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“How Not to Do the Cognitive Science of Religion Today: A Reading of Daniel Dennett,” by Armin W. Geertz

“Dangerous Ideas: the Spell of Breaking the Spell,” by Lars Albinus

“Full of Sound and Fury: The Media Response to Dennett,” by Gretchen Koch

How Not to Do the Cognitive Science of Religion Today: A Reading of Daniel Dennett¹

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How to Do the Cognitive Study of Religion

The cognitive science of religion is at a crucial stage. On the one hand, levels of sophistication in research design are continually evolving and, on the other, more and more young scholars are dedicating their careers to high quality cognitive research. With the massive accumulation of knowledge from all the neurosciences, we may well be on the verge of major theoretical and empirical breakthroughs in the academic study of religion.

Cognitive approaches are not a passing phenomenon. They have been around for over a century. In fact, two important phases have definitively changed our world. The first occurred during the 1950s in connection with the development of computers, artificial intelligence and analogical thinking and the second during the 1990s in connection with the decade of the brain. Other disciplines such as the ethnosciences, anthropology, linguistics and cultural psychology have been working in this area for decades. The academic study of religion has been slow in realizing the import of the neurosciences. But now, I think, we have reached a stage of sophistication so that even psychologists and neuroscientists are becoming aware of our work. They need us. We need them. What better deal could we hope for?

However, there is a price for this deal. First of all, we need to learn a new language and new methods. We need to brush up on our biology, chemistry and brain physiology. We need to learn strange technical terms. Colleagues in the health sciences are generally very happy to help us here. We need to learn research design, how to formulate hypotheses and how to prove or disprove them. Colleagues in the natural, psychological and social sciences, but also, and perhaps more importantly, in the philosophy of science come to our rescue here. We need to learn statistics and how to determine levels of significance. Colleagues in psychology and in the sociology of religion can help us out on this too. We need to keep track of cognitive approaches in our sister disciplines such as linguistics, anthropology, history, archaeology, theology, philosophy, semiotics, literature, art history and so on. And we need to do all of this with a bit of modesty.

Perhaps the most important job at the moment is to persuade our more skeptical colleagues in the academic study of religion and theology. They need to see what exactly the cognitive science of religion is, what it can do and, more importantly, what it cannot do. They need to see that the original triumphalism and cultural eliminativism of the pioneers of the cognitive science of religion

¹ This article is a revised version of a paper read at the "Seminar on Daniel C. Dennett, Breaking the Spell", hosted by the Laboratory on Theories of Religion, Research Project on Religion, Cognition and Culture, May 23, 2006, University of Aarhus, Denmark.

were strategically necessary. But they also need to know that those strategies are not only wrong-headed today, but constitute bad science seen in the light of recent breakthroughs in psychology and the neurosciences. Culture and social relations and institutions are back again, center stage, in the story of cognition. Cognition is not just about the brain. It is more precisely and more correctly about *interacting* brains. It is about brains that cannot even use their highly evolved capacities without supportive cultural symbolic systems — language for one thing, but also the myriads of other symbolic systems, among them religious symbolic systems. In fact, culture may have played a central role in the physical development of the brain during the phylogenetic evolution of *Homo sapiens*.

Thus, all of us who are interested in cognition, culture and religion have an important role to play. We need to convince our colleagues that much is to be gained by studying religion as a natural phenomenon. We need to convince our colleagues that such a study can be pursued without buying into scientism.²

How Not to Do the Cognitive Study of Religion

A recent book by philosopher Daniel C. Dennett, called *Breaking the Spell: Religion as a Natural Phenomenon* (New York 2006) is a catastrophe if our goal is to persuade skeptics of the advantages of cognitive approaches to the study of religion — or even just introduce cognition to the curious! Dennett seems to be hellishly bent on turning his readers off. I would say that about 40% of the book is an inelegant, polemical attack on religion and religious people. He claims to be using all those pages to persuade intolerant religious people to read his book. I used to think that philosophers by definition are sophisticated thinkers, gifted in the art of persuasive argument, valiantly exposing hidden assumptions and opaque meanings. But I am wrong. What Dennett has done is a disservice to the entire neuroscientific community. If people were skeptical before his book came out, they will be downright hostile from now on, and the rest of us in the cognitive science of religion will have to pay the price!

The worst thing about the book is that the cognitive part is poorly done. In fact, one might claim that Dennett has trivialized serious work being done by Pascal Boyer, Scott Atran, E. Thomas Lawson, Robert N. McCauley, Dan Sperber, Harvey Whitehouse, Nicholas Humphrey and others. I am all for sharing knowledge with readers who are not familiar with the terminology and methods of the cognitive sciences. Many cognitive scientists are extremely good at popularizing their work without compromising their integrity. Dennett has not only placed the cognitive science of religion in a poorly argued and hostile context, he hasn't even introduced that science properly.

² For some of my work on cognition, see Armin W. Geertz 1999; 2004a; 2004b; and 2004c.

In his defense, it could be said that the religious right, whether Christian, Muslim, Jewish or any other kind, need to be stopped from their excesses *and* from political influence. One could begin with a number of politicians who currently govern the United States. Only the big stick approach works with people like that. Nuances of argument and sophisticated insight are useless here. Therefore, aggressive organizations like the Council for Secular Humanism, the Skeptics Society and others are absolutely necessary in counter-balancing extremists, especially conservative Christians who constantly, systematically, massively and influentially undermine democracy, enlightenment, education, science and public opinion in the United States in order to preserve absurd dogmas. Even though American behavior is comically provincial, whatever happens there always has ramifications for the rest of us. A good case in point is the role of the religious right in the war in Iraq, resulting in some European countries, my own unfortunately included, backing the U.S. because of an irrational confidence in U.S. intelligence operations. We went to war because religious fanatics on both sides wanted us to. The U.S. lost face in a major way. And in that context, Dennett's book, perhaps, could be a way of exposing the forces behind such situations. But specific contexts such as these are not discussed in the book. Nor does Dennett avail himself of political philosophers or political analyses. Instead, he hammers away at religious people. I think it would have been better if he had written a political book for a popular audience, but in a much more pedagogical manner. A number of essays in national newspapers could have done the trick too. The science part of the book is weak, and his religious critics, not being as stupid as Dennett thinks, will be quick in picking up on this weakness.

By the way, the title of the book, *Breaking the Spell* refers to how an exhaustive and invasive examination of religion may lead to breaking its spell or enchantment. In fact, Dennett says in several places that if your religion can't withstand such examination, then your religion is not worth holding. Sanctimoniously rhetorical, he exclaims, "I for one am not in awe of your faith. I am appalled by your arrogance, by your unreasonable certainty that you have all the answers" (51). Add arrogant scientists to this list, and I wholeheartedly agree!

If Dennett had stuck to his criticism of religious people, it might not have been so bad for the rest of us. We could have written it off as just another example of Americans shooting themselves in the foot. But Dennett has another victim in mind, namely professional scholars of religion. Dennett says that it is "high time that we subject religion as a global phenomenon to the most intensive multidisciplinary research we can muster, calling on the best minds on the planet" (14), as if such research does not exist! He not only seems to think that he has invented the wheel ("someone has to start somewhere", p. 19), he even claims that his book constitutes the science of religion for the first time:

Even if we do the science of religion right (for the first time), we must strenuously guard the integrity of the next process, the boiling down of the complex results of the research into

political decisions. (73)

Dennett evidently is aware of the fact that there is a scholarly tradition in the study of religion, but he has only arrogant disdain for it:

Haven't we been looking carefully at religion for a long time? Yes, of course. There have been centuries of insightful and respectful scholarship about the history and variety of religious phenomena. This work, like the bounty gathered by dedicated bird-watchers and other nature lovers before Darwin's time, is proving to be a hugely valuable resource to those pioneers who are now beginning, for the first time really, to study the natural phenomena of religion through the eyes of contemporary science. (31)

These theoretically innocent scholars are small-minded backbiters in low prestige jobs:

In fact, if you set out to design an impermeable barrier between scientists and an underexplored phenomenon, you could hardly do better than to fabricate the dreary aura of low prestige, backbiting, and dubious results that currently envelops the topic of religion.... [F]ew good researchers, in any discipline, want to touch the topic. (33-34).

And finally, this "reverent", uncritical research which is respectful of religious tradition "is like the protective outer shell that often conceals deadly viruses from our immune system" (45). The science of religion, for Dennett, needs to be the great source of truth, the final platform of discernment which can work out "whatever revisions and reforms are called for" so that it no longer passes on "a legacy of ever more toxic forms of religion to our descendants" (39).

It is true that the study of religion, especially in the United States, has been plagued by theological, religious and spiritual agendas which assume that religion is good for you because it is spiritual. But it is equally true that the last three or four decades have witnessed challenges to that tradition. Dennett seems to be ignorant of the last decades in the comparative study of religion. When he mentions anyone, it is William James, Mircea Eliade, one sociologist of religion, Rodney Stark, and then, otherwise, the pioneers of the cognitive science of religion. Nothing, evidently has happened in between. This is poor scholarship on Dennett's part.

Furthermore, Dennett knows very little about religion. And he's blatant about it. His knowledge of religion includes the religiosity of 37 students who attended his undergraduate seminar in 2004,³ the results of a hitherto unpublished questionnaire, references to third hand source material and a variety of opinions on fundamentalistic and violent religious fanaticism.

So What About His Scientific Arguments?

The most interesting part of the book is Dennett's evolutionary theory of religion. He presents it as his own, but it is actually a somewhat sketchy pastiche based on a few central cognitive

³ Some of them, evidently, needed psychological support, judging by his acknowledgments to his assistants who, among other good things, "advised students who were upset by the project", p.xv.

scientists of religion, namely, the abovementioned Boyer, Atran et al.

But before discussing Dennett's evolutionary theory, let's see how he defines religion. His tentative definition is:

I propose to define religions as *social systems whose participants avow belief in a supernatural agent or agents whose approval is to be sought*. (9, italics in the original)

Later he states:

The core phenomenon of religion, I am proposing, invokes gods who are effective agents in real time, and who play a central role in the way the participants think about what they ought to do. (11-12)

And finally:

What apparently grounds the widespread respect in which religions are held is the sense that those who are religious are well intentioned, trying to lead morally good lives, earnest in their desire not to do evil, and to make amends for their transgressions. (12).

What can we learn from these definitions and distinctions? First, Dennett has not consulted the voluminous literature on the definition of religion. But I suppose his excuse would be that the scholarship is theoretically naive anyway. Second, his understanding of religion is in terms of social constructionism, which is fine with me, but we need more information on how the cognitive and the social are connected. Third, he assumes that religion is about belief in gods who people believe play an active role in their daily lives. And, fourth, that people generally assume that religious people are morally good.

The reason Dennett chooses such formulations is because of his central claim that religion in actual fact has little to do with what people claim it does. Religion is about believing in belief and, more importantly, avowing it to be so. The rest is along the order of Hans Christian Andersen's story of the emperor's new clothes. Some people may get better lives out of being religious, but, Dennett insists, we need to test such claims (56). And, furthermore, we need to decide whether the side effects of religious belief are worth the price. The side effects being bigotry, murderous fanaticism, oppression, cruelty and enforced ignorance (56), which, by the way, are the time-proven side effects of being human, a fact which Dennett ignores.

Religion is, according to Dennett, a product of the accumulation of memes. This aspect of Dennett's theory has some promise, although it should be mentioned that he didn't invent the term, nor does he do justice to the literature on meme theory. On the other hand, the best section in the whole book is Appendix A, which is a reprint of Dennett's article "The New Replicators", published in the *Encyclopedia of Evolution* from 2002. In this well-written essay, Dennett strikes a middle ground between meme-enthusiasts and meme-debunkers and shows how much of the criticism of meme-theory can be defused by asking the same questions of gene-theory, such as clear definitions and delineations. I am unsure about whether such comparisons are timely in a

book written to Intelligent Design enthusiasts, among others, but the arguments are persuasive for those of us who accept evolutionary theory and who find meme-theory promising.

On page 344, Dennett presents a handy chart of a simple taxonomy of the new replicators. A meme from this perspective is “any culturally based replicator”, such as words, songs and artefacts, which blindly compete with other memes for residence and retainment in human brains. Even though the process is mindless, the goal, as with genes, is the replication of information. All of these mindless, competing information vessels crowd into our memory and overload it. Drawing on Pascal Boyer, Dennett says that counterintuitive anomalies are a kind of “fiction-generating contraption” which triggers a sort of “curiosity startle” that starts “churning out ‘hypotheses’ of sorts” (119-120). Many such thoughts are forgotten almost immediately, others stick around and sometimes “a lineage of ideas” is born and becomes self-replicative. It only becomes a meme when it escapes the individual mind and spreads through culture. It is a kind of proto-meme, understood as being “a slightly obsessional — that is, oft-recurring, oft-rehearsed — little hobbyhorse of an idea” (120). Rehearsal, Dennett reminds us, is replication. And then he provocatively claims that “this is probably the source...of *episodic memory*, our ability to recollect events in our lives” (121). This, I believe, is a good start, better perhaps than Dennett’s theory of narrative gravity in his book *Consciousness Explained* (New York 1991). It would have been nice, however, if he had looked into the literature on memory.

This is, in fact, the start of Dennett’s evolutionary theory. Much of religious tradition consists of the more or less automatic, unquestioning copying of designs passed on by our mothers and fathers, grandmothers and grandfathers. Sometimes it is simply passed on as mindless “tradition”. “We do as we always have done,” the frustrating reply heard in the field by every scholar in search of significance. This mindless copying is similar to genes, but human copying produces many more variations or errors in the copying process than in gene replication. Whole new traditions can arise through variations in the copying process. “A culturally transmitted design can, in this way,” Dennett argues, “have a free-floating rationale in exactly the same way a genetically transmitted design does” (78). This differential replication process where “copies are made with variation, and some variations are in some tiny way ‘better’...will lead inexorably to the ratcheting process of design improvement Darwin called evolution by natural selection” (78). Dennett does not tell us how the variants are ‘better’.

Thus, Dennett’s claim, which I think is relatively uncontroversial, is that “cultural transmission can *sometimes* mimic genetic transmission” since the revisions have “*no deliberate, foresighted authors*” (78). His best example of this is how languages develop branches and dialects:

The gradual transformations that turned Latin into French and Portuguese and other offspring languages were not intended, planned, foreseen, desired, commanded by anyone. (79)
The same with folk art, folk music, folk medicine, folklore, superstition and so on. Sometimes

there are deliberate improvements, but most often a mechanical “sifting-and-duplicating process”. This is not yet religion. We get religion when systems get developed by specialists.

But I am getting ahead of my story. Here is how Dennett’s evolutionary theory goes (cf. the accompanying chart).

Following Boyer (2001), Dennett discusses briefly the evolution of mind through the use of “cultural gadgets” (pp.107ff.). These are neat, attention-demanding tricks that thrive on salience in order to help the mind grasp and retain information. Furthermore, Boyer claims that there are six distinctive cognitive systems designed for salience cues, namely agent-detector, memory-manager, cheater-detector, moral-intuition-generator, sweet tooth for stories and various alarm systems. Dennett adds one other system which he calls “the intentional stance” (108). Any mind with these tools, Dennett says, will eventually have religion.

After discussing Justin Barrett’s (2000; 2004) hyperactive agent detection device (HADD), which is nature’s way of providing humans and other animals with too much of a good thing, thus improving their chances of survival (better to be jumpy than to end up in a tiger’s jaws), Dennett argues that humans and animals share the adoption of the intentional stance. This stance assumes that other agents have limited beliefs about the world, specific desires and more or less rational behavior (109-110), thus allowing for prediction, ploy and counterploy. This is the basis of folk psychology. Since we cannot delete our files on other “intentional systems”, (meaning here people who have passed away), we indulge in remembering them, using reminders, preserving relics or stories about that person. Dennett refers to Boyer’s discussion on death where burial rituals solve the crisis of the simultaneous need to bury the corpse and preserve the virtual person or spirit (112-113). Thus, we are on our way, although not quite there yet, to religion.

Dennett needs first to account for other supernatural agents. Our dead relatives have become virtual agents who are free to evolve in our minds and become ancestors. They became more and more social, more and more linguistic, more deeply involved in the everyday lives of their living heirs. Add the human tendency to animism, Boyer’s claims of counterintuitive anomalies and behavioral psychologist B.F. Skinner’s (1948) experiments with pigeons which seem to show how a “superstition effect” with concomitant ritual behavior can be generated even among animals, and suddenly you have a fantastic world of supernatural beings narrated about in mythologies that enthrall, puzzle and frighten us:

This mindlessly generates a vast overpopulation of agent-ideas, most of which are too stupid to hold our attention for an instant; only a well-designed few make it through the rehearsal tournament, mutating and improving as they go. The ones that get shared and remembered are the souped-up winners of billions of competitions for rehearsal time in the brains of our ancestors. (123-124)

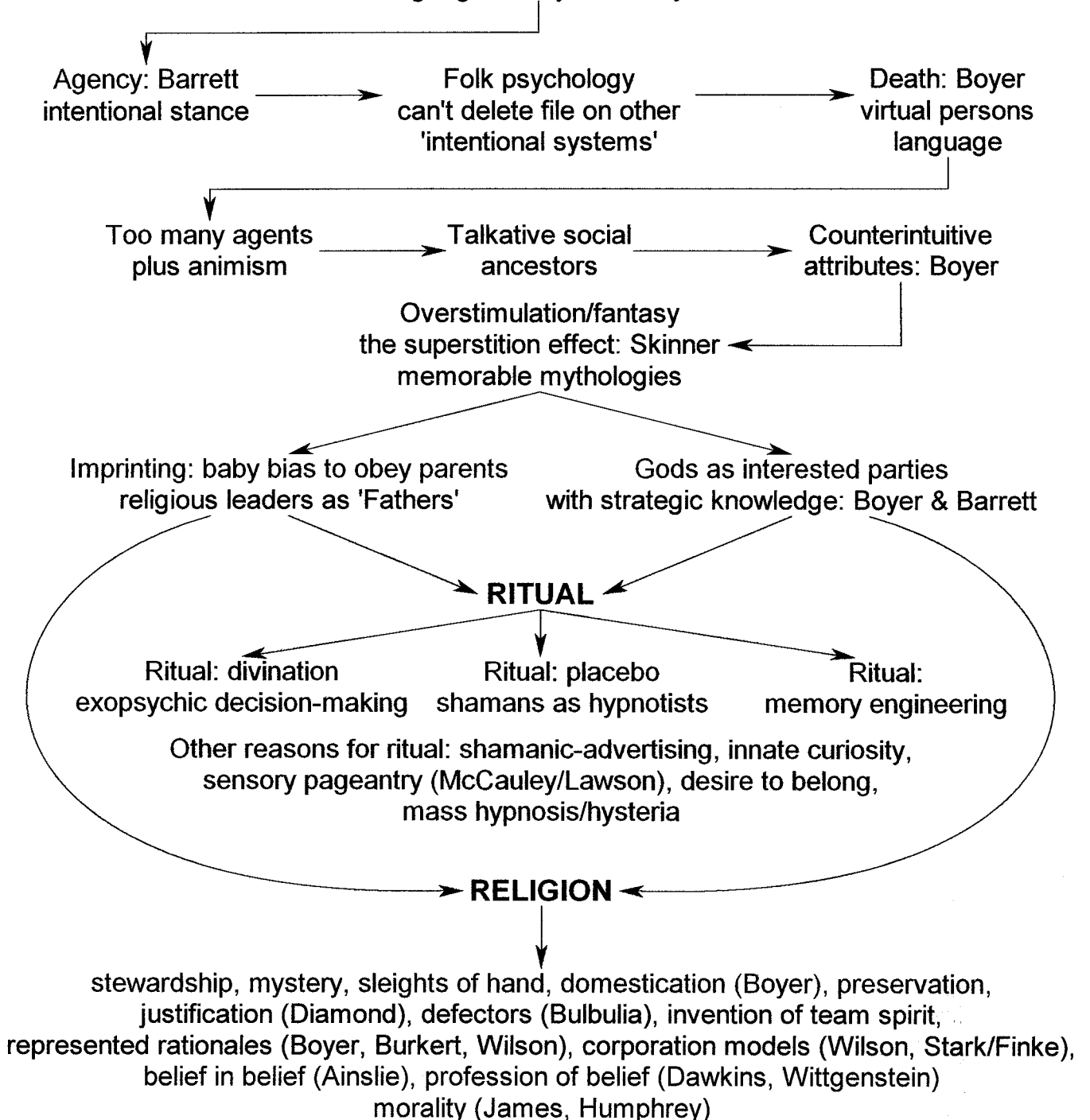
The end result is superstition — not yet religion.

Breaking the Spell: Dennett's evolutionary theory with a little help from his friends

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EVOLUTION OF MIND

cultural gadgets: Boyer's six systems



A key facet in religion, as Boyer argues, is that gods are parties interested in human affairs. They keep track of things and are full-access agents with strategic knowledge. Dennett argues that such ideas may be the result of prolonged parental care and training, during which the “imprinting effect” or the baby’s bias to obey its parents is a primary factor (pp.127ff.). Drawing on Dawkins (2004, 12ff.), this infantile bias is translated into adult obedience to tribal elders. In fact, Dennett claims that a direct psychological transference is witnessed by the common habit of calling religious leaders “fathers” (131).

A primary concern for humans is to get to know the strategic knowledge that gods have. This is the source of divination. Dennett makes use of Julian Jaynes’ formulation “exopsychic methods of thought or decision-making”, commonly known in American idiom as “passing the buck”.⁴ Divination helps people to make strategic and timely decisions in predicament situations. Further to the evolution of ritual, Dennett argues that people have discovered over and over again the placebo effect. They have noticed how ritual, medicinal herbs and other factors stimulate this life-saving mechanism. Dennett also argues that the evolution of treatment styles — which is cultural — goes hand in hand with the susceptibility to treatment — which is genetic (137):

Just as lactose tolerance has evolved in peoples who had the culture of dairy-herding, hypnotizability could have evolved in peoples who had the culture of healing rituals. (137)

Again, a seductive argument which, however, ignores the fact that we are talking of universal rituals known to virtually every culture in human history. At any rate, the argument runs that the culture of shamanic healing could have created the selective pressure for response to such rituals (140). This is still folk religion, not organized religion.

One last element that may have contributed to the evolution of ritual is the use of ritual as a memory-engineering device in oral cultures. The idea is that bringing a group of people together helps improve “copying fidelity” during meme transmission because there is a good chance that a handful of participants can catch errors and help others adjust without recourse to extraordinary memory (147). I wonder if Dennett has ever participated in a collective religious ritual? If any kind of intellectual reflection occurs during ritual, it usually is in the context of a sermon or exhortation addressed to the whole congregation. I don’t see how memory management occurs among the ritual participants. In fact, Harvey Whitehouse (2000; 2004) has shown that imagistic modes of religiosity, dominant in oral cultures, encourage rather than discourage idiosyncratic reflection. There is very little check for errors in such rituals. Doctrinal rituals, on the other hand, like Protestant church services excel in maintaining orthodoxy through dreary repetition.

Dennett asks further questions about why people are motivated to ritual. He suggests that some of the factors might be shamanic-advertising, innate curiosity, sensory pageantry (drawing on

⁴ Jaynes 1976, 223-254. Dennett describes the book as “brilliant but quirky and unreliable” (133).

McCauley and Lawson 2002), the innate desire to belong, and factors such as mass hypnosis and mob hysteria (147-149). Ritual provides, at any rate, a handy memory enhancer because it acts as a digitalized alphabet of behaviors enhanced by rhythm, rhyme and the inclusion of incomprehensible elements. The latter encourages participants to fall back on “direct quotation”, thus preserving accuracy under replication (149-150). This scenario has some possibility, but strikes me as being extremely simplified.

The big question at this point is: How do we get religion? Dennett argues that religion emerged with agriculture, where specialist guilds (drawing on Boyer here) developed the idea of stewardship, i.e. the artful, sophisticated and elaborated reflection on genealogies of ideas and behaviors. When folk religion, in other words, became thoroughly domesticated (167-171) and specialists became dedicated to actively preserving religious tradition. Drawing on Jared Diamond (1997, 276), Dennett claims that in order to carry out this domestication process, an alliance was struck between government leaders and priests by which ideologies and religions were constructed to justify their kleptocracies or government by theft. Every control system, Dennett argues, is designed to protect something, including itself.

But reflectiveness undermines control systems, so there is a need to anchor free-floating rationales as *represented* rationales (177), in other words, as a body of ideas that are publicly discussed, agreed upon and nurtured. In this way, people become conscious stewards. A by-product of this selective process is the invention of team spirit. Represented rationales enhance survival in two ways: First, since believers are the chosen ones, they become imbued with resolution and confidence, thus securing individual effectiveness (following Dunbar 2004), and second, they create or strengthen bonds of trust, thus permitting groups to act more effectively (following Boyer 2001 and Burkert 1996). Reflection brings with it the need of systematic invulnerability to disproof, a veil of mystery and various sleights of hand. There is the need for stimulating fear of a higher power through the use of awesome displays which will discourage defectors (following Joseph Bulbulia 2004).

Dennett devotes a number of pages to organizational theories. He calls the one type “the ant colony model”, where the group is a kind of super-organism, and the other “the corporation model”, where, according to David Sloan Wilson (2002), selection occurs at many levels, including the group level. Dennett also discusses Stark and Finke’s rational choice, market competition theories (2000), but argues that the evolutionary process involves “the differential replication of *memes*, not *groups*” (184), and thus his hypothesis is:

Mememes that foster human group solidarity are particularly fit (as mememes) in circumstances in which host survival (and hence host fitness) most directly depends on hosts’ joining forces in groups. The success of such mememe-infested groups is itself a potent broadcasting device, enhancing outgroup curiosity (and envy) and thus permitting linguistic, ethnic, and geographic

boundaries to be more readily penetrated. (184-185).

Thus, there is no theoretical need of rational designers or competing groups, rather a cultural environment of competing ideas.

The final element necessary to religion is the most central one, namely “believing in belief”. Once people commit themselves publically to particular ideas, a peculiar process of defense mechanisms fall into place, as psychiatrist George Ainslie (2001) argues, by which the myths we live by must not be disturbed at any cost (202-203). This is the source of the many baffling epistemic taboos found in religions around the world. Even when people lose faith, they either live on as if nothing has happened or else they cast around for alternatives. The actual belief that belief in God is necessary is hardly questioned (204-205). This belief was a paramount element in the development of the Abrahamic monotheistic religions, Dennett claims. The division of doxastic labor allows the experts to concern themselves with understanding dogma so that the lay-people can do the believing (218). There is even room for agnostics to live comfortably with the belief in belief. I won’t go into detail with Dennett’s long-winded arguments on types of God beliefs and arguments about the existence of God. The important point is the *profession of belief* (pp.226ff.). This arguments leaves the back door open for Dennett’s political agenda.

Chapter ten could have been a competent discussion of what the experimental literature of the past decade or so has shown us about moral behavior; a literature, by the way, that would have given credence to Dennett’s arguments. Instead, we are subjected to a moral tirade against religious moralists and silly comparisons like “brights” (i.e. those who are enlightened like Dennett) have the lowest divorce rates, while born-again Christians have the highest (279). Dennett’s more sober argument in the chapter is one in which moral cognition research has become increasingly clear, namely, that religion does not necessarily create moral behavior. Nor does it necessarily ensure moral behavior. On the contrary, belief in heaven and hell can cause people to perform monstrous acts (280), justified, as it were, with a license to kill.

Conclusion

Dennett has ignored the literature on exactly the phenomena that worry him the most: The origins of tribalism, fundamentalism, terror, violence, bigotry, mass hysteria, deception, ignorance, pride, intolerance, murder, rape, child abuse, war and so on. If Dennett had done his homework, he would have found interesting literature on such things as the cognition of fundamentalism (Atran 2002; 2003; 2006 and Malley 2004). If he had delved into the literature on memory and suggestion, he would have come up with lots of material on how false beliefs come across as completely and convincingly authentic (Spanos 1996). If he had dealt more seriously with developmental psychology, he would have been able to enlighten his readers with the impressive and scary array of techniques used in the mind control (or ‘socialization’, if you wish) of children. Instead,

he has wasted his time inventing a discipline and a field of inquiry that has already been invented. And in the process, he thinks that showing how religion might have evolved will persuade ignorant bigots why religion is no longer necessary. He also wants to show politicians why there should be laws against toxic religiosity. He conveniently ignores, however, that there already are laws against almost all of the above-mentioned horrors, ignorance and pride excepted.

A number of topics are left untouched by Dennett, such as the evolution of consciousness (which Dennett has written on earlier), theories of memory, the role of narrative, the development of persons and selves, embodied cognition, extended mind, the chemistry of ritual in general (not just placebo), and the development of language in general.⁵ He could also have discussed other, more cohesive, evolutionary accounts such as those of Terrence Deacon (1997), Merlin Donald (2001), Michael Tomasello (1999), Robin Dunbar (2004), Stewart Guthrie (1993), Steven Mithen (1996) or any of the well-known evolutionary psychologists such as Leda Cosmides and John Tooby.⁶ He could have treated the work of Pascal Boyer and Scott Atran more comprehensively.

There is the question, of course, of priorities. But I argue that Dennett's priorities are wrong. If he had dropped a hundred pages or so of rhetoric, he could have produced a more respectable treatise. As it stands now, everyone will be disappointed: The general (more or less religious) public will be turned off by the rhetoric and hostility, the professional community of comparative religion will definitely be turned off by the arrogance and ignorance, the cognitive scientists of religion will be turned off by the lack of depth and the religious fanatics won't read it anyway. In fact, I bet that a large number of conservative congregations across the U.S. have already been given explicit instructions *not* to read the book. The politicians will only be irritated and might even consider him to be a dangerous liberal. "Brights" will become a term of mockery. Well, at least the book will sell because Dennett is a big name. So someone will gain from it.

Dennett is dealing with a topic that is of the utmost importance to the study of religion, namely its evolution. No science worthy of its name can ignore issues of origin and evolution. But it must be done with sophistication and fairness to those who have seriously thought about these matters before we did. Standing on the shoulders of giants, we catch fleeting glimpses of the future. We also look back with the knowledge of hindsight. We think bigger because we stand taller. We learn more because we have been diligent students. We advance science because many have done the groundwork for us already. Because of all this industry and the many sacrifices that it has cost us, we need to hold on to the sobering thought that misrepresentation in the name of politics, however well-meaning it may be, is not the way forward.

Dennett wants to break a particular kind of spell. And best wishes to his quixotic crusade. But

⁵ See my survey in Armin W. Geertz 2004b.

⁶ Barkow, Jerome H., Leda Cosmides & John Tooby, *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*, Oxford: Oxford University Press, 1992.

what is the price of dragging the cognitive science of religion into it?

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