

Communicative Rationality, Logic and Mathematics

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In this article the following thesis is explained and substantiated: Sense and meaning of mathematics finally lie in the fact that mathematics is able to support the rational communication of humans.

The essence of the argumentation is that the effective support becomes possible by the close connection between mathematics and logic (in the sense of Peirce's late philosophy) by which, in his turn, the communicative rationality (in the sense of Habermas' theory of communicative action) can be activated. How such a support may be concretely performed shall be illustrated by the development of a retrieval system for the library of the Center of Interdisciplinary Technology Research at Darmstadt University of Technology.