

Book reviews

The Selfish Meme: A Critical Reassessment. By Kate Distin. Pp. 231. (Cambridge University Press, Cambridge, UK, 2005.) £40.00, ISBN 0-521-844525, hardback. doi: 10.1017/S0021932007002349

There are three realms of phenomena that are governed by the same, or at least very similar principles: (1) the market place in economics, (2) operant conditioning in the psychology of learning, and (3) biological evolution. This common principle is that the better one survives the good one – be it some good in the market, a special behaviour of a learning organism, or a species. Darwin (1859) discovered that this principle works in genetics and coined the phrase of the ‘survival of the fittest’, Skinner (1938) discovered that the same rules apply in the modification of behaviour, and various economists found it in the market – we experience this nowadays in the fast ‘evolution’ of electronic devices and information storing media.

In the middle of the 19th century, Gregor Mendel (1865) found that information about the phenotype is passed on to the offspring in discrete units, and in 1909 W. L. Johannsen coined the term ‘gene’ for it. In 1944, O. Th. Avery found the chemical basis of this information in the DNA molecules, and in 1953 Watson and Crick unveiled how it works.

In 1859, Charles Darwin published his discovery that the transfer of genetic information controls the selection of reproduction in species, and that this information may be changed by mutations that sometimes lead to phenotypes better fitting the respective environment, and thus shape the evolution of species. And in 1976, Richard Dawkins proposed that it is not the species or the individual that strives for survival of its offspring but rather the gene itself, using the respective organism as its reproduction machine or vehicle. In his book *The Selfish Gene* where he published this finding, he added a twelfth chapter where he introduced the concept of a ‘meme’ as a kind of cultural entity that is passed on, selected and survives in a culture in about the same way as genes do in biological evolution.

Clusters of memes may co-evolve and work together, like clusters of genes co-operate to make successfully surviving individuals, e.g. genes for the growth of strong claws and teeth make a successful carnivore in genetics, and memes for the promise of paradise and the threat of hell make a successful religion.

This idea, a meme in itself, was enthusiastically adopted by many authors, and criticized by others, and released a boom of publications elaborating this concept further; there exists even a journal devoted to the discussion of memes (*Journal of Memetics – Evolutionary Models of Information Transmission*). A very popular book on memes was Susan Blackmore’s *The Meme Machine* (1999) which was translated from English into other languages, and now comes Kate Distin’s *The Selfish Meme: A Critical Reassessment*. It is based on Kate Distin’s doctoral dissertation in the field of philosophy, and with the sophistication of a scientific paper, she carefully analyses and discusses what a meme can be, and do, on a philosophical and epistemological

basis, including a discussion about how cultural development could have started at all.

Memes might be words and concepts, notions, ideas, attitudes, ways of behaviour, 'scripts', tunes, fashions, techniques, books, laws, skills, habits, designs, blueprints, prejudices, gods, beliefs – anything that can be transferred from one person to the other by means of language or imitation, and adopted by others, and spread through a society. One question, meticulously discussed by Kate Distin in her book, is which of these actually are memes themselves, analogous to genes, containing representational content, meta-representations, and which are products of memes, and which are prerequisites that may contain, preserve and transfer memes.

Kate Distin does not assume too much prior knowledge in the field, and starts from scratch. This makes the book appear a little redundant in some parts for those readers who are already familiar with memetics, as is this reviewer.

Kate Distin discusses thoroughly the gene/meme analogy, its advantages and shortcomings, the parallels and differences between genes and memes, what memes can be as mental representations of content, what kind of information they may contain, and what they can do to become passed on, and replicated, whether they are just switches that trigger specific behaviour, or more complex elements of culture. She goes into the analogy of recessive genes (or rather alleles) to memes that exist in a culture without influencing actual behaviour. She discusses the ways of passing on cultural complexity, the need of memes to attract and retain attention in order to be replicated, how variation (mutations) may happen by means of copying errors and by recombination like in genetics, and what the conditions for the selection and preservation of memes might be, including the role of context.

Later in the book, Kate Distin critically discusses the contributions and commentaries of other authors on meme theory, like Susan Blackmore, Dan Sperber, Robert Boyd, Peter J. Richardson, Daniel Dennett, Rosaria Conte, Noam Chomsky, Robert Aunger, Maurice Bloch and Richard Dawkins himself. She comprehensively presents their respective positions, and thoroughly explains where, and why, she agrees or disagrees. Here is not the space to reproduce all these elaborations, but her conception is mainly that the mind is not a meme itself but an innate prerequisite that enables us to accept, preserve and transfer memes. This reminds me a little of Immanuel Kant's (1781) 'categories' as innate prerequisites for perception and experience.

The theory of memetics in its various versions may explain almost every achievement in human (and animal) culture. To the best of my knowledge, nobody has so far discussed the possibility of its falsification – an important criterion for scientific theories according to Karl Popper (1935, 1960) – although several authors have proposed 'tests' to decide what a meme is, and what does not count as a meme. At any rate, Kate Distin's book gives an excellent, thorough and comprehensive presentation and critical discussion of the field of memetics, and if you've become interested, and read this review so far, read the book – it is worth it!

DIRK WENDT
Department of Psychology
University of Kiel,
Germany