



Call for contributions to a special issue to be submitted to the *Historia Mathematica* journal:

“Concrete numbers” versus “abstract numbers”: an anthropological, historical, historiographical and didactical approach

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This special issue would be an incentive to interconnect several disciplinary perspectives: history, anthropology, philosophy, didactics and ethnomathematics, in order to critically analyze the opposition between “concrete numbers” and “abstract numbers”. Some historians, philosophers, and anthropologists have theorized a separation between “numbers” and the entities enumerated or counted with these numbers, and more particularly, between numbers and measurement units attached to them in the expression of measurement values. This perception gave rise to a linear history of oral and written numerations rooted in evolutionary theories and classifications (Smith, Guitel, and many others). To what extent does this separation reflect the practices carried out in societies or social groups under scrutiny by these scholars? How has the notion of “abstract numbers”—as opposed to those described as “concrete numbers” shaped the history of numerations? This issue’s goal is to confront common historiography with the great diversity of numeration and measurement systems (and their interrelations), attested to by the various textual and ethnographic sources available to us (Murdoch, Thomas, Lean, etc.).

Contributors are invited to expose different case studies, from distinct times and in various contexts, highlighting the way in which mathematical work on measurement units is an integral—and sometimes essential—part of the mathematical elaborations of numbers. How the inclusion of units of measurement shape our understanding of numerical systems and fractions, in past or present treaties and textbooks? How focusing on often neglected mathematical elements such as measurement units could open up new prospects for discussion on mathematical practices? Of particular interest are the cases studies which enable the analysis of various methods of quantification involved in administrative tasks, trade, craft-making, as well as those developed in oral tradition societies, and furthermore in the way mathematics are currently taught. Anthropological, historical, historiographical and didactical approaches are encouraged.

This special issue will include selected articles—as well as a general introduction by the editors—which will be submitted to the *Historia Mathematica* Journal. The journal’s editorial staff has expressed a keen interest in this project.

Contributors to this issue are invited to submit a title and an outline of the projected article of about 500 words in English, and a short bibliography, including their publications on the subject or related subjects.

Proposals should be sent **before January 31, 2018** to Christine Proust <christine.proust@univ-paris-diderot.fr> and Eric Vandendriessche <eric.vandendriessche@univ-paris-diderot.fr>.

Approvals will be sent to the authors by March 5, 2018. Subsequently, the first version of the articles (written preferably in English, approximately 60 000 characters including spaces, references, as well as a 100 word abstract) should be sent to the editors by September 30, 2018.

Short indicative bibliography

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