

# The Meme Machine

**Susan Blackmore**

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"meme. An element of a culture that may be considered to be passed on by non-genetic means, esp. imitation" -- *Oxford English Dictionary*

Could Richard Dawkins ever have imaged in 1976 that his neologism coined in *The Selfish Gene* would be enshrined in the world's greatest dictionary? One suspects not, judging from his forward to this book, which makes it sound as if the idea was an afterthought. Yet, according to Susan Blackmore, we are now firmly in the age of memetics.

Blackmore, who is reader in psychology at the University of the West of England, in Bristol, UK, makes the strongest and most extensive case yet in print on behalf of meme theory. Her stated aim in the book is "to show that many aspects of human nature are explained far better by a theory of memetics than by any rival theory yet available" (p. 9). This is ambitious, but she goes beyond theory to make testable predictions that "will decide whether memes are just a meaningless metaphor or a grand new unifying theory" (p. 9). Blackmore has no doubts: "we cannot possibly hope to understand the nature and origins of the human mind without an effective theory of memetics" (p. 23). No half measures here!

Most people are likely familiar with the term meme as an analog for gene. Genes are instructions for protein synthesis; memes are instructions for behavior and cognition. Each unit of information is a replicator, honed by natural selection. Organisms are the vehicles or vessels for both, as transmitters and recipients. Just as genes may occur in coadapted complexes, so may memes ("memeplexes"). The sum of each is a pool, and each mutates, flows, drifts, etc. In Blackmore's terms, each is an example of the evolutionary algorithym manifest in universal Darwinism.

But there are obvious differences too: Genes (apart from viruses) move only vertically, from one generation to the next, via meiosis. Memes also move vertically, but more often horizontally, within generations. (Lamarckian as well as Darwinian evolution!) Score one for the superiority of memes! On the other hand, according to Blackmore, memes are almost entirely restricted to one species, *Homo s. sapiens*, while genes occur in all life on earth. Score one for the genes!

So, are the two forms of replicators complementary, the yin and yang of human nature? Each influences the other, as in gene-culture coevolution, but each system is also independent and selfish. Most important, according to Blackmore, memes are not, in any proximate way, leashed by genes. Far from it, for in humans memes drive genes.

Why are we not all taught memetics? Obviously the idea (meme!) has not yet gained wholesale acceptance. Blackmore effectively dispenses with the usual objections, e.g., that memes are low fidelity replicators, that their mechanisms and even physical existence are unknown, that the scale of the unit is

vague. (Question: which is the meme--word, dialect, French, language? Answer: all are.) Many of these objections apply equally well to genes.

However, there are rough spots in the road. A key element in Blackmore's argument is the last word in the O.E.D. definition, "imitation." She takes an outdated, constricted view that (apart from song birds) only humans can imitate, despite compelling findings that great apes do so too. This restriction of memes to behaviorally modern humans puts her in a fix when it comes to the earliest stages of human culture. Oldowan technology seems likely to have been meme-based, yet the hominids had brains more similar to living chimpanzees than to modern humans. Burgeoning findings in cultural primatology make it likely that memetics is needed to explain what primates and cetaceans do too.

Blackmore's basic argument is laid out in the first five chapters. The remaining 17 chapters are her application of memetics to everything that is essential to the Human Condition: brain, language, sex, altruism, religion ("virus of the mind"), and ultimately, even consciousness itself. All are products of memes in action. If we are constrained by genes, we are both liberated and enslaved by memes. (Consider the implications of memetic engineering...) To help us cope with this, Blackmore ends the book with some self-help advice about living with the "selfplex," i.e., the memplex of the self ("If there is no choice, how am I to choose?" p. 242). This sounds suspiciously like Zen Buddhism.

The book has a list of more than 200 references and a decent index, but no endnotes nor footnotes, and no illustrations.

So how convincing are Blackmore's arguments? Enough to be pursued and tested. If she's even half-right, then the implications and utility of memetics are worth taking seriously. However, she (ironically?) provides a cautionary note about the whole enterprise: "By acquiring the status of a personal belief a meme gets a big advantage. Ideas that can get inside a self--that is, become "my" ideas, or "my" opinions, are winners" (p. 232). Perhaps this is close to home...

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