

logic and mathematics. Not only a person judging the value of the material for education will say: put the iron curve away. Anyone judging its value for science will say the same.

It has never come to our knowledge that experts in mathematics or logic have come across such errors in the ISOTYPE system. This system does not take for its field the more complex part of science; its field is only the teaching of the very first stage—but this work it does seriously and as well as those responsible for building it up have been able to make it.

#### FROM DESIGNS IN STONE AND THE ORBIS PICTUS TO THE ISOTYPE ENCYCLOPAEDIA

The first designs of man are old designs on stone, in secret and dark places in hollows, or on great stone walls. It seems that these designs were a part of the process by which special powers were used to put animals to death ('magic'). We have the knowledge of old sign-languages in different countries, for example in America, and specially in

Egypt, where the pictures were named 'hieroglyphs.' The hieroglyphs came from pictures, but they became representative of the unit sounds of words.

The present writing in China and Japan is a writing in signs, and every sign is representative of a thing or an idea, etc. and not of a word or of sounds. The position of signs in a group, their form of connection, gives them a sense. When the same sign is put down more than once, the sense does not necessarily have to be given in more words. For example, signs for *tree* put together give the sign for *wood*. This comes very near to the ISOTYPE system. But the Chinese writing has to be able to put down all the words and statements of the language—this writing itself has to be a complete language, while the ISOTYPE language is only a helping language for those groups of statements which will be made clearer by pictures. This fact makes these two languages very different. (It is impossible for all Chinese signs to be clear straight away. They have been formed by reasoning, and by hundreds of years of use).

All these sign-languages have more in common than word languages. That