

Memes and Genes

Memes represent an extraordinarily important recent concept, which was developed by the evolutionary biologist Richard Dawkins.

We are not simply protective replication machines for our genes, but for our memes as well. Memes are the ideas, behaviors, etc. that are imitated and thereby copied from individual to individual, both within and across generations and even cultures. The brains of humans, which are approximately three times larger relative to body mass than those of our nearest animal relatives, the great apes, evolved largely to enhance our ability to imitate the ideas and behaviors of others, and thereby to propagate memes.

Memes are influenced by the process of natural selection, just as are genes. Those individuals with superior ability to find and identify the best memes, and to replicate those memes, are the ones who will be most successful at survival and reproduction. The latter would involve sexual selection, in that such individuals would be more desirable as mates.

When it is said that humans have cultural evolution in addition to biological evolution, what is meant is that we have memes in addition to genes, which evolve through similar processes of natural selection. What makes humans unique is our ability to find, identify, and replicate beneficial memes so relatively effortlessly. This is perhaps the major advantage that humans have over other species.