

PMP2007 - Aims and Scope

In October 2002, Brussels hosted the first Perspectives on Mathematical Practices conference (see <http://www.vub.ac.be/CLWF/PMP2002>). With this event, the organizers tried to meet part of the growing need, at least as they felt it, for fora where researchers could collectively concentrate on (aspects of) phenomena collectively characterized as "mathematical practices", as the philosophical popularity of this topic during the past few decades had been ever on the rise.

A few years on now, and despite enduring reluctance in more traditional philosophical circles, it seems fair to say that it has proven to be among us to stay. As a consequence, while it was the modest aim of the original PMP conference to "bring together" a variety of scholars able to throw some specific light upon the central question involved, viz., "what do mathematicians do when they do mathematics?", now the same organizers feel confident they are entitled (or even held) to be somewhat more ambitious.

Indeed it would be very nice if this follow-up conference could produce something in excess of another "mere" collection of perspectives, that is in terms of getting us further down the road of formulating shared research programmes and/or (roughly) delimiting a full-fledged and self-contained area of inquiry. To facilitate this, we dare propose one general theme of (meta)philosophical scrutiny and then also suggest a few more specific ones.

The general theme is that of why and how philosophers and historians of mathematics need each other. This takes for granted the thesis, ventilated by Lakatos, *that* they do so. We are here referring, of course, to his famous paraphrase of Kantian dictum: "The history of mathematics, lacking the guidance of philosophy, has become *blind*, while the philosophy of mathematics, turning its back on the most intriguing phenomena in the history of mathematics, has become *empty*".

Any serious attempt of remedying this perceived sorry state of affairs, and thus facilitating the philosophy-history cross-over when it comes to the study of mathematics, will either "bring to" philosophy the historian's expertise of conducting meticulous diachronical case-studies, or else "bring to" history the philosopher's concern with epistemological depth.

Let us be clear, however, that a focus on the historical dimension of mathematical practices is not to the exclusion of contemporary themes. To the contrary, for rather than to "dead" mathematics, Lakatos's point pertains to the *historicity* or growth of mathematical knowledge, past *and* present.

And this remark indeed brings us to a couple of particular themes possibly to be considered. They are sometimes associated with a lurking humanistic revolution in the philosophy of mathematics, more particularly in being clustered around challenging the exclusivity of formal proof. We mention but visual (picture) proof or digital (computer) proof, but are open to others.

In addition, do note that, next to contributions delving into one of the above topics, the organizers *very much* invite (and will not in the least prejudice against) any other perspectives that are sympathetic to the general agenda as set out here.