MEMES

What Happens If You Say "Meme"

What a meme is supposed to be

"Memes" are the units of selection in culture as genes are the units of selection in evolution. When we talk of traits (height, hairiness, colour-blindness, and so on) being passed down through generations, we are also talking about genes being passed down. Likewise, when we talk of ideas being passed from person to person, we are also talking about memes. Richard Dawkins introduced the idea of memes towards the end of *The Selfish Gene*, where they were a means of demonstrating the wider applicability of the Darwinian algorithm of descent with modification. Memes seem to offer a new vocabulary for discussing travelling facts. They seem to be precisely the type of things that might enable us to gain insight into the transmission and reception of facts across time and between disciplines. Added to which, they are apparently a *scientific* way to talk about this.

But there are problems. It's not entirely clear how seriously we are supposed to take memes. For a start, there are taxonomical problems. Daniel Dennett, who is the chief philosophical advocate of Dawkins and has done much to popularise the meme, makes a list of memes which contains both *The Odyssey* and the alphabet. Logical priority is obviously a problem here. So is scale: how "big" can a meme be? How small? How can it be that one meme is contained by another? Which takes precedent? Does the *Illiad*-meme carry the Achilles Heel meme? It seems clear that there is no co-dependence. Susan Blackmore, author of *The Meme Machine* (2000), resolves this by saying that a meme is "whatever is imitated." This definition might sound a little vacant. But, as Mark Ridley describes, George Williams (a founding figure in modern evolutionary biology) had done much the same thing with genes some decades before:

Williams defined the gene to make it almost true by definition that the gene is the unit of selection. He defined the gene as "that which segregates and recombines with appreciable frequency."¹

The genetic theory offers a ready-made conceptual framework into which the memetic theory supposedly slots. Once the basic analogy is established, it takes very little imagination to see

¹ The quote continues: "According to this definition, the gene need not be the same as a cistron (i.e., the length of DNA encoding one protein, or polypeptide). Rather, it is the length of chromosome that has sufficient permanence for natural selection to adjust its frequency. Longer lengths are broken by recombination and shorter lengths have no more permanence that the gene (for the reason shown in Figure 12.3). The gene on Williams' definition is what Dawkins calls the replicator. In practice, the replicator (or Williams' gene) does not consistently correspond to any particular length of DNA." (from *Evolution* [Oxford: Blackwell, 1996], ch.12.3)



how more and more analogies can be threaded between the two fields. What goes for genetics goes for memetics. Someone who studies the transmission of memes is a "memeticist." Someone who seeks to produce or alter a meme is a "memetic engineer."

One advantage of the meme account is its ability to generalise across languages, genres, disciplines, and even the categories of explicit and tacit knowledge with which we have had so much trouble. Of course, this same generality and universal applicability is also perceived by critics as a failing. "Meme," they say, is just too vague a concept to be of any use. And yet memes manifestly are of use to some people. What type of person says "meme," and what might they stand to gain from doing this? Meanwhile, why resist the new word? Is it anymore threatening than "email" for what used to be called "letter"?

There are lots of reasons to critique the memetic theory. One of the most obvious is that the new term doesn't have a referent: or, in other words, there is nothing at which the word "meme" uniquely points. Another and related reason is that there is already enough language, and the net gain in comprehension offered by the memetic theory seems inadequate compensation for our all having to learn a new word. Still another is that we might have ideological problems with those who rush to endorse the memetic theory: is some common property shared by the theory's supporters that we find objectionable? Might the so-called memeticists have a more subversive agenda?

A tactical reason for adopting meme-speak

Supporters of memetics seem to perceive in it a revolutionary character which may not be apparent to those left cold by the new theory. Here, for example, is a quotation from Richard Brodie, author of *Viruses of the Mind*: "Viruses of the mind, and the whole science of memetics, represent a major paradigm shift in the science of the mind." Admittedly, Brodie is advertising his own book, but this type of claim remains woefully unsubstantiated. The closest thing to a paradigm shift is the epidemiological metaphor for the *transmission* of ideas. In this respect, meme talk has been useful – but it's not clear that we needed memes to get this insight, and once we have the insight, it's definitely clear that we don't need to keep memes to retain it. (As concrete proof, our "How Well Do 'Facts' Travel?" project proceeds in its absence.)

One of the interesting things about the growth of meme-speak is the community among whom it has currency. The thinkers most keen on our adopting the new word also share a particular approach to the understanding of the human mind, namely, they all advocate evolutionary psychology. Evolutionary psychology seeks to describe all aspects of human behaviour (including culture and art) in terms of Darwinian (mal)adaptation. The evolutionary psychologists are looking for a way to describe how culture works.



Unfortunately, the territory is largely occupied already – by anthropologists, sociologists, historians, and so on. And all of these scholars have their own distinctive and adequate vocabularies. There doesn't seem to be very much room in discussions of human culture for the evolutionary psychologists.

So one reason why memes might be popular with this type of thinker is their ability to provide a novel and (apparently) scientifically credible way in which to talk about culture. The effect of such a vocabulary might be the replacement of those vocabularies currently employed by anthropologists, sociologists, historians, and so forth, and to replace them with the vocabulary of memetics. Of course, there seems to be a contradiction here: if "meme" really is a surplus term, uselessly synonymous with "idea," why resist its adoption? When we resist talking about memes, what is really being resisted are the corollaries.

What happens when you say "meme"

For the purposes of discussing the memetic theory, it is useful to adopt the terminology first invented and now favoured by supporters of the theory. This may also be frustrating, especially as one of the questions raised by the discussion of memes is whether the word refers to anything new or useful. Whereas "postmodernists" and "constructivists" and so forth tend to deny such labels apply to them on the basis that the terminology implies a distinction the validity of which they deny (see, for example, Richard Rorty, who will argue that to accept the label of "anit-realist" is to tacitly accede that there is a coherent "realist" position against which an "anti-realist" might be contrasted), the memeticists (as they must be called) are in precisely the opposite position. They want everyone who talks about them to employ the terminological apparatus they have created. This way, "memes" become more feasible.

How might that happen? Recall that the only criterion of success for a meme is virulence. So regardless of whether the meme is "real," if it is being talked about then it is doing well by the lights of the memetic theory. (It is a little like the definition that identifies a celebrity as someone who is known for being well-known.) A parallel suggests itself with other disputed belief systems, but there are important differences: calling someone a "psychic" or a "Raelian" or a "priest" doesn't imply that you accept their belief system. It is entirely possible to talk about "God" without acceding to the reality of God, because the reality of God is made neither more nor less likely by the use of the word "God." However, such is the (alleged) nature of memes that merely talking about them satisfies the conditions for their reality. Those who deny that "meme" has a useful referent must then explain what it was they were referring to when they used the terminology in the first place. In other words, the memeticist has manoeuvred himself into a tricky position whereby anyone who wants to dispute the existence of "memes" must to some extent accept that the he is onto something.



Two versions of memetics

The memetic theory arrives in two versions, a weak and a strong, between which proponents will vacillate depending upon what sort of argument they are being presented with. (This type of vacillation is characteristic of so-called thaumotropic arguments.) As is usually the case when there is a weak and a strong version of any theory, the strong version here does rather more than the (casual) memeticist will want to admit, whereas the weak version doesn't quite do enough to warrant the new terminology (which is to say, we already have perfectly good ways to do everything the meme theory apparently allows us to do, and we don't need to add new words. That said, the meme has already become a new word. If your making sense of this discussion were not evidence enough for that, those opposed to the memetic theory will be disheartened to discover that meme appears in the OED now).

1. The weak version(s)

The weak version amounts to the claim that what is meant by "meme" can be reduced down to what we already mean by "idea" (in the broad sense). The advantage of the new word is simply that it collects a good deal of currently disparate items under one simple term. In this respect, "meme" presents itself as a useful title for a taxonomical category presently unlabelled. We might think it's a little like a world with the words "mammal," "mollusc," "bird," "amphibian," reptile" (...and so on) but without the word "animal." So it is that songs, inventions, dances, storylines, fashions, games, technologies – items we in any case currently recognise as sharing some common feature (being products of the human mind, good ideas, cultural artefacts, or whatever) – can now be grouped under a useful umbrella term: memes. Of course, most memeticists think of themselves as doing more than simply offering us a new piece of terminology.

2. The strong version(s)

The first strong version is one which claims memes are strongly analogous with genes. The other strong version – and the one which seems to be most popular (and coherent) – is the viral account of memetics. The viral account claims that genes move from mind to mind in a manner which is strongly or weakly analogous with viruses. However, unlike in the genetic analogy, in this case even the weakly analogous version carries some quite severe corollaries.



How "real" is the meme?

It is very unlikely that the meme has a physical correlate in anything like the sense that genes have physical correlates. In genetics, there is something in the world (the nucleus of cells) that geneticists can point to and say, "This is where the genes are." There is no such place where memes are supposed to be. They exist in people's heads, of course, but they also exist even when they are not in anyone's head. A gene doesn't exist outside the cell. Additionally, in genetics, there are two levels of operation, and the bit that actually emerges isn't identical with the gene at all: the gene is the code for the phenotype – the claw, the lens, the feather – and it's the efficacy of this phenotype that increases the chances of the gene which blindly codes for it being transmitted onto the next generation ("efficacy" here need mean only "if it doesn't hamper the organism too much").

The second of these points is worth pursuing, as it is frequently raised by critics of the memetic theory. The clever and distinct thing about Darwinian evolution is the nature of inheritance. The charge against memetics here is that successive "generations" of memes are related by a wholly different mechanism of inheritance, such that the apparent analogies with the genetic theory are rendered trivial. Cultural evolution, in short, is "Lamarckian" – which means that memes acquire characteristics in between being passed on to other minds. One by one, the analogies with genetics begin to collapse. In fact, the analogy with genetics, in the end, is deeply misleading: (1) the meme lacks a physical correlate, (2) memetic replication is non-Darwinian.

Genetics or epidemiology?

Perhaps, then the genetic analogy should be dropped, and we should instead see the meme as a "mind virus." Supporters seem to want it both ways, frequently shuttling between registers: memes reproduce like genes, and secondly, memes spread like viruses. And so is "memetics" analogous to genetics or to virology/epidemiology?

It doesn't seem that it could be strongly analogous to both. Daniel Dennett is a good example here. In one essay, we have memes in a "meme-nest" (1990: 131) – which is to say, memes are parasites (presumably by analogy with cuckoos – although earlier in the same essay they are "larvae" and his brain is a "dung-heap" [1990: 128]). He then makes it seem as if the meme were strongly analogous with genes, mentioning progress over a "brief period in biological time" (1990: 134). Of course, "biological" time is an irrelevant qualification here, as we're not talking about bio-genetic evolution (even Dawkins makes this point). Finally, at the end of the essay, Dennett is a "vector" and the memes are viruses again (1990: 134).



Some problems with the strong (viral) version

The strong version of the memetic theory (which sees memes as "mind viruses") certainly seems to do the work we want such a theory to do. And the new perspectives that strong versions of meme-speak allow – such as Dennett's formulation that "A scholar is just a library's way of making another library" (1990: 128) are indeed often striking, and an illuminating way of reconceptualising our relations with the culture from which we have emerged, and to which we contribute. But to invert priority in the ways that the (strong) viral account demands comes at a price.

The attractive aspect of the viral account is the transmission mechanism – unlike the genetic analogy, the viral account allows for "free-floating" memes, travelling between minds, then invading their "hosts." In order to preserve this valance with virus transmission, it seems essential to relinquish free will. Only then does the strong memetic theory make sense. For some supporters (Susan Blackmore, for example), it happens that the meme theory is so alluring that they are "willing" to jettison free-will (inasmuch as that makes sense). But the world without free-will is going to be a very different place: taking memes seriously involves relinquishing much of our sense of personal accountability. Religious believers – frequently targeted by Dawkins – ought really to be pitied by him, they are (after all) only victims of the "God virus." Dennett famously called the evolutionary algorithm Darwin's "dangerous idea," which is precisely how he characterises memes such as "free speech" (1990: 131). Does that mean that Darwinism, too, is just a mind virus?

Epistemological problems with memetics

Aside from the *ontological* problems – that is, the problems of what is a meme and where is a meme – there are also important *epistemological* problems: what type of knowledge do memes carry? What does being a meme do the status of the claim? Are all ideas memes, or only some? How can we discriminate between them? One of the interesting things about the memetic theory is that it is neutral with respect to the epistemic or moral value of an idea (or, to keep within their vocabulary, a "meme"); that is, how "true" or "good" an idea is. Memes even seem to subsume the very terms we might want to use to discriminate between memes: Dennett, for example, talks about the "memes for normative concepts – for *ought* and *good* and *truth* and *beauty*" (1990: 133). And whilst epistemic conditions are irrelevant to the success of a meme, they obviously exist – or else we'd have no means of measuring the meme's divergence from them. In other words, virulence is not the condition we actually use to select ideas (excepting when those ideas are memes). Trying to figure out what it is that



allows us to discriminate between memes points up the problem of agency with respect to meme selection: if the very structures/mechanisms with which we discriminate between memes are also memes then even the memes we select will not be "our selections" but the selections of our memes.

Some consequences of having no epistemology

Saying that "memes are neutral with respect to epistemology" means a meme's truth status is irrelevant to its success as a meme. In fact, the very idea of "true" or "false" becomes difficult to sustain. One of the reasons why memes are set up as being neutral with respect to epistemology is that Dawkins and Dennett (et al) want room to call religion (in particular, but also bubblegum-pop and bad jokes) "memes." That way, you have a mechanism for answering the challenge of "n-million people can't be wrong" without sounding antidemocratic (that is, they're neither wrong nor right, simply in the grip of a powerful meme). Memes are neither true nor false, any more than genes are true or false. This is all very well, but trying to hold together an account of memes without recourse to something like "truth" becomes troublesome, especially when you want license (as Dawkins and Dennett certainly do) to call some views wrong or right or misguided or brilliant or, even, good or bad.

What are the *background conditions* for memes? How is it possible to have any epistemology – that is, any theory capable of discriminating between good and bad ideas or wrong and right ideas? In order to have a theory of truth and falsity, some meta-level capable of discriminating between memes seems to be required. How might such a level operate? Perhaps in the same way as Darwinian natural selection operates within the laws of physics, so too do memes operate within the laws of logic. But any initial appeal this has evaporates quite quickly: Darwinian selection is a subset of the laws of physics, laws which (chronologically) precede Darwinian selection, and out of which Darwinian selection emerges. There is room to say that the shape of Darwinian laws is more or less dependent upon the laws of physics, and so on. But the relations between memes and logic are far more tangled. The laws of logic seem to be made of the same type of stuff as memes² – and in fact, surely constitute memes themselves: "the law of the excluded middle" is a phrase I know, but not one I invented. Likewise "the principle of non-contradiction." Which part of them is the meme? Is it just the word-string? Or is it the logical law for which that word string act as a mnemonic?

The laws of logic, if they are laws, must take their law-like nature from something about the relations between what we used to call ideas and we are now supposed to call

² It's as if someone were to argue that the laws of physics emerged out of some sort of cosmic struggle. And perhaps they did, but this is surely not what most meme supporters would want to argue.



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memes. It's okay for the laws of physics to be in charge of how Darwinian selection works, but it is altogether more difficult to see how the laws of logic might have arisen. (The problem becomes even more trenchant in the case of mathematics, where properties are defined in relational terms: "2 + 2" is part of what "4" *means*. Raising, of course, the additional problem of whether mathematics is also a memetic issue.) There seems to be both memes and "something else." Not everything in the head is a meme, there are also "meme complexes." (Perhaps the ability to discriminate between truth and falsity is an emergent property of such meme-aggregations, as moral agency is an emergent property of geneaggregations like us humans. Agency doesn't exist in arms or legs or cells, but it does exist in whole persons. Might the ability to distinguish truth (or the laws of logic, or any of the metalevel memes) appear out of the right clump of memes?

Of course, even without (logical) "truth," there is still room to discriminate: a meme could be called "bad" or "damaging" if (for example) it harmed people. So, Dawkins will argue, religion is a "damaging" meme in this respect because it causes more suffering than it salves. Evolution, on the other hand, is a "good" meme because it helps us understand our relation with the world. The epistemology you would end up with would be one which replaced "truth" with utility, and "falsehood" with inefficacy or liability to cause suffering. It sounds like a good way of thinking about the world, and so it should come as no surprise that a fully fleshed out account of how this would look already exists in the writings of the American pragmatists like John Dewey and William James and these days Richard Rorty who feel that ideas are tools not principles, and objectivity means nothing more than consensus, and truth can be cashed out as usefulness, and so on. But this is hardly the type of epistemology you would expect a realist such as Dawkins (for example) to embrace.

So the sensible (or at least, the "logically consistent" route – whatever this might now mean) would seem to be to reintroduce epistemology, or allow memes to compete in terms of truthfulness as well as virulence. The problem with that move is that the meme account has lost its shine: we're back to where we started from with "ideas."

Works cited

Blackmore, Susan. 2000. The Meme Machine. Oxford: Oxford University Press.
Dawkins, Richard. 1989 [1976]. The Selfish Gene. 2nd. Ed. Oxford: Oxford University Press.
Dennett, Daniel. 1990. "Memes and the Exploitation of Imagination." Journal of Aesthetics and Art Criticism. 48.2: 127-135.

