Memes and the evolution of religion: We need memetics too

by Susan Blackmore

Commentary on Norenzayan *et al*
The cultural evolution of prosocial religions
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Abstract

In their analysis, Norenzayan *et al* completely ignore memetics which, unlike other theories, treats memes as replicators and looks to memetic as well as genetic advantage. Now that memes are evolving ever faster, genetic advantage is less relevant. So when religious and secular values are at odds, we need a memetic analysis to understand what is going on.

Norenzayan *et al* claim to assess “alternative cultural evolutionary scenarios” but although they consider by-product and adaptationist theories they do not mention memetics. They never use the word ‘meme’, preferring instead “religious elements”, “mental representations”, “cultural variants”, and “culturally contagious ideas”. They argue that religious elements (I would call them memes) originally arose as nonadaptive by-products but then only some of them spread “because of their effects on success in intergroup competition”. Would memetics have anything different to say about this process? I believe it would.

The difference between memetics and other theories of cultural evolution is that for memetics cultural elements (memes) are replicators. That is, they are information that is copied with variation and selection and therefore, like genes, have replicator power. When memes compete for survival they do so not primarily for the benefit of the genes of their carriers but for their own benefit (Dawkins 1976, Dennett 2006). The authors do not make it clear whether theirs is really a memetic analysis without using that name, or whether they rely entirely on genetic advantage and reject the idea of a cultural replicator.

Much of their analysis fits well within a memetic framework. They provide excellent examples and supportive evidence of why certain memes thrive at the expense of others and they hypothesise that cultural evolution exploits such innate features as kinship metaphors. They argue for a framework that considers both genetic and cultural inheritance but even this does not make it clear whether cultural inheritance ultimately comes back to genetic advantage.

This makes a difference when it comes to the effects of cultural group selection. They argue convincingly that the beliefs and practices of prosocial religions generate greater reproductive and economic success, and economic success aids intergroup competition. So successful groups are likely to thrive, expand and be imitated by less successful groups. And here is the difference. When one group imitates another’s practices with no movement of people (and their genes), the effects could still be understood entirely in terms of genetic advantage if the memes that were imitated provided a genetic advantage to imitators in the new group but what if they do not?

This is the case with the final example they consider which is the spread of atheism and secular values. As they point out, secular memes such as universal suffrage, sexual equality, and human rights spread even though they reduce the fertility of those who hold them. Atheism “presents an interesting challenge for any evolutionary explanation of religion”. Indeed it does and I suggest it is a challenge which memetics is better able to meet.

As the authors point out, religious societies are growing faster than secular ones, but while they

frame this as the tension between demographics and economics, memetics would frame it as the tension between memes and genes; two replicators running at different speeds. This is especially relevant in a world in which memetic evolution is rapidly accelerating and human biology is not.

In such a world, why should atheism spread when we are still endowed with so many innate predispositions to believe in big gods and when atheism reduces fertility? If genetic advantage is the final arbiter this question seems hard to answer. If memetic advantage is also considered it does not. When thinking about “pathways to disbelief”, and “questions about the conditions that give rise to secularization”, memetics can set genetic advantage aside and ask about the cultural niches available to new secular memes, the memetic adaptations they possess and the selective pressures on them.

Population size and opportunities for spreading competing memes will have large effects on the size of the memepool and the strength of selection pressure within it. Relevant factors include not only the more traditional ones such as universal education for both sexes, education that is free from religious oppression and that values rationality, freedom of speech, and the independence of the media, but also technology that encourages widespread access to and rapid dissemination of new memes.

This technology is now evolving so fast that we hardly need consider the impact on fertility when trying to understand the fate of the prosocial religions in this climate. For example, traditional Islamic values clash very clearly with secular ones. At the extreme, if there is a battle between secular institutions and sharia law it will not be decided by the genetic advantage of religious groups because the process would be too slow. It will be decided by memetic competition.

At present we do not have a thriving science of memetics but I suggest that we need one to understand what is happening here. For example, Islam relies heavily on meme tricks that are prevalent in the pro-social religions; threats, promises, the beauty trick (linking religious memes with awe-inspiring music and art), the altruism trick (persuading believers that they are good by virtue of being believers, supporting other believers or spreading the faith) and admonitions to have faith not doubt (Blackmore 1999, Dawkins 1993) and, of course, not to laugh. We need to know how to weaken the effects of these meme tricks or replace them with secular equivalents that would support altruistic societies without the need of religious dogma. The memetic success of such memes as the Flying Spaghetti Monster or the Danish and Charlie Hebdo cartoons are perhaps examples to give us clues.

The authors conclude that “the evolutionary study of religion is in its infancy, and important gaps remain in our knowledge”. I agree. They have made a valuable contribution to our understanding of how prosocial religions evolved in the first place but I believe that memetics is needed to explain the evolution of religion in our fast-moving modern world.

References

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