

## Memetics as Theory of Knowledge Evolution

### ● What is Knowledge?

- A certain entity made judgments on the condition of the external world (environment)→information processing and decision making
- Initially it did so to get a cutting edge in survival.  
cf. There is bias in man's information processing. This is evolutionary consequence.
- At present unrelated to survival, the acquisition of knowledge itself has turned to be the purpose.  
cf. development of natural sciences→burn-up; pull away from natural sciences

### ● Changes in "How Knowledge Should Be".

- Religious method of knowledge acquisition: one-way traffic from one individual or a small group to majority of people, religious order of numerous believers.
- Philosophical method of knowledge acquisition: meditation of one or a small group on people, salon or circle of limited participants
- Scientific method of knowledge acquisition: confirmation of facts by multitude of people, a major academy  
→universalization in method of expressing and acquiring knowledge  
→ mathematical description and scientific method (hypothesis-Hypothetico-Deductive cycle, falsifiability, knowledge network)

### ● Knowledge and Media

- The form that a media (e.g. books) represents itself is tightly correlated to the form that knowledge takes.
- Seminar, colloquium→monograph (humanities), academic journal papers (science)  
→textbook
- What and how will the Internet change this?  
→The change from printing type on paper to the Web is not a mere change of media. It is a transformation of the form of existence that knowledge takes in society.

### ● What Form of Knowledge is Required in Today's Japan?

- With the transformation of the environment, society and media, knowledge that is required will also change.
- Content of knowledge (contents), method of transmission (education) and distribution (media) will all have to change.

※So what changes will occur and how? For the time being, let's go to the National Museum of Emerging Science and Innovation.

### ● Bibliography

Sakura, Osamu. *Evolution as a Tool of Thinking* (especially chapter 5), Kodansha Gendai Shinsho (This challenges the interdisciplinary application of concepts and frameworks of evolutionary theory.)

Sakura, Osamu (text) and Kino, Toriko (illustration). *Where do we come from? Where are we going?* Bronze Publishers (Try viewing "philosophy" in the eyes of biological evolution? It is a picture book for adults. Illustrations are wonderful.)

※ For further readings refer to <http://park.itc.u-tokyo.ac.jp/sakuralab/index.htm>