CHAPTER ELEVEN

Now What Do We Do?

1 Just a theory

You philosophers are fortunate people. You write on paper—I, poor empress, am forced to write on the ticklish skins of human beings.

—Catherine the Great, to Diderot (who had advised her about land reforms)

Since 2002, schools in Cobb County, Georgia, have put stickers in some of their biology textbooks saying "Evolution is a theory, not a fact," but a judge recently ruled that these must be removed, since they may convey the message of endorsement of religion "in violation of First Amendment separation of church and state and the Georgia Constitution's prohibition against using public money to aid religion" *(New York Times,* January 14, 2005). This makes sense, since the only motivations for singling out evolution for this treatment are religious. Nobody is putting stickers in chemistry or geology books saying that the theories explained therein are theories, not facts. There are still plenty of controversies in chemistry and geology, but these rival theories are contested within the securely established background theories of each field, which are not just theory but fact. There are lots of controversial theories within biology, too, but the background theory that is not contested is evolution. There are rival theories of vertebrate flight, and the role of migration in speciation, and, closer to human home, theories about the evolution of language, bipedality, concealed ovulation, and schizophrenia, to name just a few particularly vigorous controversies. Eventually, these will all get sorted out, and some of the theories will prove to be not just theories but facts.

My description of the evolution of various features of religion in chapters 4-8 is definitely "just a theory"—or, rather, a family of proto-theories, in need of further development. In a nutshell, this is what it says: Religion evolved, but it doesn't have to be good for us in order to evolve. (Tobacco isn't good for us, but it survives just fine.) We don't all learn language because we think it's good for us; we all learn language because we cannot do otherwise (if we have normal nervous systems). In the case of religion, there is a lot more teaching and drill, a lot more deliberate social pressure, than there is in language learning. In this regard, religion is more like reading than talking. There are tremendous benefits to being able to read, and perhaps there are similar or greater benefits to being religious. But people may well love religion independently of any benefits it provides them. (I am delighted to learn that red wine in moderation is good for my health, since, *whether or not* it is good for me, I like it, and I want to go on drinking it. Religion could be like that.) It is not surprising that religion survives. It has been pruned and revised and edited for thousands of years, with millions of variants extinguished in the process, so it has plenty of features that appeal to people, and plenty of features that preserve the identity of its recipes for these very features, features that ward off or confound enemies and competitors, and secure allegiance. Only gradually have people come to have any appreciation of the reasons—the heretofore free-floating rationales—for these features. Religion is many things to many people. For some, the memes of religion are mutualists, providing undeniable benefits of sorts that cannot be found elsewhere. These people may well depend for their very lives on religion, the way we all depend on the bacteria in our guts that

help us digest our food. Religion provides some people with a motivated organization for doing great things—working for social justice, education, political action, economic reform, and so forth. For others, the memes of religion are more toxic, exploiting less savory aspects of their psychology, playing on guilt, loneliness, the longing for self-esteem and importance. Only when we can frame a comprehensive view of the many aspects of religion can we formulate defensible policies for how to respond to religions in the future.

Some aspects of this theory sketch are pretty well established, but getting down to specifics and generating further testable hypotheses is work for the future. I wanted to give readers a good idea of what a testable theory would be like, what sorts of questions it would raise, and what sorts of explanatory principles it could invoke. My theory sketch may well be false in many regards, but if so, this will be shown by confirming some alternative theory of the same sort. In science, the tactic is to put forward something that can be either fixed or refuted by something better. A century ago, it was just a theory that powered fixed-wing flight was possible; now it is fact. A few decades ago, it was just a theory that the cause of AIDS was a virus, but the reality of HIV is not just a theory today.

Since my proto-theory is not yet established and may prove to be wrong, it shouldn't be used yet to guide our policies. Having insisted at the outset that we need to do much more research so that we can make well-informed decisions, I would be contradicting myself if I now proceeded to prescribe courses of action on the basis of my initial foray. Recall, from chapter 3, the moral that Taubes drew in his history of the misguided activism that led us on the low-fat crusade: "It's a story of what can happen when the demands of public health policy—and the demands of the public for simple advice—run up against the confusing ambiguity of real science." There is pressure on us all to act decisively today, on the basis of the little we already (think we) know, but I am counseling patience. The current situation is scary—one religious fanaticism or another could produce a global catastrophe, after all—but we

should resist rash "remedies" and other overreactions. It is possible, however, to discuss *options* today, and to think *hypothetically* of what the sound policies *would be* if something like my account of religion is correct. Such a consideration of possible policies can help motivate the further research, giving us pressing reasons for finding out which hypotheses are really true.

If somebody wants to put a sticker in this book, saying that it presents a theory, not a fact, I would happily concur. *Caution!* it should say. *Assuming that these propositions are true without further research could lead to calamitous results.* But I would insist that we also put the stickers on any books or articles that maintain or presuppose that religion is the lifeboat of the world, which we dare not upset. The proposition that God exists is *not even* a theory, as we saw in chapter 8. That assertion is so prodigiously ambiguous that it expresses, at best, an unorganized set of dozens or hundreds—or billions—of quite *different* possible theories, most of them disqualified as theories in any case, because they are systematically immune to confirmation or disconfirmation. The refutable versions of the claim that God exists have life cycles like mayflies, being born and dying within a matter of weeks, if not minutes, as predictions fail to come true. (Every athlete who prays to God for victory in the big game and then wins is happy to thank God for taking his side, and chalks up some "evidence" in favor of his theory of God—but quietly revises his theory of God whenever he loses in spite of his prayers.) Even the secular and nonpartisan proposition that religion *in general* does more good than harm, either to the individual believer or to society as a whole, has hardly begun to be properly tested, as we saw in chapters 9 and 10.

So here is the only prescription I will make categorically and without reservation: Do more research. There is an alternative, and I am sure it is still hugely appealing to many people: Let's just close our eyes, trust to tradition, and wing it. Let's just *take it on faith* that religion is the key—or one of the keys—to our salvation. How can I quarrel with faith (for heaven's sake)? *Blind* faith? Please. Think.

This is where we began. My task was to demonstrate that there was enough reason to question the tradition of faith so that you could not in good conscience turn your back on the available or discoverable relevant facts. I am quite prepared to roll up my sleeves and get down to examining the evidence and considering alternative scientific theories of religion, but I think I have already made my case that it would be indefensibly reckless *not* to do this research.

My survey has highlighted a small fraction of the work that has already been done, using it to tell one of the possible stories of how religion became what it is today, leaving other stories unmentioned. I told what I think is the best current version, but perhaps I have overlooked some contributions that will eventually be recognized retrospectively to be more important. This is a risk that a project like mine takes: if, by drawing attention to one avenue of research, it helps bury some better avenue in oblivion, I will have done a disservice. I am acutely aware of this prospect, so I have shared drafts of this book with researchers who have their own vision of how to make progress in the field. My network of informants inevitably has its own bias, however, and I would like nothing better than for this book to provoke a challenge—a reasoned and evidence-rich scientific challenge—from researchers with opposing viewpoints.[1]

I anticipate that one of the challenges will come from those in academia who are unmoved by my discussion of the "academic smoke screen" in chapter 9, and who firmly believe that the only researchers qualified to do the research are those who enter into an exploration of religion with a "proper respect" for the sacred, with a deep commitment to hallowing the traditions if not converting to them. They will want to maintain that the sort of empirical, biology-based inquiries I have championed, what with their mathematical models and use of statistics and the rest, are bound to be woefully superficial, insensitive, and uncomprehending.

Recent history shows that this is a concern to take seriously. A few decades ago, the field of "science studies" was born, when

historians of science and philosophers of science were joined by sociologists and anthropologists who decided to apply their techniques, honed on the exploration of tribal cultures isolated in distant jungles and archipelagoes, to science itself, such as the subcultures of particle physicists, or molecular biologists, or mathematicians. Some of the early attempts by well-intentioned teams of social scientists to study these phenomena "in the wild" (of the laboratory and seminar room) led to the publication of studies that were met with—and deserved—the derision of the scientists who were the topic of the research. However sophisticated the researchers may have been as anthropologists, they were still naive observers, largely clueless about the technicalities of the science they were witnessing, so they often came up with comically bad interpretations of what they had observed. If you don't understand in some detail the enterprise of the people you are studying, you have scant chance of understanding their interactions and reactions at the human level. The same maxim should apply to the study of religious discourse and practices.

People in science studies have had to work hard to overcome the bad reputation the field garnered in its early days, and there are still many scientists who do not bother suppressing their contempt for it, but the misguided work has by now been more than balanced by deeply informed and comprehending work that has actually managed to open scientists' eyes to patterns and foibles in their own practice. The key to this more recent success is simple: do your homework. Anybody hoping to make sense of any highly sophisticated and difficult field of human effort needs to become a near-expert in that field *in addition* to having the training of his or her home field. Applied to the study of religion, the prescription is clear: scientists intent on explaining religious phenomena are going to have to delve deeply and conscientiously into the lore and practices, the texts and contexts, the daily lives and problems of the people they are studying.

How could this be guaranteed? Religious experts—priests,

imams, rabbis, ministers, theologians, historians of religion—who are skeptical of the qualifications of those scientists who would study them could create and administer an entrance examination! Anybody who could not pass the entrance exam that they devised would be quite appropriately judged not sufficiently knowledgeable to comprehend the phenomena under investigation, and could be denied access and cooperation. Let the experts make the entrance examination as demanding as they like, and give them total authority on grading it, but require some of their own experts to take the exam as well, and require that the examination be blind-graded, so the graders couldn't know the identity of the candidates. That would give the religious experts a way of confirming their mutual esteem while weeding out the clueless from their own ranks and certifying any qualified investigators.[2]

2 Some avenues to explore: how can we home in on religious conviction?

Thou shalt not answer questionnaires
Or quizzes upon World-Affairs,
Nor with compliance
Take any test. Thou shalt not sit
With statisticians nor commit
A social science.
—W. H. Auden, "A Reactionary Tract for the Times"

What research is needed? Consider some of the unanswered empirical questions already raised by me so far in this book:

Chapter 4: What were our ancestors like before there was anything like religion? Were they like bands of chimpanzees? What, if anything, did they talk about, aside from food and predators and the mating game? Do the burial practices of Neanderthals show that they must have had fully articulate language?

Chapter 5: Could an ape (without language) *concoct* the counter-intuitive combination of a walking tree or an invisible banana? Why don't other species have art? Why do we human beings so consistently focus our fantasies on our ancestors? Does impromptu hypnosis work as effectively when the hypnotist is not the parent? How well have nonliterate cultures preserved their rituals and creeds over the generations? How did healing rituals arise? Does there have to be someone to prime the pump? (What is the role of charismatic innovators in the origin of religious groups?)

Chapter 6: For how long could folk religion be carried along by our ancestors before reflection began to transform it? How and why did folk religions metamorphose into organized religions?

Chapter 7: Why do people join groups? Is the robustness of a religion like the robustness of an ant colony or a corporation? Is religion the product of blind evolutionary instinct or rational choice? Or is there some other possibility? Are Stark and Finke right about the principal reason for the precipitous decline after Vatican II in Catholics seeking a vocation in the church?

Chapter 8: Of all the people who believe in belief in God, what percentage (roughly) also actually believe in God? At first it looks as if we could simply give people a questionnaire with a multiple-choice question on it:

I believe in God:_____Yes_____No_____I don't know

Or should the question be:

God exists:_____Yes_____No_____I don't know

Would it make any difference how we framed the questions?

You will notice that hardly any of these questions deal even indirectly with either brains or genes. Why not? Because having religious convictions is not very much like having either epileptic seizures or blue eyes. We can already be quite sure there isn't going to be a "God gene," or even a "spirituality" gene, and there isn't

going to be a Catholicism center in the brain of Catholics, or even a "religious experience" center. Yes, certainly, whenever you think of *Jesus* some parts of your brain are going to be more active than others, but whenever you think of *anything* this is going to be true. Before we start coloring in your particular brain-maps for thinking about *jesting* and *Jet Skis* and *jewels (and Jews),* we should note the evidence that suggests that such hot spots are both mobile and multiple, heavily dependent on context—and of course not arrayed in alphabetical order across the cortex! In fact, the likelihood that the places that light up *today* when you think about Jesus are the same places that will light up *next week* when you think about Jesus is not very high. It is still possible that we will find dedicated neural mechanisms for some aspects of religious experience and conviction, but the early forays into such research have not been persuasive.[3]

Until we develop better *general* theories of cognitive architecture for the representation of content in the brain, using neuro-imaging to study religious beliefs is almost as hapless as using a voltmeter to study a chess-playing computer. In due course, we should be able to relate everything we discover by other means to what is going on among the billions of neurons in our brains, but the more fruitful paths emphasize the methods of psychology and the other social sciences.[4]

As for genes, compare the story I have told in the earlier chapters with this simplified version, from *Time* magazine's recent cover article "Is God in our Genes?":

> Humans who developed a spiritual sense thrived and bequeathed that trait to their offspring. Those who didn't risked dying out in chaos and killing. The evolutionary equation is a simple but powerful one. [Kluger, 2004, p. 65]

The idea that lurks in this bold passage is that religion is "good for you" because it was endorsed by evolution. This is just the sort

of simpleminded Darwinism that rightly gives the subtle scholars and theorists of religion the heebie-jeebies. Actually, as we have seen, it isn't that simple, and there are more powerful evolutionary "equations." The hypothesis that there is a (genetically) heritable "spiritual sense" that boosts human genetic fitness is one of the less likely and less interesting of the evolutionary possibilities. In place of a single spiritual sense we have considered a convergence of several different overactive dispositions, sensitivities, and other co-opted adaptations that have nothing to do with God or religion. We did consider one of the relatively straightforward genetic possibilities, a gene for heightened hypnotizability. This might have provided major health benefits in earlier times, and would be one way of taking Hamer's "God gene" hypothesis seriously. Or we could put it together with William James's old speculation that there are two kinds of people, those who require "acute" religion and those whose needs are "chronic" and milder. We can try to discover if there really are substantial organic differences between those who are highly religious and those whose enthusiasm for religion is moderate to nonexistent.

Suppose we struck paydirt and found just such a pattern. What would be the implications—if any—for policy? We could consider the parallel with the genetic differences that help to account for some Asians' and some Native Americans' difficulty with alcohol. As with variation in lactose tolerance, there is genetically transmitted variation in the ability to metabolize alcohol, due to variation in the presence of enzymes, mainly alcohol dehydrogenase and aldehyde dehydrogenase.[5] Needless to say, since, through no fault of their own, alcohol is poisonous to people with these genes—or it turns them into alcoholics—they are well advised to forgo alcohol. A different parallel is with the genetically transmitted distaste for broccoli and cauliflower and cilantro that many people discover in themselves; they have no difficulty metabolizing these foods, but find them unpalatable, because of identifiable differences in

the many genes that code for olfactory receptors. They don't have to be advised to avoid these foods. Might there be either "spiritual-experience intolerance" or "spiritual-experience distaste"? There might be. There might be psychological features with genetic bases that are made manifest in different reactions by people to religious stimuli (however we find it useful to classify these). William James offers informal observations that give us some reason to suspect this. Some people seem impervious to religious ritual and all other manifestations of religion, whereas others—like me—are deeply moved by the ceremonies, the music, and the art—but utterly unpersuaded by the doctrines. It may be that still others hunger for these stimuli, and feel a deep need to integrate them into their lives, but would be well advised to steer clear of them, since they can't "metabolize" them the way other people can. (They become manic and out of control, or depressed, or hysterical, or confused, or addicted.)

These are hypotheses that are definitely worth formulating in detail and testing if we can identify patterns of individual variation, whether or not they are genetic (they might be culturally transmitted, after all). To take a fanciful example, it could turn out that people whose native language was Finnish (whatever their genetic heritage) were well advised to moderate their intake of religion!

A "spiritual sense" (whatever that is) might prove to be a genetic adaptation in the simplest sense, but more specific hypotheses about patterns in human tendencies to respond to religion are apt to be more plausible, more readily tested, and more likely to prove useful in disentangling some of the vexing policy questions that we have to face. For instance, it would be particularly useful to know more about how secular beliefs differ from religious beliefs (and as we saw in chapter 8, "belief" is a misnomer here; we might better call them religious *convictions* to mark the difference). How do religious convictions differ from secular beliefs in the manner of their acquisition, persistence, and extinction, and in the roles they play in people's motivation and behavior? There has been a substantial

research industry devoted to conducting surveys on all aspects of religious attitude.[6] We regularly see the highlights of the latest results in the media, but the theoretical underpinnings and enabling assumptions of the survey methodologies are in need of careful analysis. Alan Wolfe (2003, p. 152), for one, thinks that the surveys are unreliable: "The results are inconsistent and puzzling, depending, as is often the case with such research, on the wording of the questions in surveys or the samples chosen for analysis." But is Wolfe right? This should not just be a matter of personal opinion. We need to find out.

Consider one of the more striking recent reports. According to ARIS (American Religious Identification Survey) in 2001, the three categories with the *largest gain* in membership since the previous survey of 1990 were evangelical/born-again (42 percent), nondenominational (37 percent), and no religion (23 percent). These data support the view that evangelicalism is growing in the U.S.A., but they also support the view that secularism is on the rise. We are apparently becoming polarized, as many informal observers have recently maintained. Why? Is it because, as supply-siders such as Stark and Finke think, only the most costly religions can compete with no religion at all in the marketplace for our time and resources? Or is it that the more we learn about nature, the more science strikes many people as leaving something out, something that only an antiscience perspective can seem to supply? Or is there some other explanation?

Before we jump in to explain the data, we should ask how sure we are of the assumptions used in gathering them, fust how reliable are the data, and how were they gathered? (Telephone inquiry, in the case of ARIS, not written questionnaire.) What checks were used to avoid biasing context? What other questions were people asked? How long did it take to conduct the interview? And then there are offbeat questions that might have answers that mattered: What had happened in the news on the day the poll was conducted? Did the interviewer have an accent? And so on.[7] Large-scale surveys

are expensive to conduct, and nobody spends thousands of dollars gathering data using a casually designed "instrument" (questionnaire). Much research has been devoted to identifying the sources of bias and artifact in survey research. When should you use a simple yes/no question (and don't forget to include the important "I don't know" option), and when should you use a five-point Likert scale (such as the familiar *strongly agree, tend to agree, uncertain, tend to disagree, strongly disagree)?* When ARIS did its survey in 1990, the first question was: "What is your religion?" In 2001, the question was amended: "What is your religion, if any?" How much of the increase in *Non-denominational* and *No religion* was due to the change in wording? Why was the "if any" phrase added?

In the course of writing *How We Believe: Science, Skepticism and the Search for God* (2nd ed., 2003), Michael Shermer, the director of the Skeptic Society, conducted an ambitious survey of religious convictions. The results are fascinating, in part because they differ so strikingly from the results found in other, similar surveys. Most recent surveys find approximately 90 percent of Americans believe in God—and not just an "essence" God, but a God who answers prayers. In Shermer's survey, only 64 percent said they believed in God—and 25 percent said they disbelieved in God (p. 79). That's a huge discrepancy, and it is not due to any *simple* sampling error (such as sending the questionnaires to known skeptics!).[8] Shermer speculates that education is the key. His survey asked people to respond in their own words to "an open-ended essay question" explaining why they believed in God:

> As it turns out, the people who completed our survey were significantly more educated than the average American, and higher education is associated with lower religiosity. According to the U.S. Census Bureau for 1998, one-quarter of Americans over twenty-five years old have completed their bachelor's degree, whereas in our sample the corresponding rate was almost two-thirds. (It is hard to say why this was the case, but one possibility is that educated people are more likely to complete a moderately complicated survey.) [p. 79]

But (as my student David Polk pointed out) once self-selection is acknowledged as a serious factor, we should ask the further question: who would take time to fill out such a questionnaire? Probably only those with the strongest beliefs. People who just don't think religion is important are unlikely to fill out a questionnaire that involves composing answers to questions. Only one out often of the people who received the mailed-out survey returned it, a relatively low rate of return, so we can't draw any interesting conclusions from his 64 percent figure, as he acknowledges (Shermer and Sulloway, in press).[9]

3 What shall we tell the children?

It was the schoolboy who said, "Faith is believing what you know ain't so."
—Mark Twain

A research topic of particular urgency, but also particular ethical and political sensitivity, is the effect of religious upbringing and education on young children. There is an ocean of research, some good, some bad, on early-childhood development, on language learning and nutrition and parental behavior and the effect of peers and just about every other imaginable variable that can be measured in the first dozen years of a person's life, but almost all of this—so far as I can determine—carefully sidesteps religion, which is still largely *terra incognita.* Sometimes there are very good—indeed, unimpeachable—ethical reasons for this. All the carefully erected and protected barriers to injurious medical research with human subjects apply with equal force to any research we might imagine conducting on variations in religious upbringing. We aren't going to do placebo studies in which group A memorizes one catechism while group B memorizes a different catechism and

group C memorizes nonsense syllables. We aren't going to do cross-fostering studies in which babies of Islamic parents are switched with babies of Catholic parents. These are clearly off limits, and should remain so. But what *are* the limits? The question is important, because, as we try to design indirect and noninvasive ways of getting at the evidence we seek, we will confront the sort of trade-offs that regularly confront researchers looking for medical cures. Perfectly risk-free research on these topics is probably impossible. What counts as informed consent, and how much risk may even those who consent be permitted to tolerate? And whose consent? The parents' or the children's?

All these policy questions lie unexamined in the shadows cast by the first spell, the one that says that religion is out of bounds, period. We should not pretend that this is benign neglect on our part, since we know full well that under the protective umbrellas of personal privacy and religious freedom there are widespread practices in which parents subject their own children to treatments that would send any researcher, clinical or otherwise, to jail. What are the rights of parents in such circumstances, and "where do we draw the line"? This is a political question that can be settled not by *discovering* "the answer" but by working out *an* answer that is acceptable to as many informed people as possible.

It will not please everybody, any more than our current laws and practices regarding the consumption of alcoholic beverages please everybody. Prohibition was tried, and by general consensus—far from unanimous—it was determined to be a failure. The current understanding is quite stable; we are unlikely to go back to Prohibition anytime soon. But there are still laws forbidding the sale of alcoholic beverages to minors (with age varying by country). And there are plenty of gray areas: what should we do if we find parents giving alcohol to their children? At the ball game, the parents may get in trouble, but what about in the privacy of their own homes? And there is a difference between a glass of champagne at big

sister's wedding, and a six-pack of beer every evening while trying to do homework. When do the authorities have not just the right but the obligation to step in and prevent abuse? Tough questions, and they don't get easier when the topic is religion, not alcohol. In the case of alcohol, our political wisdom is importantly informed by what we have learned about the short-term and long-term effects of imbibing it, but in the case of religion we're still flying blind.

Some people will scoff at the very idea that a religious upbringing *could* be harmful to a child—until they reflect on some of the more severe religious regimens to be found around the world, and recognize that in the United States we already prohibit religious practices that are widespread in other parts of the world. Richard Dawkins goes further. He has proposed that no child should ever be identified as a Catholic child or a Muslim child (or an atheist child), since this identification in itself prejudges decisions that have yet to be properly considered.

> We'd be aghast to be told of a Leninist child or a neo-conservative child or a Hayekian monetarist child. So isn't it a kind of child abuse to speak of a Catholic child or a Protestant child? Especially in Northern Ireland and Glasgow where such labels, handed down over generations, have divided neighbourhoods for centuries and can even amount to a death warrant? [2003b]

Or imagine if we identified children from birth as young *smokers* or *drinking* children because their parents smoked or drank. In this regard (and no other) Dawkins reminds me of my grandfather, a physician who was way ahead of his time back in the 1950s, writing impassioned letters to the editors of the Boston newspapers, railing against the secondhand smoke that was endangering the health of children whose parents smoked at home—and we all laughed at him, and went on smoking. How much harm could that little bit of smoke do anyone? We've found out.

Everybody quotes (or misquotes) the Jesuits, "Give me a child

until he is seven, and I will show you the man," but nobody—not the Jesuits or anybody else—really knows how resilient children are. There is plenty of anecdotal evidence of young people turning their backs on their religious traditions after years of immersion and walking away with a shrug and a smile and no visible ill effects. On the other hand, some children are raised in such an ideological prison that they willingly become their own jailers, as Nicholas Humphrey (1999) has put it, forbidding themselves any contact with the liberating ideas that might well change their minds. In his deeply thoughtful essay, "What Shall We Tell the Children?," Humphrey pioneers the consideration of the ethical issues involved in deciding how to decide "when and whether the teaching of a belief system to children is morally defensible" (p. 68). He proposes a general test based on the principle of informed consent, but applied—as it must be—hypothetically: what *would* these children choose if they were, later in life, somehow given the information they would need in order to make an informed choice? Against the objection that we cannot answer such hypothetical questions, he argues that there is in fact plenty of empirical evidence, and general principles, from which clear conclusions can be conscientiously derived. We take ourselves to be sometimes permitted, and even obligated, to make such conscientious decisions on behalf of people who cannot, for one reason or another, make an informed decision for themselves, and this set of problems can be addressed using the understanding that we have already hammered out in the workshop of political consensus on these other topics.

The resolution of these dilemmas is not (yet) obvious, to say the least. Compare it with the closely related issue of what we, on the outside, should do about the Sentinelese and the Jarawas and the other peoples who still live a stone-age existence in remarkable isolation on the Andaman and Nicobar Islands, far out in the Indian Ocean. These people have managed to keep even the most intrepid explorers and traders at bay for centuries by their ferocious

bow-and-arrow defense of their island territories, so little is known about them, and for some time now the government of India, of which the islands form a distant part, has prohibited all contact with them. Now that they have been drawn to the world's attention in the wake of the great tsunami of December 2004, it is hard to imagine that this isolation can be maintained, but even if it could be, should it be? Who has the right to decide the matter? Certainly not the anthropologists, although they have worked hard to protect these people from contact—even with themselves—for decades. Who are they to "protect" these human beings? The anthropologists do not own them as if they were laboratory specimens carefully gathered and shielded from contamination, and the idea that these islands should be treated as a human zoo or preserve is offensive—even when we contemplate the even more offensive alternative of opening the doors to missionaries of all faiths, who would no doubt eagerly rush in to save their souls.

It is tempting, but illusory, to think that they have solved the ethical problem for us, by *their* adult decision to drive away all outsiders without asking if they are protectors, exploiters, investigators, or soul-savers. They clearly want to be left alone, so we should leave them alone! There are two problems with this convenient proposal: Their decision is so manifestly ill informed that if we let it trump all other considerations are we not as culpable as somebody who lets a person drink a poisoned cocktail "of his own free will" without deigning to warn him? And in any case, although the adults may have reached the age of consent, are their children not being victimized by the ignorance of their parents? We would never permit a neighbor's child to be kept so deluded, so shouldn't we cross the ocean and step in to rescue these children, however painful the shock?

Do you feel a slight adrenaline surge at this moment? I find that this issue of parental rights versus children's rights has no clear rivals for triggering emotional responses in place of reasoned responses, and I suspect that this is one place where a genetic factor

is playing a quite direct role. In mammals and birds who must care for their offspring the instinct to protect one's young from all outside interference is universal and extremely potent; we will risk our lives unhesitatingly—unthinkingly—to fend off threats, real or imagined. It's like a reflex. And in this case, we can "feel in our bones" that parents *do* have the right to raise their children the way they see fit. Never make the mistake of wandering in between a mother bear and her cub, and *nothing* should come between parents and their children. That's the core of "family values." At the same time, we do have to admit that parents don't literally *own* their children (the way slaveowners once owned slaves), but are, rather, their stewards or guardians and ought to be held accountable by outsiders for their guardianship, which does imply that outsiders have a right to interfere—which sets off that adrenaline alarm again. When we find that what we feel in our bones is hard to defend in the court of reason, we get defensive and testy, and start looking around for something to hide behind. How about a sacred and (hence) unquestionable bond? Ah, that's the ticket!

There is an obvious (but seldom discussed) tension between the supposedly sacred principles invoked at this point. On the one hand, many declare, there is the sacred and inviolable right to life: every unborn child has a right to life, and no prospective parent has the right to terminate a pregnancy (except maybe if the mother's life is itself in jeopardy). On the other hand, many of the same people declare that, once born, the child loses its right not to be indoctrinated or brainwashed or otherwise psychologically abused by those parents, who have the right to raise the child with any upbringing they choose, short of physical torture. Let us spread the value of freedom throughout the world—but not to children, apparently. No child has a right to freedom from indoctrination. Shouldn't we change that? What, and let *outsiders* have a say in how I raise *my kids?* (Now do you feel the adrenaline rush?)

While we wrestle with the questions about the Andaman Islanders, we can see that we are laying the political foundations

for similar questions about religious upbringing in general. We shouldn't assume, while worrying over the likely effects, that the seductions of Western culture will automatically swamp all the fragile treasures of other cultures. It is worth noting that many Muslim women, raised under conditions that many non-Muslim women would consider intolerable, when given informed opportunities to abandon their veils and many of their other traditions, choose instead to maintain them.

Maybe people everywhere can be trusted, and hence allowed to make their own informed choices. Informed choice! What an amazing and revolutionary idea! Maybe people should be trusted to make choices, not necessarily the choices *we* would recommend to them, but the choices that have the best chance of satisfying *their* considered goals. But what do we teach them until they are informed enough and mature enough to decide for themselves? We teach them about *all* the world's religions, in a matter-of-fact, historically and biologically informed way, the same way we teach them about geography and history and arithmetic. Let's get *more* education about religion into our schools, not less. We should teach our children creeds and customs, prohibitions and rituals, texts and music, and when we cover the history of religion, we should include both the positive—the role of the churches in the civil-rights movement of the 1960s, the flourishing of science and the arts in early Islam, and the role of the Black Muslims in bringing hope, honor, and self-respect to the otherwise shattered lives of many inmates in our prisons, for instance—and the negative—the Inquisition, anti-Semitism over the ages, the role of the Catholic Church in spreading AIDS in Africa through its opposition to condoms. No religion should be favored, and none ignored. And as we discover more and more about the biological and psychological bases of religious practices and attitudes, these discoveries should be added to the curriculum, the same way we update our education about science, health, and current events. This should all be part of the mandated curriculum for both public schools and home-schooling.

Here's a proposal, then: as long as parents don't teach their children anything that is likely to close their minds

1. through fear or hatred or
2. by disabling them from inquiry (by denying them an education, for instance, or keeping them entirely isolated from the world)

then they may teach their children whatever religious doctrines they like. It's just an idea, and perhaps there are better ones to consider, but it should appeal to freedom lovers everywhere: the idea of insisting that the devout of all faiths should face the challenge of making sure their creed is worthy enough, attractive and plausible and meaningful enough, to withstand the temptations of its competitors. If you have to hoodwink—or blindfold—your children to ensure that they confirm their faith when they are adults, your faith *ought* to go extinct.

4 Toxic memes

Any creative encounter with evil requires that we not distance ourselves from it by simply demonizing those who commit evil acts. In order to write about evil, a writer has to try to comprehend it, from the inside out; to understand the perpetrators and not necessarily sympathize with them. But Americans seem to have a very difficult time recognizing that there is a distinction between understanding and sympathizing. Somehow we believe that an attempt to inform ourselves about what leads to evil is an attempt to explain it away. I believe that just the opposite is true, and that when it comes to coping with evil, ignorance is our worst enemy. —Kathleen Norris, "Native Evil"[10]

Writing this book has helped me to understand that religion is a kind of technology. It is terribly seductive in its ability to soothe and explain, but it is also dangerous.

—Jessica Stern, *Terror in the Name of God: Why Religious Militants Kill*

Have you heard about the Yahuuz, a people who think that what we call child pornography is just good clean fun? They smoke marijuana daily, make a public ceremony of defecation (with hilarious competition to see who gets to do the ritual wiping), and, whenever an elder reaches the age of eighty, have a special feast day on which the person ceremonially kills himself or herself—and is then eaten by all. Disgusted? Then you know how many Muslims feel about our contemporary culture, with its alcohol, provocative clothing, and casual attitudes toward familial authority. Part of my effort in this book is to get you to *think* and not just *feel.* In this instance, you need to see that your disgust, however strong, is only a *datum,* a fact about you and a very important fact about you, but not an inerrant sign of moral truth—it's just like the Muslim's disgust at some of our cultural practices. We should-respect the Muslims, empathize with them, take their disgust seriously—but then propose that they join us in a discussion about the perspectives on which we differ. The price you should be willing to pay for this is your own willingness to consider the (imaginary!) Yahuuz' way of life calmly, and ask if it is so clearly indefensible. If they enter into these traditions wholeheartedly, with no apparent coercion, perhaps we should say, "Live and let live."

And perhaps not. The burden should be on us to demonstrate to *the Yahuuz* that their way of life includes traditions they should be ashamed of, and should banish. Perhaps, if we engaged in this exercise conscientiously, we would discover that *some* of our disgust with their ways was parochial and unjustifiable. They would teach us something. And we would teach them something. And perhaps the gulf of difference between us would never be crossed, but we shouldn't assume this worst-case prospect.

In the meantime, the way to prepare for this Utopian global conversation is to study, as compassionately and dispassionately as we can, both their ways and our own ways. Consider the brave self-observation of Raja Shehadeh, writing about the grip of modern

Palestine: "Most of your energy is spent extending feelers to detect public perception of your actions, because your survival is contingent on remaining on good terms with your society."[11] When we can share similar observations about the problems in our own society, we will be on a good path to mutual understanding. Palestinian society, if Shehadeh is right, is beset with a virulent case of the "punish those who won't punish" meme, for which there are models (beginning with Boyd and Richerson, 1992) that predict other properties we should look for. It may be that this particular feature would foil well-intentioned projects that would work in societies that lack it. In particular, we mustn't assume that policies that are benign in our own culture will not be malignant in others. As Jessica Stern puts it:

> I have come to see terrorism as a kind of virus, which spreads as a result of risk factors at various levels: global, interstate, national, and personal. But identifying these factors precisely is difficult. The same variables (political, religious, social, or all of the above) that seem to have caused one person to become a terrorist might cause another to become a saint. [2003, p. 283]

As communications technology makes it harder and harder for leaders to shield their people from outside information, and as the economic realities of the twenty-first century make it clearer and clearer that education is the most important investment any parent can make in a child, the floodgates will open all over the world, with tumultuous effects. All the flotsam and jetsam of popular culture, all the trash and scum that accumulates in the corners of a free society, will inundate these relatively pristine regions along with the treasures of modem education, equal rights for women, better health care, workers' rights, democratic ideals, and openness to the cultures of others. As the experience in the former Soviet Union shows only too clearly, the worst features of capitalism and high tech are among the most robust replicators in this population explosion of memes, and there will be plenty of grounds for xenophobia, Luddism, and the tempting "hygiene" of backward-looking fundamentalism. At the same time, we shouldn't rush to be apologetic about American pop culture. It has its excesses, but in many instances it is not the excesses that offend so much as the egalitarianism and tolerance. The hatred of this potent American export is often driven by racism—because of the strong Afro-American presence in American pop culture—and sexism—because of the status of women we celebrate and our (relatively) benign treatment of homosexuality. (See, e.g., Stern, 2003, p. 99.)

As Jared Diamond shows in *Guns, Germs, and Steel,* it was European germs that brought Western Hemisphere populations to the brink of extinction in the sixteenth century, since those people had had no history in which to develop tolerance for them. In this century it will be our memes, both tonic and toxic, that will wreak havoc on the unprepared world. Our capacity to tolerate the toxic excesses of freedom cannot be assumed in others, or simply exported as one more commodity. The practically unlimited educability of any human being gives us hope of success, but designing and implementing the cultural inoculations necessary to fend off disaster, while respecting the rights of those in need of inoculation, will be an urgent task of great complexity, requiring not just better social science but also sensitivity, imagination, and courage. The field of public health expanded to include cultural health will be the greatest challenge of the next century.[12]

Jessica Stern, an intrepid pioneer in this endeavor, notes that individual observations such as hers are just the beginning:

> A rigorous, statistically unbiased study of the root causes of terrorism at the level of individuals would require identifying controls, youth exposed to the same environment, who felt the same humiliation, human rights abuse, and relative deprivation, but who chose nonviolent means to express their grievances or chose not to express them at all. A team of researchers, including psychiatrists, medical doctors, and a variety of social scientists,

> would develop a questionnaire and a list of medical tests to be administered to a random sample of operatives and their families. [2003, p. xxx]

In chapter 10, I argued that researchers don't have to be believers to be understanders, and we had better hope I was right, since we want our researchers to understand Islamic terrorism from the inside without having to become Muslims—and certainly not terrorists—in the process.[13] But we also won't understand Islamic; terrorism unless we can see how it is like and unlike other brands of terrorism, including Hindu and Christian terrorism, ecoterrorism, and antiglobalist terrorism, to round up the usual suspects; And we won't understand Islamic and Hindu and Christian terrorism without understanding the dynamics of the transitions that lead from benign sect to cult to the sort of disastrous phenomenon we witnessed in Jonestown, Guyana, in Waco, Texas, and in the Aum Shinrikyo cult in Japan.

One of the most tempting hypotheses is that these particularly toxic mutations tend to arise when charismatic leaders miscalculate in their attempts to be memetic engineers, unleashing memetic adaptations that they find, like the Sorcerer's Apprentice, they can no longer control. They then become somewhat desperate, and keep reinventing the same bad wheels to carry them over their excesses. The anthropologist Harvey Whitehouse (1995) offers an account of the debacle that overtook the leaders of Pomio Kivung, the new religion in Papua New Guinea mentioned at the outset of chapter 4, that suggests (to me) that something like runaway sexual selection took over. The leaders responded to the pressure from the people—*Prove that you mean it!*—with ever-inflated versions of the claims and promises that had brought them to power, leading inevitably to a crash. It's reminiscent of the accelerated burst of creativity you see in pathological liars when they can sense that their exposure is imminent. Once you've talked the people into killing all

the pigs in anticipation of the great Period of the Companies, you have nowhere to go but down. Or out: It's *them*—the *infidels—who are the cause of all our misery!*

There are so many complexities, so many variables—can we ever hope to make predictions that we can act on? Yes, in fact, we can. Here is just one: in every place where terrorism has blossomed, those it has attracted are almost all young men who have learned enough about the world to see that their futures look otherwise bleak and uninspiring (like the futures of those who were preyed upon by Marjoe Gortner).

> What seems to be most appealing about militant religious groups—whatever combination of reasons an individual may cite for joining—is the way life is simplified. Good and evil are brought out in stark relief. Life is transformed through action. Martyrdom—the supreme act of heroism and worship—provides the ultimate escape from life's dilemmas, especially for individuals who feel deeply alienated and confused, humiliated or desperate. [Stern, 2003, pp. 5-6]

Where are we going to find an overabundance of such young men in the very near future? In many countries, but especially in China, where the draconian one-child-per-family measures that have slowed the population explosion so dramatically (and turned China into a blooming economic force of unsettling magnitude) have had the side effect of creating a massive imbalance between male and female children. Everybody wanted to have a son (a superannuated meme that had evolved to thrive in an earlier economic environment), so daughters have been aborted (or killed at birth) in huge numbers, so now there are not going to be anywhere near enough wives to go around. What are all those young men going to do with themselves? We have a few years to figure out benign channels into which their hormone-soaked energies can be directed.

5 Patience and politics

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

—First Amendment to the Constitution of the United States of America

Traditions deserve to be respected only insofar as they are respectable—that is, exactly insofar as they themselves respect the fundamental rights of men and women.

—Amin Maalouf, *In the Name of Identity: Violence and the Need to Belong*

Praise Allah for the Internet With the Web making self-censorship irrelevant—someone else is bound to say what you won't—it became a place where intellectual risk-takers finally exhaled.

—Irshad Manji, *The Trouble with Islam*[14]

Eternal vigilance is the price of liberty.

—Either Thomas Jefferson (date unknown) or Wendell Phillips (1852)

There's such a thing as growing up too fast. We all have to make the awkward transition from childhood through adolescence to adulthood, and sometimes the major changes come way too early, with lamentable results. But we cannot maintain our childhood innocence forever. It is time for us all to grow up. We must help one another, and be patient. It is overreaction that again and again has lost us ground. Give growing up some time, encourage it, and it will come about. We must have faith in our open society, in knowledge, in continuing pressure to make the world a better place for people to live, and we must recognize that people need to see their lives as having meaning. The thirst for a quest, a goal, a meaning, is unquenchable, and if we don't provide benign or at least nonmalignant avenues, we will always face toxic religions.

Instead of trying to destroy the madrassahs that close the minds of thousands of young Muslim boys, we should create alternative schools—for Muslim boys *and girls*[15]—that will better serve their real and pressing needs, and let these schools compete openly with the madrassahs for clientele. And how can we hope to compete with the promise of salvation and the glories of martyrdom? We could lie, and make promises of our own that could never be fulfilled in this life or anywhere else, or we could try something more honest: we could suggest to them that the claims of *any* religion should, of course, be taken with a grain of salt. We could start to change the climate of opinion that holds religion to be above discussion, above criticism, above challenge. False advertising is false advertising, and if we start holding religious organizations accountable for their claims—not by taking them to court but just by pointing out, often and in a matter-of-fact tone of voice, that of course these claims are ludicrous—perhaps we can slowly get the culture of credulity to evaporate. We have mastered the technology for creating doubt through the mass media ("Are you sure your breath is sweet?" "Are you getting enough iron?" "What has your insurance company done for you lately?"), and now we can think about applying it, gently but firmly, to topics that have heretofore been off limits. Let the honest religions thrive because their members are getting what they want, as informed choosers.

But we can also start campaigns to adjust specific aspects of the landscape in which this competition takes place. A bottomless pit in that landscape that strikes me as particularly deserving of paving over is the tradition of "holy soil." Here is Yoel Lerner, an Israeli and a former terrorist, quoted by Stern:

> "There are six hundred thirteen commandments in the Torah. The temple service accounts for about two hundred and forty of these. For nearly two millennia, since the destruction of the Temple, the Jewish people, contrary to their wishes, have been unable to maintain the temple service. They've been unable to

comply with those commandments. The Temple constituted a kind of telephone line to God," Lerner summarizes. "That link has been destroyed. We want to rebuild it." [2003, p. 88]

Nonsense, say I. Here is an imaginary case: Suppose it turned out that Liberty Island (formerly Bedloe's Island, on which the Statue of Liberty stands) was once a burial ground of the Mohawks—say the Matinecock Tribe of nearby Long Island. And suppose the Mohawks came forward with the claim that it should be restored to pristine purity (no gambling casinos, but also no Statue of Liberty, just one big holy cemetery). Nonsense. And shame on any Mohawks who had the chutzpah(!) to rile up their fellow braves on the issue. This would be ancient history—a lot *less* ancient than the history of the Temple—and it should be allowed to recede gracefully into the past.

We don't let religions declare that their holy traditions require that left-handed people be enslaved, or that people who live in Norway should be killed. We similarly cannot let religions declare that "infidels" who have been innocently living on their "holy" turf for generations have no right to live there. There is also, of course, culpable hypocrisy in the policy of deliberately building new settlements in order to *create* just such "innocent" dwellers and foreclose the claims of the previous dwellers on that land. This is a practice that goes back centuries; the Spaniards who conquered most of the Western Hemisphere often took care to build their Christian churches on the destroyed foundations of the temples of the indigenous people. Out of sight, out of mind. Neither side of these disputes is above criticism. If we could just devalue the whole tradition of holy soil, and its occupation, we could address the residual injustices with clearer heads.

Perhaps you disagree with me about this. Fine. Let's discuss it calmly and openly, with no untrumpable appeals to the sacred, which have no place in such a discussion. If we should continue to

honor claims about holy soil, it will be because, all things considered, this is the course of action that is just, and life-enabling, and a better path to peace than any other we can find. Any policy that cannot pass that test doesn't deserve respect.

Such open discussions are underwritten by the security of a free society, and if they are to continue unmolested, we must be vigilant in protecting the institutions and principles of democracy from subversion. Remember Marxism? It used to be a sour sort of fun to tease Marxists about the contradictions in some of their pet ideas. The revolution of the proletariat was inevitable, good Marxists believed, but if so, why were they so eager to enlist us in their cause? If it was going to happen anyway, it was going to happen with or without our help. But of course the inevitability that Marxists be-Here in is one that depends on the growth of the movement and all its political action. There were Marxists working very hard to bring about the revolution, and it was comforting to them to believe that their success was guaranteed in the long run. And some of them, the only ones that were really dangerous, believed so firmly in the Tightness of their cause that they believed it was permissible to lie and deceive in order to further it. They even taught this to their children, from infancy. These are the "red-diaper babies," children of hardline members of the Communist Party of America, and some of them can still be found infecting the atmosphere of political action in left-wing circles, to the extreme frustration and annoyance of honest socialists and others on the left.

Today we have a similar phenomenon brewing on the religious right: the inevitability of the End Days, or the Rapture, the coming Armageddon that will separate the blessed from the damned in the final Day of Judgment. Cults and prophets proclaiming the imminent end of the world have been with us for several millennia, and it has been another sour sort of fun to ridicule them the morning after, when they discover that their calculations were a little off. But, just as with the Marxists, there are some among them who are

working hard to "hasten the inevitable," not merely anticipating the End Days with joy in their hearts, but taking political action to bring about the conditions they think are the prerequisites for that occasion. And these people are not funny at all. They are dangerous, for the same reason that red-diaper babies are dangerous: they put their allegiance to their creed ahead of their commitment to democracy, to peace, to (earthly) justice—and to truth. If push comes to shove, some of them are prepared to lie and even to kill, to do whatever it takes to help bring what they consider celestial justice to those they consider the sinners. Are they a lunatic fringe? They are certainly dangerously out of touch with reality, but it is hard to know how many they are.[16] Are their numbers growing? Apparently. Are they attempting to gain positions of power and influence in the governments of the world? Apparently. Should we know all about this phenomenon? We certainly should.

Hundreds of Web sites purport to deal with this phenomenon, but I am not in a position to endorse any of them as accurate, so I will not list any. This in itself is worrisome, and constitutes an excellent reason to conduct an objective investigation of the whole End Times movement, and particularly the possible presence of fanatical adherents in positions of power in the government and the military. What can we do about this? I suggest that the political leaders who are in the best position to call for a full exposure of this disturbing trend are those whose credentials could hardly be impugned by those who are fearful of atheists or brights: the eleven senators and congressmen who are members of the "Family" (or the "Fellowship Foundation"), a secretive Christian organization that has been influential in Washington, D.C., for decades: Senators Charles Grassley (R., Iowa), Pete Domenici (R., N.Mex.), John Ensign (R., Nev.), James Inhofe (R., Okla.), Bill Nelson (D., Fla.), Conrad Burns (R., Mont.), and Representatives Jim DeMint (R., S.C.), Frank Wolf (R., Va.), Joseph Pitts (R., Pa.), Zach Wamp (R., Tenn.), and Bart Stupak (D., Mich.).[17] Like the nonfanatical Muslim leaders in the Islamic world on whom the world is counting to cleanse

Islam of toxic excess, these nonfanatical Christians have the influence, the knowledge, and the responsibility to help the nation protect itself from those who would betray our democracy in pursuit of their religious agendas. Since we certainly don't want to relive McCarthyism in the twenty-first century, we should approach this task with maximal public accountability and disclosure, in a bipartisan spirit, and in the full light of public attention. But of course this will require that we break the traditional taboo against inquiring so openly and searchingly about religious affiliations and convictions.

So, in the end, my central policy recommendation is that we gently, firmly educate the people of the world, so that they can make truly informed choices about their lives.[18] Ignorance is nothing shameful; *imposing* ignorance is shameful. Most people are not to blame for their own ignorance, but if they willfully pass it on, they *are* to blame. One might think this is so obvious that it hardly needs proposing, but in many quarters there is substantial resistance to it. People are afraid of being more ignorant than their children—especially, apparently, their daughters. We are going to have to persuade them that there are few pleasures more honorable and joyful than being instructed by your own children. It will be fascinating to see what institutions and projects our children will devise, building on the foundations earlier generations have built and preserved for them, to carry us all safely into the future.