Oct. 17 (Sat.) 16:50-17:30

Communication and Its Future Ryohei Nakatsu

Interactive & Digital Media Institute, National University of Singapore

The way of people's communication is changing rapidly mainly because of the introduction of various kinds of new media. What would be the future form of communications? I want to discuss this issue observing the old way of communications as well as the present status.

Oct. 17 (Sat.) 17:30-18:10

From genes to memes: Culture as an evolutionary arena. Matthias Rauterberg Technical University

The idea of the selfish gene and the revival of genetic determinism provide a new view of our relationship with our genes. Dawkins (1976) argued that as self replicating molecules, genes have no agenda other than replication. The phenotype is merely an extension of the genome and that an inexorable outcome of selfish replication should be phenotypes capable of acclimation and manipulation of their environment. The phenotype is the vehicle in which the genes reside, and as such, genes are capable of coding for exceedingly complex organs and organisms when under the forces of natural selection over sufficient time. An extension of this idea is the concept of the "meme". This is an extension of the replicator concept to language and cultural evolution. Dawkins noted that there are two known means of replicating information, genes and ideas. Dawkins defined the meme as simply a unit of intellectual or cultural information that survives long enough to be recognized as such, and which can pass from mind to mind. One need only observe that cultural evolution moves much more rapidly than biological evolution to begin to wonder about the evolutionary future of humans. It is important to note that, in contrast to genes, memes are not encoded in any universal code within our brains or in human culture.

The meme hypothesis posits that it is fruitful to consider particulate, culturally-transmitted units as replicators, similar to genes. Memes are conveyed among individuals by a variety of forms of social learning, and, due to their imperfect transmission, undergo processes akin to mutation. Given some correlation between the variant properties of different versions of a meme and its replication success, memes