

MODALITY IN MATHEMATICS: POSSIBILITIES FOR WHOM?

ROBERT THOMAS

Abstract. For purposes of this abstract, I distinguish three levels, beginning at the middle.

2. Mathematics, said by some to be languageless, but issues nevertheless in much textual material. Underlying mathematics is:

1. What mathematics is about:

I share the view of many mathematicians—including Gauss, Poincaré, Dieudonné and some anglophones—that mathematics concerns relations between objects, not the objects themselves. This prejudice will not be much on display.

3. Talk about mathematics:

One can study mathematical texts for clues to mathematical practice—a study increasingly fashionable over the past fifty years. I'm going to confront part of Brian Rotman's semiotic analysis of mathematical texts published in 1993 with the ancient Greek text *Spherics* by Theodosios, revealing a superficial flaw in Rotman's analysis, but also supporting the notion of modality actually used in mathematics as formulated by Leslie Tharp in work published posthumously in 1989. This is a talk about talk about talk about the bottom level; I do not expect to have the last word.