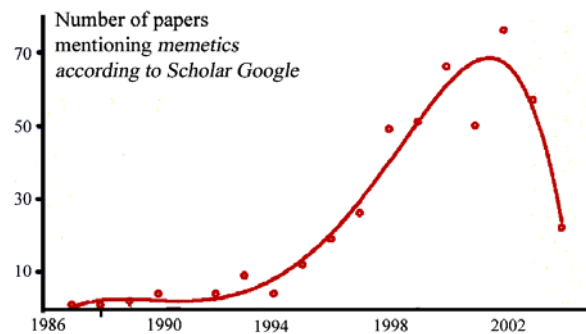


# Save memetics!

Reinhard Blutner (Amsterdam)

Recently, the *Journal of Memetics* has ceased due to a lack of quality submission. Unfortunately, the project has failed to interest other academics, and, by a case of self-application of memetic theory, the projects did not survive.

“The fact is that the closer work has been to the core of memetics, the less successful it has been. The central core, the meme-gene analogy, has not been a wellspring of models and studies which have provided ‘explanatory leverage’ upon observed phenomena. Rather, it has been a short-lived fad whose effect has been to obscure more than it has been to enlighten. I am afraid that memetics, as an identifiable discipline, will not be widely missed.” (Bruce Edmonds in the last issue of the journal)



Perhaps Mr. Edmonds’s dread is not justified if it comes out that memetics finds a real application in natural language diachrony/typology and replaces simplifying pictures of the genetic roots of language by its memetic counterpart. And perhaps this application brings us closer to the core of memetics and the question on the replicator mechanism in the cultural transmission of language.

The term ‘meme’ first appeared in Richard Dawkins book *The Selfish Gene*. After discussing the view that evolution is best understood in terms of the competition of genes (rather than the competition of species), at the very end of the book he asked the question if there are any other replicators on our planet. The answer, he claimed is ‘Yes’, there is a unit of cultural transmission, or a unit of ‘imitation’. It needs a good name in order to make the theoretical idea a good replicator in the world of science. Dawkins: “‘Mimeme’ comes from a suitable Greek root, but I want a monosyllable that sounds a bit like ‘gene’. I hope my classicist friends will forgive me if I abbreviate mimeme to *meme*.”

Dawkins's (1976) original conception of the meme includes the idea that memes are copied from one person to another by imitation. We therefore need to be clear what is meant by imitation. True imitation is extremely rare in animals other than humans, except for birdsong and dolphin vocalisation, suggesting that they can have few or no memes. Many authors speculate that more complex human cognitive processes, such as language, reading, scientific research and so on, all build in some way on the ability to imitate, and therefore all these processes are, or can be, memetic. When we are clear about the nature of imitation, it is obvious what does and does not count as a meme. Hence, the definition of a meme has to refer to a unit which is passed on by (generalized) imitation.

Perhaps it’s not superfluous to add that Dawkins identified *three* criteria for a successful replicator: fidelity, fecundity and longevity. In other words, a good replicator must be copied accurately, many copies must be made, and the copies must last a long time. Genes are high on all three. Memes are copied by learning, but not each form of learning is sufficient to form a good replicator. Much of human learning is Skinnerian (classical conditioning) and not memetic. Parents shape their children’s behavior by the way they reinforce them. Dawkins stresses the idea of imitation for building a cultural replicator. It was the psychologist Thorndike (1898) who gave the first clear definition of imitation as ‘learning to do an act from seeing it done’. Thorndike’s definition – although confined to the visual domain – captures the essential idea that in imitation a new behavior is learned by copying it from somebody else.

Human infants are able to imitate a wide range of vocal sounds, body postures, actions on objects, and even completely arbitrary actions like bending down to touch your head on a plastic panel. By a little more than one year of age they can even delay imitation for a week or more, and they seem to know when they are being imitated by adults. Unlike any other animals we readily imitate almost everything and anything. If we define memes as transmitted by imitation then we must conclude that only humans are capable of extensive memetic transmission. It is imitation that makes us different from other animals – this is one of the main theses of Blackmore’s (1999) book *The Meme Machine*. Hence, we have not only descended from apes, but it is aping that makes us unique. Unlike the Darwinian thesis, the idea of replication via imitation is one that is more in consonance with a Biblical injunction [Luke 10.37]: “Go and do likewise.”

However, there is a problem with the idea of imitation when we consider the example of the acquisition of language. “In acquiring a language, a child internalizes a grammar and a lexicon on the basis of linguistic interactions. Nowhere in this interactions, nowhere in the linguistic data the child is presented with is the grammar present to be copied. Rather the grammar must be inferred from these data. Imitation in some literal sense may play a role (though not a sufficient one) in the acquisition of the phonology of words, but not in the acquisition of their meaning. Meaning is not something that can be observed and copied. It can only be inferred.” (Sperber, 2001)

Hence, what is required is a learning theory that – taken as a proper generalization of imitation learning – is able to deal with the problem of language acquisition. In my view, recent developments in OT learning theories are on the right track to generalize the idea of imitation. I think it is an interesting idea to apply these proposals and to check if they form a successful replicator in terms of fidelity, fecundity and longevity.

There are *Societies for Endangered Species* and there is a *Society for Endangered Languages*. Of course, it doesn’t make sense to found a *Society for Endangered Theories* since most theories are too artificial and not worth to survive. However, there might be exceptions.

Save memetics!

## References

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