcile these two very different accounts of the Red Sox vs. Yankees rivalry? The answer, I think, is to acknowledge that the rivalry exists, but also to recognize that it is not the inevitable result of the conflict of inherent properties of the Red Sox or the Yankees, or even a natural consequence of their specific historical relationships to one another. Rather, the rivalry between the Red Sox and the Yankees is a product of the multidimensional structure of the broader game of baseball in which both teams are participants. A multitude of actors involved in the sport of baseball have stakes in promoting a rivalry between these two teams. Writers push the rivalry story in newspapers and in books like *The Curse of the Bambino* (Shaughnessy 1990). The league office crafts a schedule that emphasizes the rivalry between the teams, for example by scheduling Opening Day as a Red Sox vs. Yankees game. The teams themselves promote the rivalry to sell more tickets to otherwise normal events, such as mid-season games that are largely inconsequential overall. Savvy entrepreneurs sell customized merchandise such as t-shirts emblazoned with "1918!" for eager fans to wear to these games. And, of course, fans steeped in the rivalry reproduce the rivalry with every shout, cheer, song, and special commemorative shirt.

What I have done in this dissertation is approach the apparent conflict between religion and science in American public life as something like the Red Sox vs. Yankees rivalry. Most current approaches to religion and science work from the more myopic perspective that focuses only on specific encounters between religion and science. For example, they examine historical instances where the relationship between religion and science has seemed especially contentious (Hitchens 2007, Numbers 2009). They point out that religion and science offer competing claims over exclusive prizes such as epistemological truth or ontological definition (see overview in Evans and Evans 2008). Or they point to a deeper division between facts and values that science and religion merely reflect (e.g. Gould 1999). In all of these cases, explanations of (or arguments against) conflict between religion and science depend on the assumption that something about the relationship between religion and science causes problems for public life that make good debate impossible.

Instead I have taken a more synoptic view and examined religion and science as two of many participants in the process of working out controversial issues through public talk. Instead of focusing on only those cases where religion and science already appear to be in conflict, I expanded the focus to include those cases where religion and science are involved, but not necessarily in conflict. Likewise, instead of showing how existing conflict narratives are not supported by historical evidence (similar to Numbers 2009) or by descriptive statistics about elite actors (similar to Ecklund 2010), I sought to move the study of religion and science beyond simply the study of what the relationship between religion and science "really is."

By taking this approach, I found that, just as the Red Sox vs. Yankees rivalry is best explained as the outcome of broader structural features of baseball as a public institution, the supposed rivalry between religion and science is best explained as a specific product of the structure of American public debate. Religion and science are not essentially or inherently opposed. In fact, as Chapter Two showed, even in cases where religion and science are both involved in public debate, they hardly ever encounter one another. Religion talk and science talk are generally separate. Prominent representatives, who

in theory should be engaging one another in public debate, instead promote their own interests and agenda without substantively engaging their supposed rivals. Contrary to what the vast majority of "science and religion" scholarship would predict, religion and science representatives are only rarely engaged with each other at all.

As Chapter Three showed using data from debate analysis and archival sources, there is nothing distinctive about religion and science representatives on this point. Elite representatives, whether science, religion, politics, or something else, see good debate as getting their way and advancing their agenda. In contrast, ordinary people think that good debate means engagement and deliberation. I show that the key problem in these debates is that representatives participate in ways that conflict with what ordinary persons expect. The result of this "great disconnection" is that ordinary persons negatively evaluate representatives and debates on normative grounds. Few, if any, representatives are pursuing deliberative debate in the public sphere, even though this conflicts with what ordinary persons want.

Instead, what representatives are doing is, in various ways, pursuing credibility in the public sphere. But not all institutions, and not all groups within those institutions, pursue credibility in the public sphere, and those who participate do not always participate in the same way. As I showed in Chapters Four and Five, the conditions of public debate over religion and science reflect different approaches to the pursuit of public credibility by religion and science representatives. The Religious Right pursues public credibility through individual representatives in the public sphere, while the Religious Left, scientists, and other potential science representatives do not. However, these approaches reflect separate and distinct institutional histories and contingent circumstances for science and for religion, rather than a particular relationship between religion and science.

This finding leads to a surprising insight. It is not conflict between religion and science that limits possibilities for good debate in the public sphere, but conflict over good

debate that limits the possibilities for religion and science to be involved in the public sphere. The pursuit of credibility in the public sphere does not require good debate, and is often opposed to it. But the successful pursuit of credibility in the public sphere limits possibilities for good debate. As I showed in Chapter Four and Five, this means that the future possibilities for good debate are not dependent simply on changing representatives or approaches to public life, but on a more fundamental reimagining of religious and scientific credibility.

6.1 Public Credibility and Good Debate

The most consistent finding across all interviews, debates, and dimensions of evaluation is that ordinary persons want good debate. Scholars also agree that good debate is an important requirement for a vibrant, peaceful, and just democratic society. But representatives, those elite persons who are supposed to be deliberating, often participate in debate for reasons that have little to do with good debate. Is it possible to align the pursuit of credibility and the desire for good debate? In what follows I speculate on how this might be accomplished for religion and for science.

6.1.1 Religious Credibility and Good Debate

Millions of Americans draw on religion as a source of strength, guidance, and moral direction. Religion should, in theory, be a rich and diverse resource in a deliberative public sphere. But this is simply not what happens. For largely contingent historical reasons, the Religious Right succeeded in gaining religious credibility in the public sphere. But the manner in which it pursues such credibility also virtually guarantees that no credible religious alternative can emerge. Historically the Religious Left has not sought religious credibility in the public sphere. Now, it is possible that they no longer have the option.

In the current American context, religion as a category of public life is fully marked as contrary to good debate.

How things might be otherwise? Is it possible to restore religion as a useful resource in public life? Can religion be part of good debate in the future? As it stands, normative conflict provides an additional barrier to future good debate involving religion. But there are at least two possible responses suggested by scholarly literature and by ordinary persons who want debate to be different. One possible response is to exchange bad representatives for good representatives. The other possible response is to abandon public life altogether and instead cultivate deliberative talk over important issues in private life and in local contexts rather than public debate.

Different Representatives

First, and most obviously, one way to restore religion in public life would be to exchange representatives who work against good debate with representatives committed to public deliberation. Certainly there is an opportunity for a changing of the guard, as indicated by the death of Jerry Falwell and the retirement of James Dobson from Focus on the Family's leadership. The possibility exists for different representatives to step up.

But this is unlikely to occur. Liberals and moderates pursue religious credibility outside of the public sphere. They do not have sufficient resources to promote individual representatives in public life on top of their other efforts. Structurally it is simply too difficult for such organizations to change, particularly as the denominational structures of liberal and moderate religions resist major reconfiguration. By contrast, the Religious Right's loose affiliation of decentralized organizations more easily reconfigures to adapt to changing circumstances. But even if liberal or moderate religious groups could reconfigure, they would be at a disadvantage, as they would have to overcome the incumbent advantage of the Religious Right. Where the Religious Right needs only to plug in an-

other conservative representative, liberal and moderate religious groups would have to start from scratch in promoting individual representatives.

A more subtle problem indicated in interview responses is that even if a different representative showed up in public life fully intending to deliberate, any use of religion talk in public would be evaluated either as not distinctively religious or as conservative. Even in the few examples in this study, liberal and moderate religious figures who used religion talk were not understood to be different from, on one hand, secular figures or, on the other hand, Religious Right figures. So in the unlikely event that liberal and moderate religious groups could successfully establish individual representatives, they would still have to overcome the challenge of being seen as conservative, or not distinctively religious, by ordinary persons whose understanding of "religion" in the public sphere has been shaped by the Religious Right. Successful liberal or moderate representation depends on completely redefining religious credibility in the public sphere and establishing new connections to liberal and moderate versions of "religion," not just providing an alternative representative in public life.

The most likely possibility for exchanging representatives is to exchange existing representatives for new Religious Right representatives who are less obviously opposed to good debate. A newer generation of conservative religious representatives, such as Rick Warren and Joel Hunter, certainly appear to be kinder and gentler than their predecessors. But it is not at all clear that these new generation representatives are actually committed to public deliberation. As a recent book by Jon Shields (2009) reports, while many of these younger conservative representatives have changed some of their strategies of representation to seem less threatening to deliberative debate, they are no less committed to public crusade than their predecessors. While they engage in dialogue and sometimes use non-religious language, they do so to assist in public crusade rather than productively engage possible alternatives (see also Klemp 2010).

Yet the success of the Religious Right in establishing itself as opposed to good debate may also have poisoned the well for more deliberative Religious Right alternatives. Ordinary persons accustomed to public religion talk as opposed to good debate are less susceptible to distraction from cosmetic changes in religion representatives. Religious scholars sympathetic to the Religious Right might argue that increasing participation in public life is an important improvement over non-participation (see Shields 2009), but ordinary persons retain the commitment to deliberation that these new Religious Right representatives lack. It is unlikely that ordinary persons will see new Religious Right representatives as committed to good deliberative debate, even if they seem to be kinder and gentler in public life.

Abandon Public Life

Prospects for good public debate involving religion appear dim. But one cause for hope is that ordinary persons currently have rich, diverse, and considerate attitudes toward other ordinary persons, even if they do not have these attitudes toward public religion representatives. Respondents often talk about discussing issues with friends who have substantively different opinions on issues. Such talk draws on personal connections and mutual respect that stabilize debate and allow conflicting ideas to engage productively. In this context, religion talk is a vital part of expressing personal experience, and can be usefully deployed without a commitment to conversion or advancing a moral agenda.

So, given that the wide range of personal religious experience is effectively reduced to one narrow element of conservative religion in public life, another answer to restoring good debate might simply be to abandon public life. Liberal and moderate religious groups already do this. The "quiet hand of God" (Wuthnow and Evans 2002) approach is arguably a way to pursue religious credibility in arenas of credibility outside the mass

media public sphere. For example, Mainline Protestants and many Roman Catholics work through institutions whose purpose is to improve local communities and the welfare of individual persons rather than trying to "own the space" of public religion. So instead of going on *The 700 Club* and railing against stem cell research as a new kind of abortion, mainline Protestants might for example host a moderated community discussion on stem cell research at a local church. Such an approach is less glamorous, and often less politically effective, than "owning the space," but it is geared toward different ends. Unlike "owning the space," such ends are compatible with deliberative debate.

But abandoning public life for more private or personal engagement may run afoul of two separate but equally challenging problems. The first problem is that sometimes public life is the only place where intervention is possible. Rapid technological changes, shifts in the balance of political power, or significant current events (for example, the 9/11 attacks) might generate public debate that would benefit from religious contribution. Without a presence in public life, liberal and moderate religious groups would be disadvantaged, both temporally and logistically, in contributing to these debates. Of course such contribution might be marginalized or read as conservative in any event, but abandoning public life means abandoning even the possibility of intervening at the level of broad public debate. This could be a serious problem, particularly if the public debate concerns policy that would directly affect liberal or moderate religion. For example, curriculum changes that emphasize America's conservative religious heritage might be difficult to oppose, even though they are immediately threatening to the religious credibility of liberal or moderate American religion.

The second problem is that there is very little barrier to entry for religious conservatives to do the same thing. In addition to its extensive national presence through overarching umbrella organizations like the NAE, the Religious Right involves several conservative religious denominations (e.g. Southern Baptist) with local congregations, access to local communities, and church facilities. Very little prevents the Religious Right from simply adding the "quiet hand of God" to its arsenal. In fact, as Shields (2009) favorably notes, the Religious Right is doing this right now by training activists to engage in both structured and informal conversations with, for example, college students on the issue of abortion. For Shields, this additional engagement cultivates "democratic virtues" by getting people participating in talk about important issues rather than developing apathy toward them (as in Eliasoph 1998). Yet Shields also recognizes that such efforts are not fully deliberative, as they do not include a commitment to openness to other perspectives. What Shields describes is a strategy for the Religious Right to "own the space" of private talk, not just public talk. So there are no guarantees that abandoning public life will yield any particular advantage in private life when it comes to religion talk.

Summary

The basic problem for good debate involving religion is that there is an asymmetrical burden on those opposed to good debate and those who seek to promote it. It is theoretically possible for some person or organization to mobilize sufficient resources and promote their own competing religion representatives in public life. While this is unlikely given the Religious Right's resource base, it is at least a faint possibility to replace "public crusaders" with religion representatives who want good debate. However, even if this unlikely replacement should occur, the second point of conflict would remain a problem. If all religion talk is associated with "public crusade," even if it comes from moderate or liberal religious representatives, then replacing representatives will not necessarily change how ordinary persons evaluate religion talk. 124

Future good debate does not (only) depend on different representatives, or on re-

¹²⁴Similarly, any efforts to promote religion in public life are, in practice, efforts to promote the Religious Right. I do not engage this point further here, but it presents a challenge to recent theoretical approaches to religion in the public sphere, e.g. as offered by Habermas (2006).

focusing efforts at a more effective level of intervention. It depends on redefining the connection between "religion" in public life and ordinary persons in terms of shared preferences for good, deliberative debate. The Religious Right does not have this burden. It is easier to maintain the status quo than to completely overhaul how people think about religion in the public sphere.

Restoring religion in public debate requires a comprehensive plan for recovering religion from the Religious Right. But intervention at one level or with one strategy is likely insufficient to overcome the asymmetric burden on non-Religious Right representatives. Even if it were possible, new approaches might generate new unanticipated consequences. As it stands, prospects for recovering religion in public life are grim. For now and the foreseeable future, "religion" in public life, and particularly in the religion and science debates under consideration, means bad debate.

6.1.2 Scientific Credibility and Good Debate

Millions of Americans look to science for progress, whether economic, national, or even more broadly as a fundamental basis for human flourishing. Science should, in theory, be a key informative resource in a deliberative public sphere. But building credibility for science as an institution has made the public sphere nearly untenable for individual science representatives. In the current American context, the actual representation of science by science representatives usually indicates bad debate.

How things might be otherwise? Is it possible for science representatives to participate as resources in public life? Can science be part of good debate in the future? As it stands, such good debate seems unlikely. I can envision three possible scenarios for the future. First, science can basically continue its pursuit of a conservative strategy, in which concerns about good debate continue to be disregarded in favor of maintaining

the credibility of science by maintaining the institutional boundaries of science in their current form. Second, scientists can exactly meet the normative expectations of ordinary people by participating in public life as expert informants who engage in productive discussion and debate. Third, scientists can withdraw from public life altogether and focus instead on research and dissemination of findings either through scientific publication or through government or corporate applications of scientific research.

A Conservative Approach

I describe the first scenario as "conservative" because it involves a total commitment to preserve science by destroying all possible competition or direct challenges. Again, since science has no armies, by "destroying" I mean "removing from any possibility of claiming scientific legitimacy." This scenario is basically what is happening now in American public life. For example, when various forms of creationism or Intelligent Design attempt to claim scientific credibility or otherwise challenge science in public life, a variety of actors attack pretenders as "pseudoscience" in a range of public and institutional settings by (e.g.) testifying in front of school boards, publishing opinion pieces in print and electronic fora, and participating as expert witnesses in courtrooms (see Binder 2007, Superfine 2009).

There are two strong reasons to continue this strategy. The first is that conservative impulses are easy to defend, as many people have interests in preserving science in its current institutional incarnation. Scientists want to be employed and have grants to support their work. Science educators want to have a standard reference version of science that can be taught repeatedly and consistently. Corporations want access to technology transfer arrangements. Governments want to be seen as more scientific, and therefore more advanced, than other governments. Even activists and reformers have an interest in the institutional structure of science remaining largely consistent, as reform or ac-

tivism efforts can be concentrated without having to deal with unpredictable responses. In short, many actors are motivated to keep things more or less the way they are now.

The second reason to continue is that the strategy is working, and has been working for decades in the American context. Whether as a core participant in the design of public school curricula (Rudolph 2002) or as a core contributor to American military supremacy (Thorpe 2006), science is so tightly woven into the fabric of American institutions that to challenge science's institutional legitimacy is an almost unthinkable proposition. Creationists, for example, have made no inroads whatsoever in the legal arena since the 1950s, and in fact have consistently been forced to retool for new institutional environments in which their potential share of scientific credibility decreases substantially with every encounter (Binder 2007). What is striking is that even though these legal challenges are technically about religion in public life, in almost every instance most of the legal arguments distinguish particularly between science and non-science. Short of promulgating a "right to science" in the U.S. Constitution, it is difficult to see how much stronger an institutional position science could have. From such a position, and with a history of success (at least since WWII), the conservative strategy makes sense.

But there are also serious risks to this strategy that are obscured by science's current institutional configuration. One risk, which I have noted elsewhere (Evans and Evans 2010), is that conceding authority in public life actually reduces the ability of key scientific actors to control their own destiny. Allowing the courts to define "science" in Intelligent Design cases works because the court's definition of science aligns with the definition that favors academic scientists. But allowing other actors and institutions to defend science means that if there is any significant institutional reconfiguration, science might well be dispossessed. That an institutional reconfiguration might be fatal to science in its current form is the concern that drives claims about, for example, "the Republican war on science" (Mooney 2005). It is not that science is in danger directly,

but that its legitimacy depends almost entirely on a superior institutional position that is not guaranteed for the future.

Another risk that is uniquely identified in this study is that the conservative approach defeats challengers only at the cost of some public credibility. As this chapter illustrates, ordinary persons who otherwise support science see such activity as entirely contrary to the good debate that they expect from representatives in public life. But a conservative approach by definition emphasizes preservation, and must proceed with such preservation even if there are other undesirable effects. Without a more subtle approach to challengers, science in public life continually runs the risk of overstepping its limits and prompting ordinary persons to induce the institutional change that offers the greatest threat to science in its current form. So while this approach works currently, if it fails, it will fail spectacularly.

Advisory Role

A second possible scenario involves reconfiguring science in public life to meet the expectations of ordinary persons for good debate. At minimum, this would mean engaging in discussion and debate without attacking fellow scientists or other participants. While it might be as simple as having current participants change their ways, a more likely approach is to exchange current representatives for different representatives who meet expectations. Such a scenario is largely consistent with several similar suggestions (though of smaller scope) throughout recent literature in the public understanding of science and science communication (e.g. Powell and Kleinman 2008, MacLean and Burgess 2010, Williams 2010).

There are three potential problems with this approach. The first is practical. There may simply not be scientists who can do this successfully. 125 Ordinary persons may be

¹²⁵ I do not mean to suggest that scientists are not inherently capable of this, simply that they might

correct that scientists are more accustomed to defending prior commitments than engaging in deliberative debate. But if such participants are not currently available, then future participants could be trained to participate in deliberative debate as a key part of scientific education. The ideal result would be that a fully educated and trained scientist would also be fully prepared to participate as an expert informant among a range of informants without attempting to impose closure on debate or otherwise subverting good debate.

The second problem is a challenge for scientists and other actors who benefit from the current institutional configuration of science in American society. Deliberative participation would require conceding that good policy results from the whole polity, not from scientists (or their deputies) telling everyone the scientific way to do things. For those who see public debate as an opportunity to advance their agenda and get their way, participation in deliberative debate might be viewed as a loss of scientific credibility, since not getting their way would likely be construed as losing authority. Such actors might also be concerned that science would be seen as less valuable if it were distributed as part of a array of authorities rather a dispositive authority in its own right. But whatever the specific concern, there obviously are few motivations for scientists and related actors to concede their current authority, no matter how good the reasons.

A final problem is that it might be good to be informative and advisory, but that leaves open a question about the distribution of such information and advice. To whom might advice be given? The problem here is that two ideal requirements of scientists in public life actually conflict in practice. While respondents consistently indicate that they do not want science in public life to be political, the unpalatable truth is that giving advice in the American context is inherently a political question. Science already risks

not have developed or trained in the necessary skills to do this successfully, or may instead be focused on other aspects of participation such as correcting errors of accuracy and description (see Gregory and Miller 1998).

accusations of corruption by politics because of its close ties with the apparatus of state power, most notably the military. Even if scientists are prepared to be deliberative, and even if scientists are willing to be deliberative at the cost of their superior institutional position, they likely would still run afoul of the discount applied to representatives who are, in various ways, political actors (see also Brown 2009).

Withdraw from Public Life

A third scenario involves abandoning public life altogether. While this would not achieve the ultimate goal of scientists productively participating as informed experts in deliberative debate, it would not violate normative expectations either. Such an approach would probably reinforce the already-entrenched notion that scientists are virtuous in part because they are too busy doing science to participate in public life.

Such a withdrawal sounds extreme. But there are two reasonable ways it might occur. First, instead of attempting to intervene in public debates more broadly, scientists could instead cultivate deliberative talk over important issues in private life and in local contexts (e.g. educational settings) rather than public debate. This would be a useful contribution without incurring the various penalties associated with being (apparently) non-deliberative scientists in public life. Such a strategy might even build credibility for science in a more useful and sustainable way that is not linked to current institutional configurations.

The problem with this particular way of withdrawing from public life is that it also abandons defense mechanisms. There is no central authority for managing science in public life, so there is nothing stopping any particular representative from gaining an advantage in public life by claiming scientific authority. While there are many reasons that any representative who did this might be discounted or disregarded, such a move is not easily countered at any level of engagement that does not directly confront the

(potential) challenger.

A second reasonable way the withdrawal might occur is to stop using narrative to say that science is credible and instead focus on evidence of success or failure. For example, instead of teaching about significant scientific heroes and discoveries, science educators might highlight the substantive contributions of science and its success or failure in achieving what scientists have claimed that it will achieve. In many respects this is already a requirement of science in its relationships to other institutions. The military requires that its bombs actually work, for example, and projects that fail enough times (e.g. particle beam weapon research) are discontinued. This would simply be a continuation of the accountability approach to science more broadly.

But the major risk is that science in public life will not be missed when it leaves. To the extent that the centrality of science to social progress depends on narrative rather than objective circumstances, abandoning narrative in favor of results means a decline in institutional authority. There have already been instances of scientists questioning whether the narrative account of science should really be driving educational policy (e.g. Ramanathan 2010). Abandoning narrative would mean recalibrating the institutional authority of science to match its practical contributions. Such recalibration is not guaranteed to benefit science or its practitioners.

Summary

The basic problem for good debate involving science is that scientific credibility currently depends on strategies that make personal intervention in public life by scientists or other science representatives untenable. The basic problem for science is that meeting the deliberative expectations of ordinary Americans would likely produce a decline in scientific credibility. The result is that the conservative approach is likely to continue, as is the assessment of scientists in public life as subverting good debate.

The possibilities for future good debate depend on science in public life building its credibility through other means, such as delivering consistently clear and beneficial results and communicating those benefits effectively. Unfortunately, in the current American context the favorable institutional position of science precludes or occludes long-term alternatives that might be more productive of good debate. But even if one of the more friendly scenarios above is seen as desirable, the problem remains that science, unlike religion, is a distributed institution with few clear leaders and no obvious center of power. The more difficult question may not be what science can do, but who can do it?

6.2 Next Steps

Throughout this dissertation I have talked not only about what is, but about what might be. How can things be otherwise? To conclude the dissertation I consider three specific versions of this question. First, I consider how scholarship in "science and religion" might be otherwise. If the way we currently study religion and science is inadequate, how might we do better? Second, I consider how scholarship on American public life might be otherwise. If the way we currently study American public life is inadequate, how might we do better? Third and finally, I consider how American public life might be otherwise. If American public debate is currently bad, how can it be made good?

6.2.1 Studying Religion and Science

For scholars of religion and science, this dissertation presents both good and bad news. The bad news is that most scholarly approaches to religion and science are probably wrong. For example, religion and science are not inevitably in conflict, as most current scholarly and popular literature suggests. But even the more nuanced versions of "science and religion" scholarship still rely on assumptions about the causal powers of religion and science, either as essential modes of thinking or as influential institutions, that only find support when other kinds of thinking or other influential institutions are sidelined in analysis. But as this dissertation has shown, the importance of religion and science is highly variable within broader social processes. Religion and science do not always actually matter, even if they are present. Sometimes debates are seen as religion and science (or religion vs. science), but sometimes they are not. To the extent that most current scholarship assumes that religion and science will always matter, most current scholarship on "science and religion" is wrong.

The good news is that studying religion and science as institutional participants in larger social processes reopens productive paths of inquiry that the essentialist causal approach foreclosed. As this dissertation has shown, religion and science display distinct institutional features in American public life. But many of these features are actually a product of specific and contingent patterns of participation in public life rather than essential features inevitably imported into public debate. What most scholars cite as cases of religion and science conflicts are actually tiny subsets of a much broader conflict over norms of public debate, in which religion and science are players but not always even the stars of the show. Indeed, depending on how normative conflict unfolds, so-called religion and science debates might actually be "about" something else entirely.

So one way that we might do better is to discard the assumption that extremely rare encounters between religion and science representatives are a good model for understanding all of the other kinds of public debates involving religion and science. Instead, we can study religion and science as two among many participants in the social process of working out issues through public talk. Instead of studying only science and religion as important participants, we can consider whether or not, and how, religion or science

become seen as important within public debate. Likewise, instead of asking questions about whether religion or science failed or succeeded in public life (e.g. whether enough people believe in evolution), we might ask how debate produced a particular version of religion or science that gained traction in public life.

I recognize that the current academic organization of subfields in some ways precludes this kind of approach. Sociologists of religion are called sociologists of religion because they start by looking for religion and moving outward from that point, for example. But what I suggest is a shift away from assuming that religion (or science) will inevitably matter, even if there is a history of scholarship that suggests that it will. Instead, scholars should select a variety of cases where religion and science should matter, or might matter, then focus first on whether or not they do. This would mean, for example, shifting from thinking about religiosity as a gradient of influence on scientific support (as in many survey-based studies of religion and science) to thinking about religiosity as something that might or might not matter when people consider science.

If there is only one principle to carry forward into future scholarship on religion and science, it is that nothing about religion and science is automatic. Distinct institutional features are the product of social processes. Sometimes these features are hard-won. Other times they are imposed. Still other times they are accidental. But no matter what our future methodological or substantive approaches to studying religion and science, we must acknowledge that public life produces religion and science as categories that ordinary persons use to organize their conceptual and social worlds. They can be produced differently.

6.2.2 Studying Public Talk

For scholars of public life, this dissertation also presents both good and bad news. The bad news is that public debate is multidimensional, and cannot simply be reduced to the substantive dimension of a given issue. This means that current approaches focusing on epistemological differences in substantive positions ("polarization"), the truth or falsity of a given position ("misinformation"), or the delivery of information ("messaging" or "framing") are probably inadequate. While such studies may usefully predict how public opinion surveys will turn out, or even how elites will act within specific institutional settings (e.g. Congress), they cannot account for the normative dimension of debate. Looking only to the substantive dimension of debate for explanations of why debate fails is at best incomplete, and at worst misleading. Even correct findings might be correct for the wrong reasons.

As this dissertation has shown, the normative dimension of debate matters. This is actually very good news for scholars of public debate, as taking the normative dimension into account may resolve two related problems that scholars of public debate face. The first problem is that the dominant model of how persons operate does not accord with the complexity of actual human persons. Current approaches to studying public debate portray most members of the public as deficient or defective in various ways. Emphasizing messaging, framing, truth, and so forth is another way of saying that when people do not do what scholars expect, then it is because those people are dumb, misinformed, easily swayed, or ignorant. Even criticism of institutions (e.g. based on "media bias") essentially claims that ordinary persons are putty in the hands of smart people who manipulate them. When the only explanation you have is based on the substantive dimension of debate, every bad debate looks like knowledge deficiency. Taking the normative dimension of debate into account restores a more realistic model of persons as

complicated, multidimensional, and variably capable or interested for reasons that are not reducible to how much they know about, for example, embryonic stem cell research funding practices.

Taking the normative dimension of debate into account may also solve a second problem. It is difficult to dispute that the vast majority of knowledge produced to influence public debate has basically no effect. Scholars who study and attempt to influence public debate are routinely ignored by elites and ordinary persons alike. The current solution to this problem is to continually generate and throw even more knowledge at public debate (in the form of papers, commentary, editorials, books, etc) in the hope that something will happen this time. But the findings in this dissertation suggest a different strategy. Instead of assuming that all debates are about epistemological claims, scholars should begin by considering the normative dimension of the particular debate in which they are interested, and structure any intervention in public debate to minimize normative conflict. If ordinary people prioritize good debate, it is probably more useful to design interventions that align with these preferences, rather than, say, only reiterating the truth of a particular epistemological claim.

Of course both of these suggestions run counter to the pattern of scholarship on public debate, particularly in those cases where scholars attempt to influence or intervene in public debate. But even here there is good news. As I have shown in this study, there are practical ways to engage the normative dimensions of debate through interviews and archival research. Probably there are also ways to construct survey questions that take the normative dimension into account, though I have not tried to do this within the scope of this dissertation. If much of our effort is effectively wasted on failed attempts to influence debate through epistemological intervention, it is certainly worth trying to incorporate the normative dimension of debate into our attempts. We might well find that things turn out differently.

6.2.3 The Future of American Public Life

This dissertation offers both good news and bad news for scholarship. But for public debate, the news has been relentlessly bad. As it stands, public debates where religion and science are involved are simply not very good. The basic engagement that precedes deliberation does not even happen. Representatives participate in public debate for a variety of reasons, only some of which are compatible with good deliberative debate. There are problems not only of substantive conflict, but of normative conflict. If this dissertation is taken only as a snapshot of the state of current public debate in America, there is little cause for hope.

But it gets worse. The structure of public debate, whether good or not, shapes future possibilities for institutions to participate in the public sphere. What I have shown in this dissertation is that American public debate rewards some of the very features of public intervention that subvert good debate. In this sense, debate actively reproduces its own problems and prevents useful solutions.

Given these pervasive structural problems, can things be otherwise? I think that the answer is "yes." But in order for things to be otherwise, we must take into account all of the things that subvert good debate. Obviously we will not always agree substantively on issues that matter. But we can develop and foster ways of engagement that take normative conflicts as well as substantive conflicts into account. At a minimum this will require reimagining competence in public talk as a matter of listening and engaging other perspectives rather than ignoring or simply talking past them. At more local levels, this can be achieved by discussing what is at stake and what the expectations are for debate before substantive discussion occurs, on the model of anarchist direct action meetings or Quaker meetings. But this is probably unrealistic for public life. Public life is too unruly. More realistic is the possibility for institutions that participate in public life,

such as religion and science, to build new kinds of competencies for representatives, for example through required communication courses in universities and seminaries. Building such competencies is a long process. In the meantime, debate will probably still not be very good.

But even bad debate is better than nothing. Really the most striking thing about American public debate is that it exists at all. Throughout this dissertation I have identified many reasons why debate should break down, and even, logically, why debate might grind to a halt or devolve into straightforward power struggle. But by and large this does not happen. Certainly I have suggested many reasons to be concerned, even critically so, with the state of debate in American public life. But the fact that public debate exists, that people can talk in public over issues that matter without resorting to personal violence, provides hope. Even if future debate cannot be made good, it can always be made better.

Appendix A:

Methodological Appendix

A.1 Text Analysis

The process of retrieving and analyzing textual data for this project depended on a combination of manual and automatic processes. In this section I provide a technically detailed walkthrough of the process. I also discuss alternatives and possible challenges.

Creating the dataset

First, some terms. A *debate* is the collection of articles on a given religion and science debate drawn from the mass media sample. For example, the "stem cell debate" refers to all articles retrieved based on keywords associated with "stem cell." A *mention* is any reference to a person within an article, including direct quotation, indirect quotation, or use as exemplar. I treat mentions in a similar way to the treatment of citations in journal articles by bibliometricians. The content of the the mention, in terms of specific claims or framing, is less important than the instance itself. An *article* is the whole body of text contained in a newspaper article. News articles, news commentary, and opinion pieces count as articles, while book reviews and letters to the editor do not count as articles. I did not limit articles based on word count. I did not eliminate multiple instances of wire

service articles, as long as those articles physically appeared in different papers.

To analyze "debates" I extracted a set of newspaper articles that fit the criteria for covering a particular general debate topic. This meant a combination of keyword searches and categorical searches (for debates that resist keyword search) in a database of newspaper articles. These are American debates, so I selected US papers. Likewise, the goal was to retrieve debate from the "master forum" of mass media, so I selected articles from the major US papers rather than from local town newspapers. The database I used was the Lexis-Nexis Major US Newspapers database (the name may have changed), which contained the full text of articles from the top 30 circulating papers in the United States.

Each debate required a slightly different set of criteria for extraction:

- EN: "global warming" or "climate change," must have major categories either "religion" or "ecology/environmental science," 2002-2007
- OH: was "gay gene" or "ex-gay" or "reparative therapy," no categories, 1997-2007
- SC: was "stem cell," 2002-2007
- CR: was "creation*" or "intelligent design," 1997-2007

Some of these criteria requires some explanation. Take, for example, the different date criteria for some debates. I initially sought to extract 10 years worth of newspaper articles for each debate. In the case of EN and SC debates, however, this yielded too much data for my computational analysis (see below) to process. In essence, it crashed the system. So for those debates I constrained the size of the data sample by going back only five years rather than ten. This still provided enormous amounts of data for those debates.

Another criteria requiring explanation is the keyword and categorical search. Recall that the goal in selecting these debates was not only to pick all talk about them, but to identify the parts of debate where someone makes claims based on religious authority, and someone makes claims based on scientific authority. The keyword and category search reflect this particular requirement. So, for example, EN results had either to be classified as "about" religion OR science, in additional to having the word "climate change" or "global warming." This combination requirement also helped exclude, for example, more general articles about, say, the "environment" in which teachers operate. Similarly, for the OH debate, a search just about "gay" or "sexuality" would bring in many articles that were not actually about the origins of sexuality. So I chose keywords that reflected debates about the origins of sexuality in particular, and drew on language from scientists and from religious groups in order to include as many perspectives as possible. In each case, however, I attempted multiple extractions using different keywords to see which search most effectively retrieved the appropriate "debate" about a topic. Note that any bias toward inclusion of specifically religion and science talk should, in theory, bias the topical analysis (see below) toward proximity of religion and science in topics (that is, increased appearance of engagement). This did not happen.

The step-by-step process for debate extraction:

- search for last 10 years based on search criteria for debate
- eliminate letters to editor, direct book/movie/tv reviews, and event announcements
- eliminate artifacts of search (e.g. the openly "gay Gene" Robinson or "by Verne Gay and Gene Seymour")
- eliminate use as reference (e.g. "the writer, whose last story was about the gay gene")
- judgment call on use as metaphor e.g. "gay gene for creativity" or "technological gay gene"

• eliminate same-paper duplicates (but not different paper duplicates)

Identifying Representatives

I established at the beginning of the dissertation that everyone who appears in public debate (see above) is a "representative." To begin the analysis of representatives, I used a computational linguistics technique called Named Entity Recognition to identify, tag, and process into a database every person who appears in the dataset of newspaper articles that I had created. At the same time I also identified, tagged, and processed into a database every organization named in any article for any reason. Organizations do not count as "representatives" but provide additional contextual information.

Figure A.1 shows the complete process flow for NER data generation and processing. First, I retrieved articles from the Lexis-Nexis Academic database, selecting the "US Major Newspapers" data source, storing the results as large comprehensive files in HTML format. I manually deleted articles from the file that did not meet the basic requirements (eg "Letters to the Editor"), saving the resulting file in HTML format. I then loaded the HTML file into GATE (General Architecture for Text Engineering), a free open-source computational linguistics platform developed by the Natural Language Processing group at the University of Sheffield (UK). GATE is a general-purpose computational linguistics framework that allows for custom configuration and pipelining of text resources and processing resources (Cunningham et al. 2002). Included with GATE are many plugins for computational linguistics work.

This project used the ANNIE (A Nearly New Information Extraction) plugin. AN-NIE combines multiple processing resources for mining unstructured data. The primary application of ANNIE for this project was named entity recognition and extraction (sometimes abbreviated NER). This is a computational linguistics term meaning that en-

tities such as places, persons, dates, organizations, and so forth are not predefined in lists as search terms, but are identified by semantic and/or grammatical rules as they appear in unstructured data. Unlike a traditional information retrieval method, where one might search a document for "Focus on the Family," NER allows one to search a document for all named entities, where the names or titles of such entities are not known before the search begins.

ANNIE contains many different types of processing resources. I employed a component chain that included a tokeniser for breaking down text into segments, a customized gazetteer for assisting in identifying problematic or unconventional entity names, a sentence splitter, a part-of-speech (POS) tagger, and a named entity transducer. In less technical terms, this set of components disassembles the text, analyzes based on semantic or grammatical rules, identifies named entities, and annotates those entities by type. The resulting file is the original HTML file plus annotations. These annotations are additional tags embedded around named entities. For example, the phrase "Jerry Falwell and his Moral Majority" would be saved as "<PERSON>Jerry Falwell</PERSON> and his <ORGANIZATION>Moral Majority
/ORGANIZATION>." NER is not a perfect process, so several iterations and manual interventions were sometimes required to improve accuracy.

A custom Perl script of my own creation processed the annotated file, extracted the tagged entities, and wrote a formatted text file for database import. This project used a free open-source relational database system called PostgreSQL. PostgreSQL is robust and powerful but not particularly user-friendly. Therefore I used the commercial Navicat PostgreSQL graphical interface for easier manipulation of tables, views, and queries. The import data file contained only a few fields per record, notably the article ID (for auditing and counting), entity, and type. Using Navicat's built-in import function, I brought the import file into a table in the database. From there I used Structured Query Language

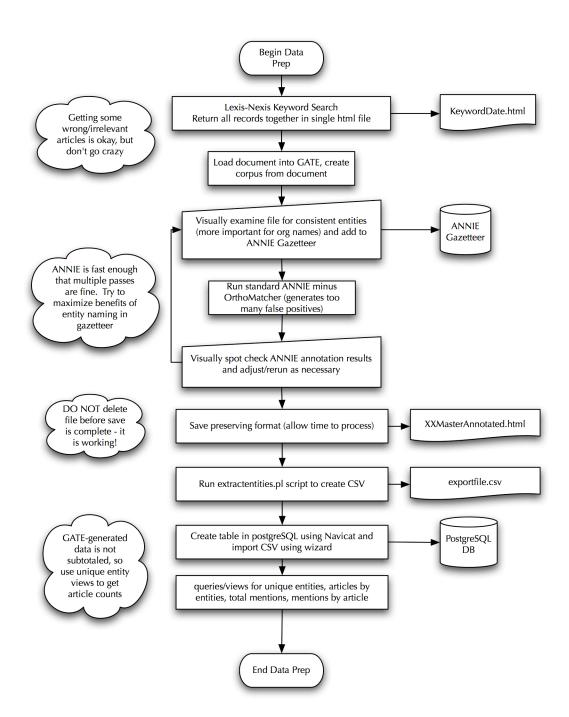


Figure A.1: NER Data Preparation Process Flow

(SQL) to construct views and queries for analyzing the article and entity information.

I created views and queries to rank representatives by visibility within each debate as well as across all debates. After testing different ways of ranking representatives, I found that the measure most consistent with my research design is the number of articles in which a person is mentioned. The best alternative is total mentions. However, articles or personal profiles may generate many mentions of a person, but such articles may be the only places that person is mentioned, out of thousands of possible articles. I think of articles as opportunities for readers to become aware of a representative. Many mentions in one article do not provide any visibility if a reader never sees the article, and are therefore misleading as a measure of visibility. The most important component of visibility is that there are many opportunities for a reader to become aware of a representative. So total mentions is not as useful as number of articles in which a person is mentioned. In technical terms, "visibility" is the result of a SQL query that finds the unique entities in a table, then retrieves the number of unique articles per entity, then adds them up to get the number of articles in which an entity is mentioned (at least once, by definition). Note that this does not count the total mentions, but rather the number of articles where each entity is mentioned.

I also created views and queries to look at the co-occurrence of representatives and organizations within the same article, to help contextualize how and why representatives showed up in these debate. In technical terms, co-occurrence data is the result of a SQL query that finds the unique entities in a table, finds where they are mentioned (by article ID), retrieves the other entities mentioned in the same article(s), and counts the entity-article-entity connections. In addition to providing information about who tends to show up in the same articles together, this query also helped for data sanitizing for co-mention of synonymous but different named entities. For example, if an article uses the term "American Civil Liberties Union" once in the article and "ACLU" for the rest of the

article, these are treated as separate entities with one article mention each. But since they co-occur in articles, and this is traceable through the query, I could disentangle the entities and correct any ranking counts accordingly.

Worth noting is that natural language processing has flaws, because a lot of language does not follow rules. At many different steps in the process I had to intervene to correct, update, and improve the process using my cognitive skills. However, NLP has three significant advantages that make it, on my view, more useful than statistical or other sampling methods often employed in discourse analysis. First, the speed of NLP makes it possible to analyze the entire universe of a debate as fast or faster than a person or multiple people can analyze a sample of a debate. Second, errors and mistakes are visible in an entire universe analysis rather than lost in an sampling error budget. Third, NLP product is replicable, in the sense that using the same processing resources to analyze the same dataset yields the same results.

However, one possible criticism is that NLP is not comparable to a human doing the same analysis. So I started this process by doing an entirely manual analysis of one debate (approximately 300 articles), then doing the NLP analysis of the same dataset, and comparing the results. The results were very similar, and when some of the ambiguous entities were disambiguated manually, the resulting ranking of entities was nearly identical to that generated by the entirely manual process, even though it was generated in less than 1/20th of the time. So the combination of NLP speed and human cognition for disambiguation seems to be the most efficient and comprehensive method for analyzing large amounts of unstructured data, and it is this method that generated results for this project.

Mapping Topics

The debate maps that I created for Chapter 2 draw on a combination of computational linguistics techniques for "topic discovery" and an admittedly subjective translation of raw results in order to communicate the topical structure of public talk in the debates under study. In technical terms, topics are probabilistic distributions of words across documents. In less technical terms, topics are what a human reader might identify as meaningful concepts, themes, or conversations in a set of documents. For a human analyst looking at a sample of documents, there is already some sense of what themes or frames might emerge, and qualitative discourse analysis usually involves selecting some of these themes or frames as important, while deemphasizing others. The challenge for computational linguistics is to identify these topics for large text corpora without knowing what such topics might be before starting the analysis.

The counterintuitive solution to discovering topics in text corpora involves throwing out assumptions about structure and syntax. Instead, topic discovery is based on the "bag of words" model, which treats documents as undifferentiated "bags of words" where sequence, syntax, and context are discarded. Documents are simply containers that have a set of words, and each word occurs a certain number of times. Moreover, many of these words are considered unimportant for topic discovery. For example, words like "of," "the," "from," and "between" are important in terms of grammar and syntax, but meaningless in a "bag of words" model because they have high frequency but no inherent semantic content. They are "stop words," used to structure language but not necessarily to communicate conceptual or meaningful information.

There are many different techniques that share the "bag of words" assumption. 126 I

¹²⁶Other techniques operating on the "bag of words" assumption include latent semantic analysis (LSA) and probabilistic latent semantic indexing (pLSI). However, LSA and pLSI are prone to overfitting because they rely on a training model. In technical terms, they are not generative. Further, these techniques organize words into topics based on symmetric measures, such as cosine distance, that do not always correspond to qualitative differences in concepts and words. For the sake of brevity I do not explore the

used a technique for qualitative analysis of text corpora called latent Dirichlet allocation, hereafter LDA (Blei, Ng, and Jordan 2003; Griffiths and Steyvers 2004). Given a text corpus, LDA calculates topics as a probability distribution over words. That is, topics are latent patterns in the corpus, rather than direct similarities between documents, or simple clusters or co-occurrence of words. In the LDA model, topics contain words, and a document may contain multiple topics. So, for example, an LDA analysis of scientific abstracts might find one topic that contains the words "genetic embryo somatic dna" and another that contains the words "viral allograft antigen lupus." The LDA technique does not know, in the human sense, that the first topic could be called "reproductive genetics" and the second could be called "immunology." However, LDA does know that the topics are qualitatively different. It also knows the probability that "viral" will be associated with "viral allograft antigen lupus" (immunology), the probability that the topic (immunology) will show up in any document, and the exact mixture of topics in any given document.

Given the counterintuitive nature of the "bag of words" assumption, it is somewhat surprising that LDA output is highly correlated to human output, given the same data. That is, the relationships between words, topics, and documents that LDA identifies are remarkably similar to the relationships that a human would identify in the same data (see Steyvers, Griffiths, and Tenenbaum 2007). It is not entirely clear why LDA output is so similar to human output. Some theories of human comprehension, such as "construction integration" theory (Kintsch 1988) suggest that human construction of meaning also occurs in a probabilistic, on-the-fly manner rather than a strictly rule-based or contextual way. But even if the process is not the same, it is clear that LDA's computational approach produces results that are comparable to that of a human looking at the same

arcane technical details here. Please consult Griffiths, Steyvers, and Tenenbaum (2007) for an excellent overview and technical comparison).

data.

An advantage of LDA, then, is that it accurately identifies important qualitative differences over a much larger set of data, and in a much shorter time frame, than a human analyst. Even more important, however, is that because it is a quantitative (if probabilistic) method, the relationships among topics and across documents that it identifies are precisely measured, rather than simply associated. This allows types of analysis that are simply not possible for human analysts. For example, LDA can plot the centrality of a topic to discourse by looking at the relationships among topics and how closely they are related to each other and to the corpus as a whole.

I used LDA as the foundation of debate maps. For each debate I started with the full set of newspaper articles used for NER (I will use the term "corpus" and "debate" interchangeably in this section). Using a custom Perl script of my own creation, I then converted these articles into "bags of words." I initially attempted to use a Porter stemming algorithm to reduce the overall vocabulary and computational load. But because of the sensitivity of these debates to differences in very similar words (e.g. scientific and scientist), I reverted to using full words as they occurred in text without applying any stemming. However, I did use a hash function, along with a native Perl multi-key sort (cached sortkeys) to reduce the computational burden of sorting and matching. The resulting file, for each corpus, was a list containing document ID, word ID, and word frequency within the document. I also generated a master vocabulary list for referencing word ID to words.

I imported the document-word frequency file for each corpus into the Topic Modeling Toolbox, a MATLAB toolbox for doing LDA analysis (Griffiths and Steyvers 2004). The toolbox contains all of the functions necessary to do LDA analysis, including topic discovery, probability ranking, and visualization of document and topic relationships. The toolbox allows some parameters and hyperparameters to be set by the user, related

to how many topics should be discovered, how many iterations should be attempted to model the topics, how many words should be displayed per topic, the cutoff for low-probability topics, and how the data should be reported. The benefit of these settings is that an analyst can basically change the level of abstraction in topic discovery, from very broad themes to specific conversations. For these settings I relied on conventions in the most current literature, then adjusted the level of abstraction until the topics were clear and coherent to human comprehension.

For output I selected both text topics (with word and topic probabilities displayed) and visualization (2D map of topics in corpus). The raw text topic data is unwieldy in print, but available on request. Table A.1 and Table A.2 display sample topics. Figure A.2 and Figure A.3 display sample 2D maps of topics in the two corpi. Note that "topics" show up simply as collections of words identified by a designator (e.g. T_82) and accompanied by probability information (e.g. 0.03). Obviously LDA analysis makes no epistemological claims about topics, nor can it make predictions about how discourse affects people. Moreover, LDA is probabilistic. There are ways to maximize the probable fit of a solution mathematically, but this does not guarantee that the result will be comprehensible to people. So LDA still requires a human analyst to make judgments about levels of abstraction and the coherence of qualitatively different topics.

Table A.1: Top 5 Topics, Human Origins Debate

T_86 (0.099)	T_92 (0.077)	T_7 (0.031)	T_82 (0.03)	T_10 (0.024)	
evolution	science	intelligent	intelligent	evolution	
science	god	design	design	species	
school	scientific	school	evolution	evolutionary	
teaching	evolution	board	theory	natural	
schools	theory	dover	institute	humans	
students	religion	judge	university	genes	
theory	scientists	district	discovery	animals	

Even though the debate maps start from the computational analysis of text corpi,

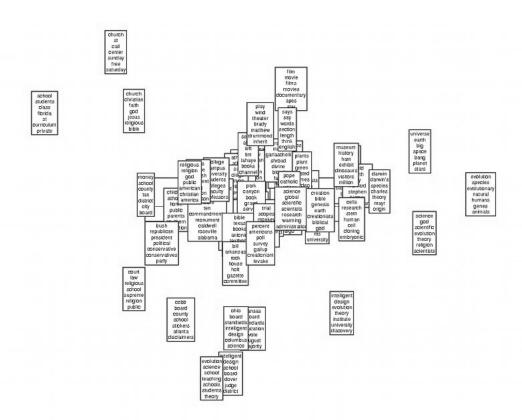


Figure A.2: Topic Distribution, Human Origins Debate

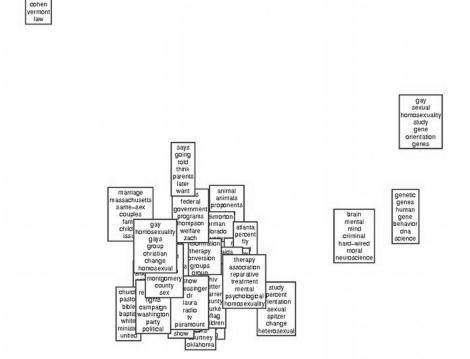


Figure A.3: Topic Distribution, Origins of Sexuality Debate

Table 11.2. Top 5 Topies, Origins of Sexuality Decate									
T_3 (0.16)	T_17 (0.083)	T_30 (0.054)	T_19 (0.037)	T_29 (0.033)					
gay	says	gay	school	genetic					
homosexuality	going	sexual	curriculum	genes					
gays	told	homosexuality	board	human					
group	think	study	education	gene					
christian	parents	gene	montgomery	behavior					
change	later	orientation	county	dna					
homosexual	want	genes	sex	science					

Table A.2: Top 5 Topics, Origins of Sexuality Debate

there is an important interpretive step involved in assigning topic names to make the maps readable. While the topic discovery software groups together words into topics (see Methodological Appendix for details), it assigns only a minimal descriptor to each topic (e.g. TOPIC_37). For each topic map, I have interpreted each topic and given each topic what I judge to be an accurate topic name that describes its contents (e.g. "Left Behind Series" or "Human Genetic Evolution" in Figure 2.2). While I have made every effort to select appropriate topic names, it is possible that another person might come up with different names for these topics. Raw data are available upon request.

The resulting debate maps are visual translations of the data generated by topic discovery (e.g. Figure A.3) into human readable and informative maps that expose the topic of structure of debate without swamping the reader with raw data. Inevitably there are some subjective elements in this translation. However, I judge the ability to analyze massive data sets for qualitative differences as more important than, on one hand, only reporting raw data or, on the other hand, executing a far more limited analysis using more conventional qualitative discourse analysis methods. But since using probabilistic methods on a large data set is unorthodox in sociology, I recognize that not everyone may agree.

A.2 Biographical Data

Several chapters draw on information about representatives themselves, both directly, as in the approaches to representation described in Chapter 3 or the case studies described in Chapters 4, and indirectly, as in the various evaluations of resumés, statements, and name recognition that made up a key part of interviews with ordinary persons. For this information I relied on a sample of representatives drawn from the information generated by Named Entity Recognition.

I began by creating a purposive sample of the representatives who showed up in the analysis reported in Chapter Two. I stratified the sample by visibility and affiliation. As before, by visibility I simply mean the number of article mentions within a given debate. I established cutoff points for low, medium, and high visibility in each debate, relative to the overall distribution. To avoid a "long tail" problem, I established a minimum cutoff of 5 article mentions. I then randomly selected representatives in each category until I returned, at minimum, one religion representative, one science representative, and at least one other representative that was neither science nor religion representative, from each level of visibility. If a given representative was no longer living, I selected a different representative from the same category and level of visibility. If a representative in one debate had already appeared in another debate, I selected an additional representative from the same category and level of visibility. If either religion or science representatives were not available in the same level of prominence (e.g. no highly prominent science representative), I selected the same category but from a lower level of visibility. And in cases where the distribution of top representatives included multiple obvious non-religion and non-science representatives in different categories, I selected additional representatives to ensure coverage of these other areas.

Constructing the sample in this way takes more care and judgment than a simple ran-

dom sample. However, it is necessary because the distribution of religion and science representatives in these debates is not precisely comparable. Religion representatives tend to be relatively few in number, but more visible. For example, a few members of the Religious Right are highly visible in several debates. By contrast, science representatives tend to be relatively more numerous, but less visible. For example, each newspaper story about a new discovery in genetics tends to quote a scientist in the study, or a local college professor, rather than a single national figure. A random sample would entangle (potential) differences between religion and science representatives with (potential) differences in high and low visibility representatives. The purposive sample, in contrast to a random sample, guarantees inclusion of science and religion representatives of similar visibility.

In practice, following the selection method described above resulted in a sample that included the top religion and science representatives in each debate, even if such representatives were not necessarily in the top 10 for a given debate, supplemented with similarly prominent representatives in other categories (e.g. media, business, politics). The resulting sample included 43 representatives from 4 debates. Some are prominent across debates, some only in one.

For each representative in the sample I constructed a biographical profile that included a variety of data, including personal characteristics, samples of public speech or writing, and, where available, biographical profiles, human-interest articles, and media interviews. Of course the amount of available data varied by person. For example, I found many more sources of data about Jerry Falwell than about John Haught, and many more sources of data about George W. Bush than about Christine Gregoire.

From this sample I generated the materials used in the evaluation component of respondent interviews. In order to test evaluation based on name recognition, I compiled a list of the top ten most frequently mentioned people in each debate (this list included the

non-living representatives as well). For each of the representatives (the sample, not the top ten persons) in each debate, I compiled an anonymous resumé containing information about their personal backgrounds, such as gender, age, nationality, education, religious affiliation (if known) and work history. I printed these resumes and identified them only by code number. For each representative in each debate I also collected a sample quote from their public discourse that I judged to be typical of their claims and their style of presenting those claims. I anonymized each quote and printed them onto index cards identified only by code number. In addition to using the resulting data to construct interview materials, I also analyzed the discursive material using principles from grounded theory (Glaser and Strauss 1967) to see what kinds of qualitative patterns emerged in the public talk of these figures. From this analysis I derived the three approaches that I describe in Chapter Three.

A.3 Interviews

The interview itself consisted of five stages for each debate (see full interview schedule below). First, I asked open-ended questions about a given debate (named generically, e.g. "stem cell research debate") such as "what is this debate about?" and "who do you think is debating?" Second, I presented a sample of anonymous resumes (one at a time), and asked whom each person represents in that debate, and why the respondent thought so. Third, I presented a sample of quotes (one at a time) and asked whom they thought the person who made that statement represents, and why they thought so. Fourth, I went through the top ten names mentioned in each debate and asked whom they thought each person represented in that debate, and why. Finally, I asked them to select their ideal committee for making decisions related to that debate. I repeated this for each debate as time and respondent availability permitted. Each stage represents a different dimen-

sion of evaluation: preexisting knowledge of the debate (open-ended), evaluation based on identity (resumes), evaluation based on interests (statements), evaluation based on recognition and association (top ten list), and finally, what qualities of representatives are most important (committee selection). I note that because respondents might understand different questions in different ways, despite interviewer guidance, the findings reported throughout the dissertation do not depend solely on one dimension or interpretation of one question (e.g. not just the committee question), but hold across several different dimensions of evaluation.

All interviews were digitally recorded and professionally transcribed. 62 interviews yielded approximately 2,500 pages of transcribed text, or approximately 40 pages per interview. As I collected data, I took notes about qualitative features of responses in order to inform a later coding scheme (Glaser and Strauss 1967, Luker 2008). Following generally accepted practices of axial and open coding (see Babbie 1998, esp. chapter 13), after all interviews were complete I manually analyzed the relevant portion of each interview transcript. Drawing on the interview notes as a guide, I identified important concepts in the interview data, adding to the preliminary coding structure and reviewing prior interviews as necessary when new themes emerged (see Glaser and Strauss 1967).

Sample Description

The sample for this research project was highly purposive, and designed to maximize range (see Weiss 1994:22-24). With the limited target size of the sample (approximately 60 respondents) the goal was not to achieve statistical representativeness, as a random sample might not actually capture enough different cases to derive useful theoretical insight. Instead, because of the religion and science content of the debates, I set purposive recruitment targets for religious affiliation and occupation, and informally sought hetero-

geneity in other categories. For religious affiliation, the target sample distribution was proportional to general US population, approximately 20% mainline Protestant, 33% evangelical Protestant, 25% Catholic, and 20% Other/Non-religious. For occupation, the target sample distribution was approximately 80% non-scientific/technical and 20% scientific/technical. I classified the former initially using denominational membership (from Steensland et al. 2000), adjusting for self-identification where appropriate (e.g. non-denominational church affiliation, or temporary attendance at new local church). I classified the latter initially using occupational categories from the Bureau of Labor Statistics, adjusting as necessary based on personal knowledge of a given respondent's specific occupation.

Though limited resources constrained site selection, I recruited respondents at two different sites to prevent the idiosyncrasies of one site from skewing results (Weiss 1994). 75% of respondents came from a Southern California city of over 1.5 million residents that is known for high-tech industries and military presence. The remaining 25% came from a South Florida city of fewer than 200,000 residents that is primarily known as a tourism and retirement destination. In addition to geographic and regional differences, demographic differences are a significant source of heterogeneity between the two sites. For example, the distribution of religious affiliations within the "Other/Non-Religious" category differs substantially between the sites. The South Florida site also skews higher in age, which is unsurprising given its status as a retirement destination.

I recruited the initial set of respondents through contacts known to have access to the purposive target groups, then proceeded using a snowball strategy (Weiss 1994). For the Southern California site, I initially worked through personal acquaintances known to have access to local congregations and non-religious organizations. For the South Florida site, I used public information to identify a preliminary list of local congregational leaders and other civic leaders who might act as initial intermediaries. In both

cases I asked these intermediaries to identify potential respondents, then contacted potential respondents directly by email or telephone. From there I continued the snowball strategy, enforcing heterogeneity for religion and occupation as necessary through selective recruitment.

Table A.3: Purposive Sample Breakdown (*n*=62)

Location	Mainline	Evangelical	Catholic	Other
Southern California				
Scientific Occupation	2	3	4	2
Non-scientific Occupation	6	11	6	13
South Florida				
Scientific Occupation	1	2	-	-
Non-scientific Occupation	3	4	3	2

Given the sample size, particularly across multiple locations, there is some inevitable variation from the exact target percentages, with most variation occurring as a slightly higher than expected number of respondents ultimately classified in the Other/Nonreligious category. (This variation is actually consistent with recent findings about the percentage of non-religious persons in the US general population, see Hout and Fisher 2002). In one case, time constraints prevented delivery of this exercise. That case is omitted from the sample, leaving 61 valid cases. But the resulting sample generally met the purposive targets for religious affiliation and occupational category within each location as well as within the total sample. The sample also ranged usefully in other categories. Respondents ranged in age from 18 to 79 years (average 40). The sample (with invalid respondent omitted) included 34 women and 27 men. All respondents had completed high school, though postsecondary education ranged from none to PhD, with most respondents having taken at least some college courses and a majority having earned AA/AS or BA/BS degrees. However, while the purposive sample shows substantial range in these categories, the sample is not intended to achieve statistical representativeness, so I do not make general claims about differences within these cate-

Interview Schedule

I used an interview schedule to guide the sequence and subject of the interview questions, particularly in the evaluation exercises. In some cases questions (or later sections) were omitted for time, or otherwise altered for clarity. In each case, however, I took care to maintain question order, avoid priming for later responses, and avoid guiding respondents in a particular direction. As Luker (2008) points out, this is often overly cautious, since respondents are generally more willing to push back than interviewers assume. Note also that many of these questions are designed to prompt reflection. I sometimes asked situation-appropriate followup questions to provoke elaboration on brief answers (e.g. about an anecdote that a respondent recounted).

Preliminary Questions

- Your age?
- What is your educational background?
- Have you studied scientific subjects? (if so) at what level?
- Were you raised in a religious tradition? (if so) which one?
- Do you attend church regularly? (if so) how often do you attend? (if so) did you go last ...?
- What do you read or watch regularly?
- Do you consider yourself to be politically active? (if so) in what ways are you active?

• Are you a member of any clubs or organizations? (if so) which ones (e.g. professional, hobby, game)?

Issues, Debates, and Media

- 1.1) We're going to go through the same set of questions for 4 different "religion and science" debate topics: stem cell research, human origins, environmental policy, and scientific research on sexual orientation.
- 1.2) Can you briefly describe the ...debate as you see it?
- 1.3) Where did you learn about ...? Can you be specific?
- 1.4) Do you talk to other people about ... Who?
- 1.5) When is the last time you talked to other people about ...?
- 1.6) Does ...matter (to you)?
- 1.7) Do you see yourself as participating in the debate over ...?

Representatives

In this section we're going to talk about people, positions, and viewpoints in debates about the issues we discussed earlier. We'll go through the questions for each issue separately, but it's entirely possible that the answers will be similar for different issues. That's completely okay.

- 2.1) When you think of ..., who do you think is debating? Does anyone come to mind?
- 2.2) I'm now going to provide you with some profiles of people who participate in the debate, but I'm not going to identify the person. For each profile, I would like

to know whom you think the person represents. Also for each profile, I'm going to ask why you think they represent those particular people or groups.

- 2.2.1) (give profile on index card, read out loud for record) Again, for …, who do you think this person represents?
- 2.2.2) why do you think this person represents them? what is it about the profile that suggests this person represents them? (possible answers: education, affiliation, book topics)
- 2.3) Now I'm going to provide with some statements from people who participate in the debate, but I'm not going to identify the person. For each statement, I will ask a series of questions about your agreement or disagreement with the statement, and I'll also ask questions about whom this person may represent. If you have any questions at all about the statement, I'm happy to try to clarify.
 - 2.3.1) (give statement on index card, read out loud for record) Do you agree or disagree with this statement, even partially?
 - 2.3.2) why do you agree or disagree? (further) which part of the statement makes the most or least sense to you?
 - -2.3.3) do you think that the person who said this represents you?
 - 2.3.4) (if not you) who do you think that this person represents?
 - -2.3.5) why do you think they represent them?
- 2.4) Now we're going to name some names. I will provide some names of people
 participating in the debate. If you don't recognize them, please say so. If you do
 recognize them:
 - -2.4.1) what is your impression of this person?

- 2.4.2) who you think they represent? why?
- 2.5) Okay, no more profiles or statements or lists of people. But here is a scenario: if you had to pick a 5-person committee to make important decisions about ..., who would be on your committee? Why? (if roles) Can you think of a particular person who fills that role?
 - 2.5.1) Why would these people be the best committee members?
 - 2.5.2) (if specific) How did you hear about these people?
 - 2.5.3) We've discussed the committee for Would you want the same people regardless of the topic?
 - 2.5.4) What changes would you make based on a topic change?
- 2.6) If you could have this committee, how would your life change? Would you do anything differently?
- 2.7) Do you think there is anything you can do to change the debate about ..., or the people involved in the debate? If so, what might that be?

Representation and Democracy

Okay, we're on the home stretch. I'm going to ask a short set of questions that are a bit more abstract. I'd like you to think not just about what is happening, but what should happen, in your opinion.

• 3.1) Let's go back to your committee, and let's say that they came up with a position on If this position went against your beliefs on ..., would you want to vote democratically on the proposal, for example in a state referendum?

- 3.2) Should the committee be allowed to override a democratic vote? Why or why not?
- 3.3) Should anyone be allowed to override a democratic vote? Why or why not?
 - 3.3.1) If so, who?

Science and Scientists

Finally, I have a last thought question for you. Let's say that someone proposed a 10-year ban on basic scientific research in order to assess our current data, get consensus on policy positions, and think about moral or ethical implications of science. Would you support such a plan? Why or why not? What alternative might you suggest?

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