Memes

A **meme** (rhymes with "cream") is a unit or element of cultural ideas, symbols, or practices that is transmitted from one mind to another through speech, gestures, or rituals. The word comes from the Greek word *mimema*, which means "something imitated." Supporters of the concept regard memes as cultural genes because they copy themselves and respond to external pressures. Memes have not been proven to exist, no one is completely sure how they work, and memes are not usually discussed in the mainstream social sciences.

The word "meme" was first introduced by British scientist Richard Dawkins in *The Selfish Gene* (1976) to discuss evolutionary principles in explaining the spread of ideas and cultural phenomena. He gave as examples melodies, catch-phrases, beliefs, clothing/fashion, and the technology of building arches.

Meme theorists insist that memes evolve by natural selection, in a manner similar to that of biological evolution, through the processes of variation, mutation, and competition. Memes spread through the behaviors that they generate in their hosts. Memes that do not copy themselves well may become extinct, while others may survive, spread, and (for better or for worse) mutate. Theorists point out that memes which replicate the most effectively spread best, and some memes may replicate effectively even when they prove harmful to their hosts.

Origins and Concepts

Dawkins, who coined the phrase "meme," said he wanted "a

monosyllable word that sounds a bit like ‘gene’”. Dawkins wrote that evolution depended only on the existence of a self-copying unit of transmission − in the case of biological evolution, the gene. For Dawkins, the meme was just a self-copying unit that could help explain human behavior and cultural evolution.

Dawkins used the term to refer to any cultural entity that an observer might consider a replicator. He hypothesized that one could view many cultural entities as replicators, and pointed to melodies, fashions, and learned skills as examples. Memes generally replicate through exposure to humans, who have evolved as efficient copiers of information and behavior. Because humans do not always copy memes perfectly, and because they may refine, combine, or otherwise modify them with other memes to create new memes, they can change over time. Dawkins likened the process by which memes survive and change through the evolution of culture to the natural selection of genes in biological evolution.

Transmission

Life-forms can transmit information vertically (from generation to generation) via replication of genes or horizontally through viruses. Memes can replicate vertically or horizontally within a single generation. They may also lie dormant for long periods of time. Memes spread by the behaviors that they generate in their hosts. Imitation counts as an important characteristic in the propagation of memes. Imitation often involves the copying of an observed behavior of another individual, but memes may transmit from one individual to another through a copy recorded in an inanimate source, such as a book or a musical score.

Researchers have observed memetic copying in just a few species on Earth, including primates, dolphins, and birds.

Some commentators have likened the transmission of memes to the spread of contagions. Social contagions such as fads, hysterias, and copycat suicides exemplify memes seen as the contagious imitation of ideas.

Memes as discrete units

Richard Dawkins initially defined meme as a noun which "conveys the idea of a unit of cultural transmission, or a unit of imitation." The meme as a unit provides a convenient means of discussing "a piece of thought copied from person to person." A meme could consist of a single word, or a meme could consist of the entire speech in which that word first occurred.

A meme has no given size and cannot be "broken down" like an atom. Susan Blackmore writes that melodies from Beethoven's symphonies are commonly used to illustrate the difficulty involved in delimiting memes as discrete units. She notes that while the first four notes of Beethoven's Fifth Symphony form a meme widely replicated as an independent unit, one can regard the entire symphony as a single meme as well.

Evolutionary influences on memes

Richard Dawkins noted the three conditions that must exist for evolution to occur:

(1) variation, or the introduction of new change to existing elements
(2) heredity or replication, or the ability to create copies of elements
(3) differential “fitness”, or the opportunity for one element to be more or less suited to the environment than another

Dawkins emphasized that the process of evolution naturally occurs whenever these conditions co-exist, and that evolution does not apply only to organic elements such as genes. Memes too, he writes, have the properties necessary for evolution, and thus meme evolution is not simply similar to genetic evolution, but is in fact a real phenomenon subject to the laws of natural selection. Dawkins noted that as various ideas pass from one generation to the next, they may either enhance or detract from the survival of the people who obtain those ideas, or influence the survival of the ideas themselves. For example, a certain culture may develop unique designs and methods of tool-making that give it a competitive advantage over another culture. Each tool-design thus acts somewhat similarly to a biological gene in that some populations have it and others do not, and the meme’s function directly affects the presence of the design in future generations. In keeping with the thesis that in evolution one can regard organisms simply as suitable “hosts” for reproducing genes, Dawkins argues that one can view people as “hosts” for replicating memes. Consequently, a successful meme may or may not need to provide any benefit to its host.