BREAKING THE SPELL

by Daniel Dennett

Reviewed by Paul R. Graves

Religion is both distinctively human and a cultural universal. For a naturalist, this raises the question of why? Thinking of religion in naturalist terms frames perennial questions provocatively in Daniel Dennett's *Breaking the Spell*. Religious activities consume significant amounts of time, effort and resources. What natural explanation can be given for such devotion to religion?

In pursuing these questions, Dennett is aware that this perspective and the honesty of his inquiry may be offensive to some, but he offers no apologies. Dennett argues that the polite convention of shielding religious beliefs and practices from analysis and criticism is unwarranted. Indeed he characterizes this shield around religion as a spell to be broken. If the religious beliefs are well grounded they have nothing to fear from inquiry and if they are not well grounded then they deserve to be exposed. His rhetoric is therefore forthright, at times aggressively so. At the same time, the book is addressed to believers, challenging them to join in this investigation.

Dennett defines religion as a belief in a supernatural being or beings that we must strive to please in some way. A belief system that hypothesizes supernatural beings that take no interest in us is therefore not a religion in Dennett's sense. The main question raised, but not decisively answered by Dennett,

is why religion is so pervasive. Ordinarily when naturalists find a pervasive feature in a species, they explain it by appeal to differential reproductive success. So it may be that religion confers some kind of reproductive advantage on the religious. This might be achieved in any of several ways. It might be that religion does something that directly enhances reproductive success in populations of religious persons, that religion is somehow an adaptation to the environment. It might be that religion is a product of sexual selection. Somehow being religious has made our ancestors more attractive to their mates. It may be that religion is a byproduct of another useful adaptation; our big brains that made us good tool makers and effective hunters, gatherers and language users produced religion as a byproduct and it is these other adaptations that actually explain the prevalence of religion.

Dennett considers a somewhat different way of thinking about religion, proposing that religions are collections of *memes*. The term *meme* was introduced by Richard Dawkins in *The Selfish Gene* on analogy with genes. A meme is a unit of cultural transmission; a way of doing something, a word, an idea, a dance step, a piece of music. Basically a meme is anything that is transmitted from one generation to another by imitation or explicit teaching. So understood, all of culture is composed of memes. Dennett's appendix on memes is well worth reading on its own merits. However, it is worth bearing in mind in what follows, that the status of memes is somewhat controversial. In particular there are theoretical concerns about the ontological status of memes, criteria for identifying and distinguishing memes, and disanalogies between the ways in which genes and memes propagate. E.g. the propagation of genes is (almost) entirely un-self-conscious, whereas the transmission and acquisition of memes may be fully deliberate. There are open theoretical debates about whether this makes any difference to the analysis of meme reproduction and selection in contrast with gene reproduction and selection.

This move to memes allows Dennett to reframe the explanation of religion's prevalence in an interesting way. If reli-

gions are collections of memes that enter our minds where they are reproduced and propagated, then they are in some ways analogous to infections. The prevalence of religion would then show that the religion memes have been successful at propagating themselves in human minds. The reproductive advantage that explains the ubiquity of religion might be in the religious memes rather than the people that host those memes. The religious memes' relation to our reproductive success would be a separate issue.

Of the biological organisms that infect us, some are true symbionts, coexisting with us for mutual benefit. The bacteria in our guts are a standard example. They aid us in maintaining healthy digestive tracts and we provide them with a warm, stable environment. It may be that religious memes besides occupying us in their reproduction and transmission also confer benefits on us. The golden rule, for example, might be beneficial for us if followed and it is also simple and compelling in ways that make it easily transmitted to others. Another possibility is that religious memes may be neutral. They may not confer any significant advantage, but they also may not do any significant harm. Finally, it is at least possible, on analogy with parasites, that even though a religious meme is actually harmful to us, it nevertheless has qualities that make it readily transmitted from one person to another. Dennett's insight here is that, although from the fact that religion is ubiquitous it follows that religion is highly successful in promoting its own reproduction, this is not necessarily because it is advantageous to us. It is at least possible that religion memes are successful in reproducing themselves even though they are harmful to us. Rather than being symbiont memes, religions may be parasitic memes, tricking us into expending great energies in reproducing them and giving us no comparable benefit in return. The question now becomes whether those memes are in fact beneficial, all things considered. Dennett insists that this is an empirical question and that the answer is unknown. His official stance is that believers and unbelievers alike should investigate this question and let the chips fall where they may. Even

if it should turn out that our religion memes are on the whole beneficial, it would not follow that we should be religious, because it may be possible to devise even more beneficial memes that are not religious. Dennett maintains that these are all open questions.

Dennett engages in considerable speculation on the origins of our religious memes. He speculates that religion has its origins in the evolution of human psychology. It was advantageous for our ancestors to detect agents in the environment, since predators and prey are both agents. That is, they are organisms that make purposeful actions. Organisms that succeed in detecting predators and prey and anticipating their actions have obvious reproductive advantages over those that do not. There is therefore some selection pressure in favor of "agent detectors". These agent detectors should generally fail in the direction of generating false positives. A false positive in the error detectors—seeing a predator when none is present—wastes a little bit of time and energy. A false negative–failing to detect the predator that is present–removes the organism from the gene pool. So there will be a tendency in animals to develop *hyperactive agent detection devices*. This results in a natural tendency to sense agents in anything moving, even very unagent-like things such as clouds. Dennett thinks this forms the basis of natural religion. Where we see movement, we imagine that minds are present and where minds are present we think that they might be susceptible to persuasion of one form or another. These hyperactive agent detection devices lead to the stage of religious development where we perceive gods in many natural phenomena and we try to appease them through various rituals.

As societies grow and the division of labor develops, specialists emerge to tend to the needs of the gods. These specialists, the priests, minister to the gods for the benefit of the society, developing rituals and doctrines. These, of course, are collections of memes which compete for attention, duplication and transmission with other memes. Priests have an interest in devising rituals that are successful in commanding the atten-

tion of the congregations. They are also in competition with other priests. Compelling rituals tend to transmit their memes more effectively than boring rituals. Over time this results in evolutionary competition that results in compelling rituals and doctrines, extravagant pageantry, elaborate cathedrals and sublime music. The religious ceremonies we enjoy today are the result of thousands of years of memetic competition, with memes competing with each other for the attention of believers.

None of this story depends on whether the religious beliefs are true or beneficial to the believers. All that is required at a minimum is that the religious ideas be sufficiently compelling to be taken up, occupy our minds and transmitted to the next generation of believers. None of this story depends on the memes even being believed! Consider all the memes associated with Santa Claus. Adults who do not believe in these memes eagerly propagate them to their children. This observation allows Dennett to ask whether the adherents to various religions really believe the teachings of their faiths, or instead merely believe in the importance of faith without believing the teachings of their particular faiths. They may believe that the maintenance of faith is necessary to decent morality or maintaining the social order even if the particular doctrines of the faith are doubted. Again there is ground here for empirical investigation. Do the religious believe the doctrines of their faiths, or do they merely believe in the institution of religion without believing the particulars? Dennett claims we don't know how prevalent such ambivalent attitudes are. Is religious faith really required as a foundation of morality or social order? Many philosophers think not, but it is a question worthy sociological investigation. Dennett asks religious believers to join with skeptics in seeking answers to such basic questions as whether religion really is good for us or not, which Dennett claims cannot currently be answered with any certainty.

Dennett has written a fascinating and provocative book. Some readers would doubtlessly like to see a more comprehensive treatment of the current state of sociological research

on religion. This omission is explicable in terms both of the author and the intended audience. Dennett admits that he is not a specialist in religious studies and he has explicitly written the book for lay religious Americans, not for religious studies specialists. The book is by and for non-specialists, though answering its questions will require some specialized work. Those seeking a more comprehensive summary of the current state of social scientific studies of religion should look elsewhere. Those who are unwilling to consider memetic arguments will find Dennett's principal line of reasoning at best uninteresting.

Breaking the Spell is a challenge to the religious to drop the defensive shroud shielding religious belief from criticism and submit their religions to rational inquiry. For the most part Dennett's tone in this book strikes me as forthright and reasonable, but some will find Dennett's tone blunt and some of his arguments offensive. For example, comparisons of religions with infectious organisms, though apt in light if Dennett's memetic analysis, will doubtlessly offend many. This offense is likely in part a result of the very shielding of religion from critique that Dennett opposes. I fear that many in the intended audience will be too offended to break their spells, and Dennett's *Breaking the Spell* will be left preaching to the converted.