

INTRODUCTORY NOTE

This is the first of two volumes on *Recent Issues in the Philosophy of Mathematics*. In this introductory note I will restrict myself to some general comments and I will reserve the more detailed treatment of the various contributions for the second volume (*Philosophica* 43, 1989, to appear).

Usually when an editor decides to devote an issue (or two, as it turned out to be) of a philosophical journal to a theme of this kind, there must be some reason. Has something new happened in the field? Is there a new development that drastically changes our perspective on the problems in the field? Is something important going on and is the time right to bring together a number of authors presently working rather individually? This editor indeed believes this to be the case.

If a reader were to expect a contribution about new axioms for the standard version of set theory or a contribution about the importance of a special version of second-order logic to decide the continuum hypothesis, (s)he will be disappointed. Questions and problems like these belong in the mainstream of the philosophy of mathematics, in particular in the field of foundations of mathematics (in conjunction with mathematical and philosophical logic). In these two volumes, issues will be addressed that many philosophers of mathematics will perhaps consider not really to belong to the core of the field. Issues such as: the sociology of mathematics, the politics of mathematics, the development of mathematics in its historical and cultural setting, the problems arising from the interaction between 'pure' mathematics and computer science, the aesthetics of mathematics, ... Usually if these problems are talked about at all in mainstream work, it happens in the margin. An occasional remark, a reference to a quote of a famous mathematician, an artistic impression, nothing more.

Parallel to the mainstream however, a new approach is developing. How does one go about to prove (in a non-mathematical meaning of the word) such a claim. The easiest way is to bring together a sufficient number of authors and thus to demonstrate that a new 'tradition' is in the making. Seen from that perspective, this editor considers himself to be a very lucky person indeed. As any editor should do, I selected some twenty authors, hoping that one third - enough to fill one volume - would

respond. I have to confess to my happy amazement that two thirds replied. In this sense my (and I hope the contributors') point is made. Numerically speaking, its strength was doubled.

Unfortunately, the following philosophers and/or mathematicians could not contribute for various reasons : David Bloor, Michael Detlefsen, Philip Kitcher, Lynn Arthur Steen, and Mark Steiner. Bloor's *Knowledge and Social Imagery*, Detlefsen's recent *Hilbert's Program*, Kitcher's *The Nature of Mathematical Knowledge* Steen's *Mathematics Today and Mathematics Tomorrow*, and Mark Steiner's *Mathematical Knowledge* are all important contributions to this new field I have tried to outline in this introductory note. As said, a more detailed discussion of all the contributed papers will be presented in the second volume.

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