## 3 1 J U L Y

## WHAT KIND OF SCIENCE SHOULD INFORMATION SCIENCE BE?

## Silvio Ceccato

Assuming information becomes communication when the two parts perform the same operations, that is when they develop the same thought, a science concerned with information is to be directed, first of all, towards the individualization, analysis and description of these operations, in addition to the studies on the physical aspects of the messages being transmitted.

A second step may consist of examining how the operations of the two parts are made public, that is, of examining the ways of communication, in particular preparing an operational grammar.

During a third stage our attention will be focussed on whatever can facilitate or hinder the repetition of the operation of the person who informs by the person being informed. The main topics of this research are: attitudes and values which may be shared or not between the two parts; and the matching up of thought with sensations, emotions, etc.

Decision theory and logico-linguistics: possible foundations for a 'shallow' and a 'deep' science of information

W. S. Cooper

Like a swimming pool, information science has a shallow and a deep end. The shallow end deals with the grosser statistics of information usage, and attempts to supply rational solutions to the problem of how to design literature search systems of maximal utility. The deep end deals as well with the fine structure of particular coding systems, ie languages; and this deeper penetration is what is needed in the design of