

Chapter 4

The Resilience of Religion
in Secular Social Environments

A Pragmatic Philosophical Analysis

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Introduction

My task in this essay is to discuss from a philosophical point of view the surprising resilience of religion in its confrontation with secular culture and scientific rationality. In order to frame my argument, I begin by explaining this resilience and describing the point of view from which it has seemed surprising, namely, so-called secularization theory. I shall also say something about the role philosophical analysis can play in explaining this resilience.

Standard secularization theory predicts a double problem for religion. On the one hand, regarding institutional differentiation and change, religious institutions should fail to thrive in secular contexts. On the other hand, regarding knowledge claims and plausibility structures, religious intellectuals should be unable to make religious beliefs credible in an era of secular social life and scientific rationality. The theoretical framework for this envisaged "problem of religion" is an account of the development of Western religious (especially Jewish and Christian) institutions and theology since the Enlightenment. Most sociologists of religion and some historians of religion held to this interpretative framework during the last third of the twentieth century. The classic historical analysis is Owen Chadwick's *The Secularization of the European Mind in the Nineteenth Century*.¹ Peter Berger gave an elegant statement of the sociological version of secularization theory toward the end of his book, *The Sacred Canopy*,² and many other sociologists have developed it in detail.

¹ Owen Chadwick, *The Secularization of the European Mind in the Nineteenth Century: The Gifford Lectures in the University of Edinburgh for 1973–4* (Cambridge and New York: Cambridge University Press, 1975).

² Peter L. Berger, *The Sacred Canopy: Elements of a Sociological Theory of Religion* (New York: Doubleday, 1967).

This standard view of post-Enlightenment religion presupposes such propositions as the following:

- Vital religion is dependent on widespread ignorance about the world's workings;
- Secular nation-states create freedom of opinion, loosening the vise grip of religious authority;
- Science creates knowledge about the world that contradicts religious truth claims; and (thus)
- Religion is increasingly irrelevant to educated people from all classes and cultures.

Within this framework of analysis-guiding assumptions, the "problem of religion" has the following three aspects:

- Religion is dying wherever secular social orders thrive because *religion is about authority and social control*;
- Religion always retreats from intellectual confrontation or else engages it merely with reactionary authoritarianism because *religious beliefs can't compete on rational terms with scientific beliefs*; and
- Flourishing, stable economies create lifestyles that render religion superfluous because *religion compensates for lack of perceived goods and needs poverty to make people willing to submit to its authority* (so-called deprivation theory).

On this view, therefore, it is only a matter of time until religion is reduced to a cultural curiosity.

Moving from its theoretical framework to the question of evidence, standard secularization theory plausibly models the relations between religion and secularity in certain social contexts, especially those Western European countries where traditional forms of religious involvement have declined precipitously through the twentieth century. But as soon as we begin to attend to other contexts, secularization theory falls apart. Most parts of the United States of America do not fit the predicted pattern at all, and the rest of the world even less so.³ Even so-called secularized European countries display a tremendous amount of religious activity and interest, albeit often beyond the boundaries of traditional Jewish and Christian religious institutions, such as the rapid growth of Islam in Europe since World War II (over 2 million in England, about 5 million in France, and over 12 million in total) and the widespread interest in new-age spirituality in many parts of Western Europe. In short, the data contradict all of the major predictions of standard secularization theories: the vitality of

³ See, for example, Christian Smith et al., *American Evangelicalism: Embattled and Thriving* (Chicago: University of Chicago Press, 1998), in which Smith argues that it is in part the conflicts and boundary questions provoked by secular culture and scientific rationality that help some forms of evangelicalism to thrive in the United States.

religion has persisted even among educated Westerners, religious fundamentalism is a powerful global phenomenon provoking unanticipated resistance to secularism, and spiritual enthusiasm thrives even when interest in organized religion flags.

The disintegration of standard secularization theories has triggered a determined effort on the part of sociologists and historians to study particular contexts more thoroughly. The relationships among religion, scientific rationality, and secularizing trends are evidently dynamic, varied, and culture-specific in their outworking. As one of the influential proponents of secularization theories, Berger has also been one of the sociologists leading the call for more detailed study of religion, politics, economics, globalization, and secularism in particular contexts. He presents a brief but honest explanation of where secularization theory went wrong in his lead essay for *The Desecularization of the World: Resurgent Religion and World Politics*.⁴ There he writes, "The world today is massively religious, is *anything but* the secularized world that had been predicted (whether joyfully or despondently) by so many analysts of modernity."⁵ He does note two exceptions to this generalization. On the one hand, the case of Western Europe really does display an increase in secularization indicators spreading south from the northern countries since the Second World War, though even this case is ambiguous, for the reasons noted above. On the other hand, a secularized subculture of intellectuals with Western-style educations pervades the world. Consisting of both humanists and scientists, "this subculture is the principle 'carrier' of progressive, Enlightened beliefs and values." Though relatively few in number, these people tend to be influential and constitute a "globalized elite culture."⁶

This is a fascinating turn of events. Just as globalization has turned out to be unexpectedly reconcilable in diverse ways with a wide range of local cultures, so secularization turns out not to be the triumphal defeater of religion that many theorists anticipated, instead provoking religious resurgence in a host of ways within diverse cultural contexts. We can tentatively hypothesize from this sea change in the sociological study of religion and culture that religion is more basic to human nature and society than once typically thought, that it is extremely adaptable and rationally flexible, and that it is capable of existing with and even within secular societies.

⁴ Peter L. Berger, "The Desecularization of the World: A Global Overview," in *The Desecularization of the World: Resurgent Religion and World Politics*, ed. Peter L. Berger (Washington D.C.: Ethics and Public Policy Center, Grand Rapids: Wm. B. Eerdmans, 1999), 1-18.

⁵ *Ibid.*, 9.

⁶ *Ibid.*, 10.

The study of the intellectual aspects of this confrontation between religion and secular scientific rationality has also undergone a reversal in recent times. Since this question began to receive intense scholarly attention at the end of the nineteenth century, scholars have often characterized the relationship between theology (thought of as the intellectual wing of religion) and science in terms of conflict.⁷ Famous instances of conflict attributable in significant part to differences in the rational structures of theology and science do exist, from the Galileo affair to some aspects of the reception of Darwin's theory of evolution. Recent studies of these and other episodes have revealed a much more complex picture, however. In fact, it is fair to say that careful historical scholarship has been nuancing and overturning conflict interpretations of theology and science.⁸ Just as in the case of the mistaken interpretation of secularism by early social theorists, so the pervasiveness of oversimplified conflict interpretations between theology and science calls for an explanation. It is tempting to account for this mistaken scholarly consensus with reference to the likelihood that some sociologists and historians are unduly influenced in their analyses by their own experiences of meeting people like themselves all over the world (Berger mentions this as a factor⁹). Then there are the facts that conflict is remembered more clearly than harmony or compromise, and that colorful accounts of conflict sell newspapers and books.

I want to suggest another reason for the pervasiveness of intellectuals with little confidence in the resilience of religion, namely, the prevalence even among intellectuals of inadequate interpretations of the rationality of religion and science. If this is indeed part of the problem, then philosophical analysis may have a relevant contribution to make. Of course, sociological and historical approaches are better suited to most aspects of the task of analyzing the complex and often local dynamics of the relations among religion, secular cultures, and scientific rationality. For example, sociologists and historians can revisit the history of modernity to construct a more nuanced account of religion and secularism, which promises far more for an understanding of the broad range of relations among

⁷ See John William Draper, *History of the Conflict between Religion and Science* (New York: D. Appleton and Company, 1875), and Andrew Dickson White, *History of the Warfare of Science with Theology in Christendom* (New York: D. Appleton and Company, 1898).

⁸ See, for example, John Hedley Brooke, *Science and Religion: Some Historical Perspectives* (New York and Cambridge: Cambridge University Press, 1991); David C. Lindberg and Robert S. Westman, eds., *Reappraisals of the Scientific Revolution* (New York and Cambridge: Cambridge University Press, 1990); and Claude Welch, "Dispelling Some Myths about the Split between Theology and Science in the Nineteenth Century," in *Religion and Science: History, Method, Dialogue*, ed. W. Mark Richardson and Wesley J. Wildman (New York: Routledge, 1996).

⁹ See Berger, "The Desecularization of the World," 11.

religion, culture, and science than a philosophical approach could ever hope to offer. So what precisely would be the contribution of philosophical analysis?

Philosophers can focus on the rationality of belief formation and belief justification in science and religion, and then articulate similarities and differences in search of an explanation in principle for the resilience and rational flexibility of religion in face of secular culture and scientific rationality. Moreover, whereas social and historical studies can describe relations between religion and secular culture, they cannot evaluate the *appropriateness* of those relationships. Philosophy (in one currently unfashionable yet vital sense) concerns itself with such normative questions, thereby resisting the reduction of religion to its social functions. Though a philosophical approach to the "problem of religion" is limited relative to social and historical approaches, therefore, it may have something distinctive to offer: an appreciation for what is possible in relations among religion, scientific rationality, and secular culture, and thereby deep reasons for the resilience of religion and the rational flexibility of religion in the face of secular social environments. A philosophical approach thus can complement the more concrete and context-sensitive sociological and historical approaches.

There are many theories of the rationality of belief formation and belief justification across the various intellectual enterprises of human beings, including science, religion generally, and theology more specifically (again, understood throughout this essay as the intellectual wing of religion). Perhaps each of these theories has something to offer the renewed effort to understand the resilience of religion. I proceed here by expounding a pragmatic theory of inquiry, which I think registers subtle differences in the ways beliefs are formed and justified in various intellectual activities better than competitor theories. This pragmatic theory of inquiry is also a unitary theory, which is to say it hypothesizes only one way for human beings to generate knowledge and beliefs, whether through scientific or theological inquiries. Indeed, any form of inquiry whatsoever is a specification of this general theory of inquiry. The unitary character of this theory of inquiry is useful for framing comparative questions about scientific and theological rationality; by contrast, if science and theology were subject to entirely separate forms of rationality, then comparison would be difficult. There is no space here to mount a full-scale argument on behalf of this pragmatic theory of inquiry, but I hope that what I do say makes evident both its *prima facie* plausibility and its value for the task at hand. This value consists in the insights that this pragmatic theory of inquiry generates into the rational flexibility and practical importance of religion, including its abilities to resist and transform secularism.

A Pragmatic Theory of Inquiry

One way to gain an understanding of the human capacity for rational inquiry is to study the phenomenon of conflicting truth claims. Conflicts over what is true appear in many human activities, from parents having to settle the competing truth claims of fighting children, to the complex political and moral debates of social life. On most occasions, settling conflicts is largely a matter of expediency. Rarely is there the leisure to investigate conflicting claims with the patience required to get to the root of the disagreement and to decide the question with complete consideration and full fairness. The fact that expediency is a large factor in any resolution of conflicting truth claims may illumine political processes and the exercise of authority within human societies, but it generates few insights about the rational elements of human inquiry. The focus here, therefore, is on those few occasions when we can inquire with leisure into the problems posed by competing truth claims.

Of course, relative to the whole fabric of human rational activity, much of which is reflexive and quite successful, competing truth claims, as common as they seem, are actually relatively rare.¹⁰ So we narrow the focus a great deal when we move from human rational activity to conflicting truth claims, and a great deal further when we move from such conflicts to situations in which we have the luxury to examine and resolve them through rational inquiry. But this tiny corner of the rational fabric of human life – the inquiry corner – is a useful place to go if our aim is to gain a philosophical understanding of the resilience of religion in the face of secular culture and scientific rationality. Sociologists and historians doubtless would head in other directions.

Patient inquiry is a luxury because it requires a civilization, stable social life, and complex institutions devoted to the creation of culture and refinement of knowledge. Modern science promotes just this sort of inquiry, and its status as a cultural luxury is confirmed by the costliness of experimental equipment in our era – witness the price tags for high-energy particle accelerators, the human genome initiative, or the space program. The intellectual wing of religion is often governed more by the expediency of providing credible accounts of beliefs vital

¹⁰ Ann Swidler in many of her writings speaks of culture in settled and unsettled social conditions, developing a distinction developed by Clifford Geertz in *Interpretation of Cultures: Selected Essays* (New York: Basic Books, 1973). This distinction as Swidler uses it corresponds to the distinction here between the entire fabric of rational and cultural activity, much of which we absorb but do not think about, and those moments, periods, and places where things seem disturbed and problematic. For example, see Swidler, "Culture in Action: Symbols and Strategies," *American Sociology Review* 51 (April 1986): 273–86.

to religious institutions than by serious interest in rationally resolving conflicting truth claims about religious topics. Yet most major religions have subtraditions within which the devotion to truth through inquiry is strong, which in turn redirects and controls the obligation to rationalize existing institutional religious practices and beliefs. Thus, both science and religion yield many instances of inquiry of the sort I am interested in here, which I shall call "serious" inquiry, or just inquiry where the qualification is understood.

A philosophical framework for negotiating competing truth claims when there is the leisure for serious inquiry requires a general *theory of inquiry*. Ideally, a theory of inquiry will be comprehensive enough to make sense of every kind of serious inquiry and will make use of concepts that permit discrimination among different styles and disciplines of inquiry. The resources that I find most promising for such a theory of inquiry derive from early-twentieth-century American philosophers such as Charles Saunders Peirce,¹¹ William James,¹² and John Dewey.¹³ The theory of inquiry I sketch here is a pragmatic one in the tradition of these paleopragmatists,¹⁴ but it resists what I consider to be James's relativizing view of truth¹⁵ and even more so the narrative-perspective approaches to truth in neopragmatists such as Richard Rorty.¹⁶ I shall try to register the plurality of results of inquiry in varying contexts differently than either James or Rorty.

The pragmatic theory of inquiry I defend has six main emphases, and I will explain each in what follows.

- Biology: inquiry is an embodied activity made possible by senses and brains.
- Evolution: inquiry serves survival through helping human beings solve problems.
- Sociality: inquiry is a social process depending on cooperation and consensus.

¹¹ See *Collected Papers of Charles Saunders Peirce*, vols. 1–6 ed. Charles Hartshorne and Paul Weiss (Cambridge, Mass.: Harvard University Press, 1931–35); vols. 7–8 ed. Arthur W. Burks (Cambridge, Mass.: Harvard University Press, 1938). Convenient collections of relevant writings exist, such as Justus Buchler, ed., *Philosophical Writings of Peirce* (New York: Dover Publications, 1955), and Philip P. Wiener, ed., *Charles S. Peirce: Selected Writings* (New York: Dover Publications, 1958).

¹² See especially William James, *Pragmatism: A New Name for Some Old Ways for Thinking* (New York: Longmans, Green, 1907), and *The Meaning of Truth: A Sequel to Pragmatism* (Cambridge, Mass., and London: Harvard University Press, 1975).

¹³ See especially John Dewey, *Logic, The Theory of Inquiry* (New York: Holt, 1938).

¹⁴ This is the term of Robert C. Neville.

¹⁵ James articulates a pragmatic theory of the meaning of truth whereas Peirce held a correspondence view of the meaning of truth. Despite this disagreement, both allowed pragmatic considerations to count as criteria for justification. I follow Peirce against James in this matter. See William James, *Pragmatism: A New Name for Some Old Ways of Thinking*, and *The Meaning of Truth: A Sequel to Pragmatism*; and esp. vol. 5 of *Collected Papers of Charles Saunders Peirce*.

¹⁶ See Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton, N.J.: Princeton University Press, 1979).

- Correction of hypotheses: inquiry is formulation of provisional ideas, continually seeking correction.
- Fallibilism: beliefs are always subject to correction.
- Critical realism: the source of correction is a feedback mechanism somehow present in reality.

Human beings are the best suited among earth animals for problem solving (inquiry). We have the right sort of brain, with its massively expanded cortex relative to other animals. We are poor fighters, so we have to solve problems to survive; compare our physical vulnerability with the hunting perfection of sharks. We are communicators, so our problem-solving efforts can be made more effective both by teaching new solutions to others (education), and by combining efforts to solve problems (cooperation). Yet human beings are far from being ideally suited for problem solving. We have many psychological and neurological characteristics that lead us consistently in the wrong directions, such as selection bias (noticing only confirming evidence), overactive pattern-recognition skills (seeing patterns where none exist), and a tendency toward insecurity and anxiety that leads us to rationalize contrary evidence to an imprudent degree. Good thinking requires a lot of training both to capitalize on our natural aptitude for inquiry and to compensate for our natural liabilities in inquiry.

The benefits of successful inquiry are enormous. Our survival depends on it, as does our thriving as a species. We may not be able to swim and hunt like sharks, but we don't have to live in the water and we have discovered ways of going into the water to hunt using tools that allow us to find food, including sharks, without unduly risking life and limb. We may not be able to run as fast as lions, but we can through trial and error figure out how to hunt lions with acceptable risks to ourselves, and eventually how to restrict lion habitats and even how to confine lions in zoos as objects of curiosity. Beyond mere survival, our capacity for inquiry has been the key to the flourishing of our species through the construction of cultures and civilizations. Successful inquiry underlies architectural, artistic, publishing, medical, and technological achievements of every kind. The failure of inquiry or the failure of the will to solve problems creatively through inquiry similarly underlies much pain and suffering in our world, from wars of revenge and frustration to the ongoing disasters of unnecessary disease and starvation. It also lies at the root of much human stupidity and gullibility, where victims of our biological limitations for inquiry are never educated to the point that they can compensate for those weaknesses and protect themselves from people who would exploit them.¹⁷

¹⁷ There are many compendiums of errors due to biological limitations on human rationality, including examples of the ways that unscrupulous people exploit such vulnerabilities for their own

We can appreciate the importance of inquiry for human survival and flourishing, and yet also grant that serious inquiry is often a socially costly luxury incompatible with the hard realities of politics and economics. Thus, we need to know not only how to inquire well but also when to solve problems through careful inquiry rather than through low-energy interventions and intuitive rulings. Should the federal government fund a superconducting supercolliding accelerator in order to investigate the fine structure of matter? When is the right time for such a massive investment of time and expertise and financial resources? Which disputes should nations try to resolve through negotiations, which through threats and intimidation, and which through joint efforts to solve problems in rational ways? These are among the most important questions facing a world whose technology gives unthinkable power to small groups of extremists, whose increasingly globalized economy increases opportunity and wealth but also injustice and poverty, whose inevitable political and cultural interactions are clumsy and often violent, and whose galloping technologies have potentially disastrous effects on the habitat on which we depend for our very lives. When do we solve these problems through patient inquiry, and when do we deal with them through force or art or neglect? The problem of the will to inquire is an enormous one and morally one of the deepest questions we must answer. My interest here, however, is in the more modest but also important issue of the method that will produce the best results when we decide to solve problems through serious inquiry. It is this question that most illumines the diverse expressions of human rationality and the deep structures of the world that account for why inquiry works in the particular ways it does.

So what method of inquiry will work best for creatures like us? Following the paleopragmatists, my proposal is that efficient inquiry, regardless of how described, in fact follows a threefold procedure. Intuitive abduction and imaginative induction allow us to formulate hypotheses; deduction produces testable consequences and predictions by which we might try to correct and improve our

profit and amusement. See, for example, Thomas Gilovich, *How We Know What Isn't So: The Fallibility of Reason in Everyday Life* (New York: Free Press, 1993); Massimo Piatelli-Palmarini, *Inevitable Illusions: How Mistakes of Reason Rule Our Minds* (New York: John Wiley and Sons, 1996); Scott Plous, *The Psychology of Judgment and Decision Making* (New York: McGraw-Hill, 1993); James Randi, *Flim Flam: Psychics, ESP, Unicorns, and Other Delusions* (Amherst, N.Y.: Prometheus Books, 1982); Carl Sagan, *The Demon-Haunted World: Science as a Candle in the Dark* (New York: Random House, 1996); Michael Shermer, *Why People Believe Weird Things: Pseudoscience, Superstition, and Other Confusions of Our Time* (New York: W. H. Freeman and Company, 1997).

initial hypothesis; and finally a process of correction identifies errors and provokes improvements in our hypotheses. This is the hypothetico-corrective theory of inquiry, and generalizes the more traditional and science-focused hypothetico-deductive method by stressing that correction can and should be sought in any way possible, including when deductions from working hypotheses are not experimentally testable, and also when the propositions that can be exposed to correction are logically relevant but not strict deductions from working hypotheses. This allows for inference-to-best-explanation styles of argument as well as straightforward correction to hypotheses by means of the falsification of propositions deduced from those hypotheses.

The intuitive and imaginative abduction process is fascinating but poorly understood. It appears to derive from hyper-developed capacities in human beings for pattern recognition and similar cognitive processes. Unsurprisingly, it misfires a great deal of the time (witness the prevalence of false beliefs and superstitions among human cultures). But it is overproductive of hypotheses in just the right way to help us stumble across good guesses now and then. The deductive phase of inquiry involves discovering what our hypotheses entail. This is enormously elaborate territory, particularly in disciplines such as mathematics and law. Human beings are prone to reasoning errors, and it takes a large amount of training to avoid them. The descriptive and analytical study of reasoning, or logic, remained fairly settled from Aristotle's statement of the syllogism until the late nineteenth century, whereafter the turmoil of intricate investigation has been the standard. The philosophy of logic asks why reasoning works when it conforms to logical rules, and is an exceedingly complex and thoroughly controverted discipline. Here I will fly by these first two phases of inquiry and focus on the third, which is the process by which hypotheses get corrected. It is here that the argument for the superiority of this theory over its many rivals emerges: the hypothetico-corrective theory of inquiry optimizes the neurological, psychological, and social constraints on human inquiry, while taking full advantage of the empirically undeniable yet uneven power of reality (however understood) to suggest corrections in our hypotheses.

Efficient inquiry is fundamentally a social process, requiring cooperation and consensus. In special circumstances, individuals can mount and complete inquiries alone, but such achievements are woven into the social fabric of human life. In fact, all conceptualizing – in language and tool making, in self-understanding and problem solving – assumes a social group as its context and condition. Primate studies have proved extremely important for understanding the social intelligence of human life, particularly as the product of

a long evolutionary process.¹⁸ Understanding the social dynamics of a troop of chimpanzees, our nearest surviving evolutionary relatives, casts human social behavior into an eerie light. We seem to share many of the chimps' fundamental social instincts and strategies, even though we are accustomed to reframing these instincts unconsciously in the conceptuality and constraints of civilization and culture. The neuropsychological implications of this working picture of the emergence of our species are equally thought provoking.¹⁹ Primate brains evolved under inherently social conditions. We are only selves in a social context. We communicate as social creatures. We solve problems corporately. We simplify social life by finding or constructing shared assumptions to guide belief and behavior. Even a little exposure to the complexity of chimpanzee social life drives home these points. There is an enormous amount for researchers, and the chimps themselves, to track, including biological relationships, who is likely to help or threaten whom, when and how the limits of hierarchy can be tested, and how to improve the chances of mating. The complexity of the resulting behaviors and strategies is prodigious, and shows how valuable it would be to have a brain better suited for conceptualizing, generalizing, and symbolizing than chimpanzee brains are. This environmental fact of life among intelligent social animals confers a significant advantage on animals with greater brain power of the special kind we have, which is the evolutionary trajectory lying at the origins of language, art, and self-consciousness.²⁰

Social life is all about shared assumptions. When we share assumptions widely with others, we greatly reduce the stress and energy associated with encountering strangers, feeling at ease, protecting oneself and one's family, and predicting the future. Shared assumptions also enable cooperation in inquiry, and with the right kind of organization they help to make inquiry more efficient. Inquiry begins with a kind of irritation, and sometimes many people share the same irritation. Whether it is how to catch fish or how to control a belligerent neighbor, corporate inquiry presupposes shared concern with a common problem. As

¹⁸ See Richard Byrne and Andrew Whiten, *Machiavellian Intelligence: Social Expertise and the Evolution of Intellect in Monkeys, Apes, and Humans* (Oxford: Clarendon Press, 1988); Dorothy L. Cheney and Robert M. Seyfarth, *How Monkeys See the World* (Chicago: University of Chicago Press, 1990); Nicholas K. Humphrey, *A History of the Mind* (New York: HarperCollins, 1993); and Richard Leaky, *The Origin of Humankind* (New York: Basic Books, 1994).

¹⁹ See Leslie Brothers, *Friday's Footprint: How Society Shapes the Human Mind* (New York and Oxford: Oxford University Press, 1997).

²⁰ On art, see David Lewis-Williams, *The Mind in the Cave: Consciousness and the Origins of Art* (London and New York: Thames and Hudson, 2002). On language, see Terrence Deacon, *The Symbolic Species: The Coevolution of Language and the Brain* (New York: W. W. Norton & Company, 1998). On the evolution of consciousness, see Nicholas K. Humphrey, *The Inner Eye* (London: Faber & Faber, 1986).

approaches to inquiry go, however, many people trying simultaneously to solve a shared problem is often more comical than effective. Efficiency of corporate inquiry requires much more than merely joint effort. The inquiring community needs a stable identity focused around the practices and procedures for carrying out inquiry, and also around the norms for judgment applicable to resolving competing proposals for solving whatever problem inspires the cooperation in the first place. Consensus on practices and norms can only emerge if mistaken proposals get corrected quickly. Otherwise, if proposals compete with no resolution, the focus of identity within the problem-solving group, as well as the goal of achieving consensus around the best solution, is frustrated. Human beings are only so patient.

On this view, then, rationality is the joining of consensus and correctability, which in turn crucially depends upon the impressive yet uneven power of reality to correct hypotheses. The consensus part of this sacred union stabilizes group identity around norms and procedures for inquiry. This sort of consensus arises in many ways. Political, economic, and social needs are powerful factors influencing any group's identity, whether a group is committed to problem solving or not. When the leisure and resources for corporate inquiry exist, however, we can characterize the rationality of the process of problem solving in terms of the way the power of correctability fosters or frustrates the formation of consensus around norms and procedures for inquiry.

- An efficient rational process is one in which consensus arises because proposals for norms and procedures can compete, creating agreement about winners and losers.
- An inefficient rational process is one in which competing proposals for norms and procedures of inquiry do not produce widely accepted winners and losers.
- An irrational process is one in which resources for the correction of hypotheses are arbitrarily neglected.

Rapid correction of hypotheses fosters consensus around norms and procedures and thereby efficient formation of identity in groups devoted to inquiry. By contrast, slow or no correction frustrates consensus around norms and procedures and provokes social innovation to fill the space of possibilities for group identity, whereby people introduce hedges against the arbitrary imposition by other groups of norms and procedures that cannot win consensus on the criterion of correctability alone. Under such circumstances, many socially supported modes of inquiry will coexist, battling the imposition of consensus, unable to resolve contradictory hypotheses, yet portraying a host of potentially valuable but uncoordinated perspectives on the underlying problem.

The differences among the various ways that hypothesis correction works in practice are significant especially because they provoke these contrasting social

strategies. We can see this in the various types of inquiry around us, which is a point of crucial importance for the theme of this essay, and one to which I shall return below. The more immediate challenge, however, is to come to terms with the fact that we can correct some hypotheses more easily than others, and some seemingly not at all. A pragmatist theory of inquiry is critically realist in its approach to this extremely profound question, which means that its explanation will make reference both to the way the world is and to the way human beings function as inquirers in the world.

On the one hand, regarding the way the world is, the differences in the correctability of hypotheses correspond to the contours of what I shall call the "feedback mechanism" within reality. Reality has parts where the feedback mechanism does not work clearly, which leads to multiple interpretations whose mutual contradictions seem irresolvable. Such irreconcilable conflict occurs most famously in metaphysics and the theoretical aspects of religion, in matters of taste and moral judgment, and also in some of the more speculative areas of the sciences, such as quantum cosmology. Reality also has more definite parts where the feedback mechanism "speaks" clearly. Such decisive feedback occurs most prominently in the natural sciences, facilitating the rapid correction of hypotheses and thereby consensus around norms and procedures for inquiry.

On the other hand, regarding the way human beings are, the differences in the correctability of hypotheses express how well adapted human beings are for taking advantage of the feedback mechanism of reality. Areas of correctability have to be discovered in inquiry because it is difficult to know in advance where the feedback mechanism works well. Indeed, the history of human inquiry shows that many previously unknown areas of efficient correctability have been discovered; the modern natural sciences are the standing examples, but the same is true to lesser degrees of sociology, psychology, and economics. It is likely, therefore, that we will discover further areas of correctability and that currently intractable debates might prove to be resolvable after all.

It is never easy to adjudicate the question about how much of the difficulty of inquiry is due to the feedback mechanism and how much to the limitations of human beings as inquirers. This question takes its most challenging form in the case of lifestyle and moral inquiries that are independently successful within more than one context yet produce different results, so that the multicontextual version of the same inquiry seems intractable in a particularly frustrating and painful way. For example, child-rearing practices differ widely among social and cultural contexts, yet there is significant consensus around them in many local groups, to the point that what seems deeply satisfying in one place and time can seem shockingly cruel or neglectful or indulgent in another. When a child-rearing

problem arises in a local context, a solution can often be found and implemented with confidence born of social consensus, yet in a wider context no solution that wins strong consensus is (or would be) forthcoming. Is the success of inquiry in local contexts due to the contextual sensitivity of the feedback mechanism or to the culturally aided neglect of relevant data and hypotheses? A pragmatist typically believes that there is an empirical answer to this question. To see the answer, perform the following test: what happens when new data and hypotheses are introduced into the debate over the child-rearing challenge that triggered inquiry in the first place? A maximally rational process can accommodate the new perspectives. It follows that many such debates are in fact aided in their efficiency by simplification and neglect of relevant data and useful hypotheses. It also follows that a fully rational process of inquiry may be maximally efficient in respect of winning consensus in the long run among all qualified inquirers, but it is often socially disruptive and practically unhelpful in the short run among inquirers within local contexts.

Reality's capacity for correcting our ideas, which I am calling a feedback mechanism, is the most basic metaphysical hypothesis of a pragmatic theory of inquiry. From a strictly empirical point of view, it is difficult to begin anywhere else, because the feedback mechanism describes our actual inquiry experiences simply and directly. Yet the textured character of the feedback mechanism – varying from rough to refined, from powerful to absent – is undeniable. We can describe these variations based on our experience but not easily explain them. Scientists often find the feedback mechanism to be quite awesome and mysterious. For example, Stephen Jay Gould expressed such sentiments in the following passage.

Something almost unspeakably holy – I don't know how else to say this – underlies our *discovery and confirmation* of the actual details that made our world and also, in realms of contingency, assured the minutiae of its construction in the manner we know, and not in any one of a trillion other ways, nearly all of which would not have included the evolution of a scribe to record the beauty, the cruelty, the fascination, and the mystery.²¹

There are many other moving expressions of the same sort scattered among the writings of thoughtful scientists. They are right, surely. The operation of the feedback mechanism in human inquiry, including its powers to forge group identity through generating consensus around norms and procedures for inquiry, is one of the primal instances of human beings encountering an *other*; something

²¹ Stephen J. Gould, *The Structure of Evolutionary Theory* (Cambridge, Mass.: Harvard University Press, 2002); italics added.

uncontrollably beyond themselves which has a kind of awesome power and evokes wonder and awe.

The importance of the concept of correctability sponsors several theoretical tendencies in all pragmatic theories of inquiry, and certainly in this one. They tend to view the meaning of truth as correspondence between human ideas and the world, without ever oversimplifying this relation. They affirm a unified world, conceived of as the ground of the capacity for correction (the feedback mechanism). They are unitary theories of inquiry, in the sense of asserting that everything is known in the same basic way, with variations due ultimately to variability in the feedback mechanism, and proximately to subtle variations of social context and inquiry procedure. And they tend to be resonant with naturalistic forms of religious sensibility that register the "mystery" and "wonder" of the feedback mechanism. These characteristics arise differently in the varieties of pragmatic theory of inquiry, however, so there is a great deal to be gained for understanding both inquiry and pragmatism by a careful comparative study on this point, but that is a topic for another place.

The framework for this pragmatic theory of inquiry entails not only anti-foundationalism in epistemology and cautious realism in ontology, but also fallibilism. That is, every proposition is in principle subject to correction, and no knowledge can be made so secure that it is invulnerable. Of course, obvious parts of knowledge (e.g., "human beings are alive") may never change in themselves, but our understanding of the terms of such propositions may change, as have the terms of this example – repeatedly, in fact, through the history of science and philosophy. The implications of fallibilism for the morality of inquiry are important. Fallibilism's inspiration of resistance to foundationalism and complacency are not merely strategies for making inquiry work more effectively. Fallibilism also gives rise to communities that enshrine these practical principles in guidelines for virtuous behavior. The modern scientific community's emphasis on curiosity and honesty are examples of this.

Challenges Facing the Pragmatic Theory of Inquiry

This theory of inquiry must face several difficulties, of which I discuss two. First, the idealization of the ultimate inquiring group is a deep challenge for pragmatic theories of inquiry. Long-run consensus among qualified inquirers functions as a regulating norm for inquiry even when there are no prospects for settling an inquiry in practical terms according to this norm, and even when we do not want to entertain such a complex inquiry for fear that social resources

would be drained by its mammoth scale and psychic cost. In fact, this norm expresses the pragmatic bet on reality as in some sense objective and truth as in some sense universal – objectivity and universality sufficient for consensus of all relevant inquirers in the long run. Why this bet rather than an alternative, say, that reality is exhaustively a social construction and truth is nothing but relative patterns of agreement? The latter will not promote diligent inquiry in the way that the former will. Dogged work is necessary to make sure that we are not overlooking important new hypotheses or special virtues of existing hypotheses, and the former view inspires us to keep striving for deeper insights and richer appreciation of complexities.

Philosophical movements have taken their rise over how to handle the entanglement of human rationality and the feedback mechanism in inquiry. On one side, some so-called postmodernist philosophy is devoted to the hypothesis that limitations in inquiry can be traced to the limited rational insight of human beings. This devotion can be so extreme that the operation of the feedback mechanism within reality is almost entirely neglected, whereupon human beings have to be interpreted as wielding vast and dangerous powers of interpretation and social construction, and any distinction between hermeneutics and politics dissolves. Within this philosophical subculture, people can remake the "great discovery" that the world does indeed have a feedback mechanism, and this discovery can seem novel and groundbreaking. On another side, some rationalist forms of philosophy have expressed such uncritical confidence in the feedback mechanism of the world that they have supposed it applies to every problem, regardless of topic or difficulty. This has produced famous (or soon-to-be famous) comical mistakes in the history of philosophy, from some of Descartes' obviously mistaken proposals for "clear and distinct ideas" to the view that science can satisfyingly interpret every aspect of reality. This latter view is false on its face yet has some influential advocates among contemporary scientist-intellectuals.

These mistakes confirm the view advanced here that consensus around norms and procedures for inquiry takes shape within social groups, but just for that reason they also give evidence of the value of interdisciplinary approaches when inquiry is complex, lest our limited perspective should doom us to quaint errors. Of course, most intellectuals of all stripes steer a middle course between these extremes. They realize that it is difficult to tease apart the functioning of the feedback mechanism from the functioning of human minds and contexts in inquiry, and understand that a theory of inquiry collapses under the weight of its own pretensions unless it attends to both aspects of the task of inquiry. Within

this middle territory, a pragmatic theory of inquiry provisionally adopts the regulative, idealized norm of long-run consensus among qualified inquirers, betting on its special usefulness for exploring the entanglement of human rationality and the feedback mechanism in processes of inquiry.

A second challenge for this theory of inquiry is its fallibilism. The weakness of a theory of inquiry affirming fallibilism – indeed, of any strictly empirical theory of inquiry – is the difficulty it has in registering what Immanuel Kant called synthetic a priori propositions – roughly, informational propositions not deriving from experience. Of course, twentieth-century philosophers have famously and aggressively attacked the distinctions underlying the category of synthetic a priori,²² and indeed many of Kant's diagnoses of synthetic a priori propositions have failed to stand the test of time, particularly in light of understandings of space and time flowing from contemporary physics. Moreover, though more puzzling in their import, other considerations obscure Kant's clear idea of synthetic a priori propositions. For example, with regard to arithmetic, which Kant thought yielded examples of informative yet nonexperiential propositions, the number systems of certain languages are not capable of expressing such truths as "5+7=12," which may be a function merely of no need to count very high but also suggests underlying conceptual limitations that problematize conventional understandings of the synthetic a priori. We ourselves have number systems in which "5+7=12" is false, in the limited sense that the meanings of the numbers themselves change (in base 8, for example, 5+7=14; in base 16, 5+7=C), which reminds us that synthetic a priori propositions are more entangled with naming and convention than we customarily acknowledge. And in altered states of consciousness such as dreams or trances, 5+7 may not seem to equal 12, and even simple analytic a priori definitions may fail (e.g., never-married men may no longer be bachelors), which suggests that categorizing the relation of propositions to experience is more deeply entangled with neurological embedding and states of consciousness than we usually admit. Kant himself developed his philosophy in almost complete isolation from the reality of human brains.

Despite these reassurances for empirically oriented theories of inquiry such as mine, it is not for nothing that so many Western philosophers have found ways to distinguish certain propositions as somehow more deeply known than others, and correspondingly not subject to subsequent correction. The optimistic advocate of a fallibilist theory of inquiry happily accepts these instances of

²² See especially W. V. O. Quine, "Two Dogmas of Empiricism," *The Philosophical Review* 60 (1951): 20–43, reprinted in Quine, *From a Logical Point of View* (Cambridge, Mass.: Harvard University Press, 1953; 2nd rev. ed., 1961).

supremely confident knowledge simply as evidence that there really are things to be known, and reasserts the pragmatic theory of inquiry by stressing both the biological encoding in the brain of all knowledge, including the most definitive knowledge, and of the way we learn. I am not above doing that, but, as a slightly more cautious proponent of a pragmatic theory of inquiry, I continue to wonder whether the thesis of fallibilism really does justice to the fact that some propositions really do seem beyond correction. Surely this second challenge is related to the first, in that the extremity of fallibilism corresponds to the idealization of the central norm for inquiry – long-run consensus of qualified inquirers.

Despite these challenges – and they certainly are not overwhelming – I think that this pragmatic theory of inquiry acquits itself very well under close scrutiny. The fundamental claim I make on its behalf, besides its truth, is that it comprehends every sort of human inquiry, and among these identifies the most energy-efficient method of fully rational problem solving, taking proper account of the capacities and limitations of human brains, the realities of social life, and the variability in the world's hypothesis-correcting feedback mechanism. I have already given reasons for this claim, but consider further the following. The hypothetico-corrective method has essentially conservative implementations. It fosters tenacious attachment to the core hypotheses being evaluated, seeking every way possible to avoid their falsification. Thus the method registers a way that actual inquiry can make a virtue even of a potent feature of human emotional life that often interferes with inquiry in untrained and often highly trained minds, namely, insecurity and the longing for stability. It is because of this that people both cling to treasured hypotheses against all evidence or in the face of fierce social pressure, and work so hard to find the time and energy to defend their working hypotheses. In the context of a social form of inquiry, this dogged attachment of some members helps the group feel more confident that it is not overlooking any hidden virtue of its core hypothesis, which in turn is essential to any decision finally to abandon it.

This theory of inquiry is quite general in its application. While it owes a lot to Peirce and Dewey, we can also understand Imre Lakatos's work²³ as an application of the hypothetico-corrective method to science, extending the general framework by introducing the concept of a research program and thereby

²³ See Imre Lakatos, *The Methodology of Scientific Research Programs*, ed. John Worrall and Gregory Currie (Cambridge and New York: Cambridge University Press, 1978). Also see Imre Lakatos and Alan Musgrave, eds., *Criticism and the Growth of Knowledge* (Cambridge and New York: Cambridge University Press, 1970).

fostering important debates over whether the abandonment of a degenerating research program can ever be rational.²⁴ Lakatos's proposal shows how complex the sociality and logic of inquiry are even in situations where the feedback mechanism speaks relatively clearly, as it does in many parts of experimental science.

Some have applied Lakatos's work more broadly, including to metaphysics and theology, where the feedback mechanism rarely speaks clearly.²⁵ These applications strike me as contrived when Lakatos's work is the basic inspiration because his work depends on a strong feedback mechanism and takes no account of the social innovation and fragmentation that result from slow or no correction of competing hypotheses. Similarly, Lakatos's methodology of research programs is indifferent to special concerns in religious epistemology having to do with the existential challenges of faith. These attempts to shine methodological light on metaphysics and theology would be more robust if they were to reach behind Lakatos to a more comprehensive and flexible pragmatic theory of inquiry, which is the approach I take. In any event, these applications of Lakatos's methodology of research programs do give evidence of my claim that this unitary theory of inquiry can work across the board from common-sense inquiries to physics, from metaphysics to mathematics, and from the social sciences to theology. Lakatos's optimism about the rationality of all phases of inquiry was unwarranted, perhaps, and he might not have succumbed to the extremity of his viewpoint, nor other philosophers of science to the opposite mistake of affirming fundamental irrationality at the root of science, had they been working from the broader perspective of a pragmatic theory of inquiry.

Science, Religion, and Secularism

With this pragmatic theory of inquiry in place, we have a powerful philosophical tool with which to analyze the rational structure of inquiry in science and in religion. To summarize: The pragmatic theory of inquiry frames both the sciences and the theoretical wing of religion (theology) as species of inquiry. It construes

the rationality of both in the same way while allowing for wide divergence of methods applicable to particular inquiries. It accepts that there can be no a priori basis for ruling out any form of inquiry or any hypothesis, though there may be many reasons deriving from social interest and energy efficiency. It interprets inquiry both in the sciences and in theology as inevitable responses to a complex social and natural environment. It distinguishes science and theology (as well as types of science and types of theology) not only with reference to their topics but also in terms of variability in the effectiveness of the feedback mechanism across various types of subject matter.

I contend that this application of the pragmatic theory of inquiry will yield the conclusion that religion, on theoretical grounds, should be exactly as rationally flexible and robust as its impressive reactions to secularism have demonstrated it to be. To see this, let us consider inquiry in the sciences and in religions from the point of view of this pragmatic theory of inquiry.

On the one hand, this pragmatic theory of inquiry predicts that a stronger feedback mechanism provokes stable practices of inquiry that can work across cultural boundaries. The stability of these practices is the result of the way that rapid correction of hypotheses promotes consensus around procedures and norms for inquiry. Inquiring groups formed in this way will accept limitations in scope of inquiry and in the resilience of hypotheses in exchange for the satisfaction of progressive knowledge, as always-hypothetical theories are corrected and improved and replaced by better theories. This describes the community of modern scientific inquiry, which is global in scope and in which people of many different cultures and religions can participate without much difficulty. Consensus around procedures is stronger than consensus around norms. Because experimentation sometimes can directly falsify some claims, there is strongest agreement on procedures and norms in those branches of science where repeated experimentation is possible. In other branches (such as high-energy particle physics), the theories of instrumentation needed to make sense of experimental results are so prodigiously complicated that there needs to be constant scrutiny of results, which produces manageable controversies over interpretation of data. The real disagreements within science appear when experimentation is difficult or impossible, as with historical inquiries such as cosmology and evolutionary biology, or extremely speculative inquiries such as quantum cosmology. In these cases, inquiry operates much as it did for Aristotle, though with more in the way of mathematical modeling: subtle and contestable observations are the only direct constraints on theoretical proposals, experimentation is irrelevant, and the criteria for theory choice are aesthetic (e.g., conceptual simplicity, mathematical elegance, or consistency with metaphysical or religious beliefs) as often as they

²⁴ Paul Feyerabend had a famous debate with Lakatos over the rationality of decisions between competing research programs; see Feyerabend, *Against Method*, 3rd ed. (London and New York: Verso, 1993). Also see Matteo Motterlini, ed., *For and Against Method: including Lakatos' Lectures on Scientific Method and the Lakatos-Feyerabend Correspondence* (Chicago: University of Chicago Press, 1999).

²⁵ See Philip Clayton, *Explanation from Physics to Theology: An Essay in Rationality and Religion* (New Haven, Conn.: Yale University Press, 1989); and Nancey Murphy, *Theology in the Age of Scientific Reasoning* (Ithaca, N.Y.: Cornell University Press, 1990).

are in any sense empirical. For example, in our own time, Stephen Hawking advanced his quantum cosmology in part specifically to rebut claims that big-bang cosmology entails a universe with a finite age, which to many suggests a deliberate act of divine creation.²⁶ At this point, consensus around procedures and norms for inquiry breaks down and complicated disputes ensue over what counts as science, all with the effect of maintaining group identity in face of a threat to precious consensus around group values.

On the other hand, where the feedback mechanism is weaker, as it is in religion and theology, we expect to find social innovation to secure group identity against the inevitable conflict that springs up in the face of intractable disagreements. Religious faith is a complex concept, but we would not be far from the mark were we to understand its cognitive aspect as the act of making vital assumptions that guide life by furnishing a moral and spiritual orientation through identification with a particular community of like-minded believers. People make these "faith assumptions" consciously or unconsciously in situations of this epistemologically intractable sort not only because they want and need to, but because they are forced to by the relative vagueness of the feedback mechanism. Such faith decisions are forced in the sense of William James: refraining from deciding is in effect to decide anyway, yet decisive rational grounds for a decision one way or another do not exist.²⁷ Under such conditions, people make faith decisions with reference to existing options presented by social groups whose existence and identity is ultimately the result of innovative responses to the underdetermination of faith decisions by the world's feedback mechanism. The result is faith-based identification of like-minded individuals with one another, all engaged in a corporate venture that has the historical dimensions of a grand social and moral experiment, even though its immediate significance for participants is the provision of a moral orientation and a social framework for daily life. This kind of social embedding of existentially powerful faith decisions produces superior resilience of working beliefs through subgroup-based social control of the criteria for plausibility that determine whether beliefs flourish. The basic experience for members of successful religious groups is that their beliefs work for them and for their community. If it were not for this compelling fact, the strategy

²⁶ See Stephen Hawking, *A Brief History of Time* (New York: Bantam Books, 1988; expanded 10th anniversary ed., 1998). See an analysis of Hawking's proposal in Robert John Russell, "Finite Creation Without a Beginning: The Doctrine of Creation in Relation to Big Bang and Quantum Cosmologies," in *Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action*, ed. Robert John Russell, Nancey Murphy, and C. J. Isham (Vatican City State: Vatican Observatory; Berkeley: The Center for Theology and the Natural Sciences, 1993).

²⁷ See William James, *The Will to Believe: and Other Essays in Popular Philosophy* (New York: Longmans, Green, 1896).

of social innovation in the face of intractable disagreement would not prove to be effective in the long run. Yet this basic experience has many social packages: large and diverse religions splitting formally or informally into subgroups within which the working power of a community's shared faith assumptions manifests itself, the constant emergence of personality cults, the modification of sacred rituals for new purposes, heresy trials, and sometimes wars.

Thus, Christian churches have national, denominational, cultural, political, doctrinal, and liturgical divisions. Judaism has deep divisions among orthodox, conservative, reform, and even more progressive fragments. Buddhism has two ancient and many more recent divisions; Islam has two major early politically distinct subgroups and, in any given time since its origins, many practically distinct legal traditions and many culturally and personality-driven subgroups. Hinduism enumerates six orthodox schools and several unorthodox schools, while practically it takes the form of a veritable horde of often local sects and independent gurus. Daoism is similarly diverse. The diversity of theological reflection within each of these groups produces finer distinctions and subtler forms of social division. Sometimes these religions have unifying ritual practices that continue to work despite widely divergent interpretations, as when Muslims go on the Hajj or pilgrimage to Mecca, Hindus of many different kinds appreciate major festivals especially along the Ganges and other major rivers, and most Christian sects celebrate a sacramental memorial meal in memory and invocation of Jesus Christ. The massively complex and relatively chaotic social process of splitting and clumping hands social control of groups to subgroup leaders, who are often local personalities, operating with or without the authority of idealized, nonlocal leaders. This pattern of local leadership and local identification allows religions to work for people as social homes, orienting forces, sources of inspiration and moral authority, convenient means for expressing compassion through social work, and sources of plausibility structures – all this despite the disagreements among even culturally and geographically similar groups.

The local character of plausibility structures and the social effectiveness of religion are the secrets of the great adaptability of beliefs in the face of competing accounts of reality, the refusal of most people to accept an elitist secular subculture, and the power source for the self-renewal of religious groups. It follows that secularity as a social option should be fairly easy to coexist with, and secular scientific worldviews should be relatively easy to resist. In fact, religion can simultaneously adapt quickly to certain aspects of secular worldviews and yet energetically contest others more or less indefinitely, so the secularity of a social environment may be a relatively unimportant factor in the survival of religion. From the point of view of this philosophical analysis, far more important

factors in religious survival and flourishing are the social functions that religion performs.

In short, it is when religion stops inspiring you and convincing you that you give it up, not when someone disagrees with you or judges you backward or superstitious. Some evolutionist scientists arguing against the teaching of creation in U.S. schools give painful or comical evidence of their utter failure to grasp this point about the way religious beliefs work for people in local groups. Their amazement that Christians could be so backward smacks of the same kind of parochialism they criticize, only in the scientists' case it is the simplistic and improper projection of their own way of working in a group onto Christian communities. Those communities do not work the way the scientific community does. The evolutionist cause is better entrusted to scientists who have the imagination to grasp the sociology of the situation of group-based plausibility structures in religion. Likewise, the sociological task of understanding the survival and even the resurgence of religion in the face of secularism and globalization calls for sensitivity to variations in the workings of inquiry to which philosophers may be well attuned. Of course, historians and sociologists would have to track down the all-important details in each context.

This philosophical analysis of the way religious diversity and fragmentation in face of intractable disagreement promote local control over plausibility structures and make feasible the survival of religious groups in secular environments is not novel in its social implications. With some variations of emphasis, and perhaps with correction of sociological details that a philosopher may get wrong, probably many sociologists of religion would accept much of this description of some of what happens in the confrontation between religions and secular scientific worldviews. My fundamental claim in this essay concerns basic reasons for all this, reasons whose detection and description require a philosophical analysis of the sort I have furnished. A pragmatic theory of inquiry explains differences in the social arrangements of groups in terms of the efficiency of the feedback mechanism that we rely on to solve problems, whether commonplace existential challenges, intricate theological problems, or scientific puzzles. And this connection between social structures and the way the feedback mechanism works is in turn a direct reflection of the deeply, inevitably social character of human inquiry and of the human species itself.²⁸

²⁸ I am grateful to Nancy Ammerman and Garth Green for fascinating discussions of themes in this essay, and especially to Nancy for several specific suggestions bearing on contact points between the argument here and the sociology of religion.

Chapter 5

Warrant, Defeaters, and the Epistemic Basis of Religious Belief

Christoph Jäger

Introduction

One of the most influential movements in current philosophy of religion is Reformed Epistemology, a project powerfully developed and supported in recent decades by philosophers such as Nicholas Wolterstorff, William Alston, and, at the very forefront, Alvin Plantinga. The core idea of the theory is that certain kinds of theistic belief can be, to use Plantinga's famous phrase, "properly basic." A belief is properly basic if it has positive epistemic status but does not owe this status to other beliefs the subject holds. This, at least, is the standard view: basic beliefs do not "rest on" other beliefs;¹ they are "justified in themselves,"² or "self-justifying";³ "their credibility is naturally intrinsic";⁴ they "owe their justification to something other than . . . justified beliefs or their interrelations."⁵ Such descriptions are not meant to imply that basic beliefs are groundless. Although they are not formed as the conclusions of arguments, typically they will have nonpropositional grounds. According to Plantinga, on whose account I shall focus in this essay, typical grounds for basic theistic belief include

Ancestors of this essay have been presented at the first Italo-German Conference on Analytical Philosophy, organized by Andreas Kemmerling at the Facoltà di Lettere e Filosofia in Bologna; at the Gifford Bequest International Conference: "Natural Theology: Problems and Prospects" in Aberdeen; to the Joseph Butler Society, Oxford; and at Georgetown University, Washington. Parts of the present version have been read at the conference "Science and Religion" 2003 in Frankfurt. I am grateful to the audiences for many helpful comments and suggestions. Special thanks go to Katherine Munn and Thane Naberhaus.

¹ William P. Alston, *Epistemic Justification: Essays in the Theory of Knowledge* (Ithaca, N.Y.: Cornell University Press, 1989), 19.

² Keith Lehrer, *Theory of Knowledge* (London: Routledge, 1990), 13.

³ John Pollock and Joseph Cruz, *Contemporary Theories of Knowledge*, 2nd ed. (Lanham, Md.: Rowman and Littlefield, 1999), 29.

⁴ Michael Williams, *Unnatural Doubts* (Princeton, N.J.: Princeton University Press, 1996), 115.

⁵ Daniel Howard-Snyder, "Lehrer's Case against Foundationalism," *Erkenntnis* 60 (2004): 51.