

# Revue d'Histoire des Mathématiques



Journal for  
the History of  
Mathematics

Tome 14 Fascicule 1

**2 0 0 8**

**SOCIÉTÉ MATHÉMATIQUE DE FRANCE**

Publiée avec le concours du Centre national de la recherche scientifique

# REVUE D'HISTOIRE DES MATHÉMATIQUES

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**Périodicité :** La *Revue* publie deux fascicules par an, de 150 pages chacun environ.

**Tarifs :** Prix public Europe : 80 €; prix public hors Europe : 89 €;  
prix au numéro : 43 €.  
Des conditions spéciales sont accordées aux membres de la SMF.

**Diffusion :** SMF, Maison de la SMF, Case 916 - Luminy, 13288 Marseille Cedex 9  
Hindustan Book Agency, O-131, The Shopping Mall, Arjun Marg, DLF  
Phase 1, Gurgaon 122002, Haryana, Inde  
AMS, P.O. Box 6248, Providence, Rhode Island 02940 USA

## EDITORIAL

The strong impression left by a recent visit to an empty museum made me think of the *Revue d'histoire des mathématiques* as a showcase for historical documents. The still empty museum, the *Neues Museum* in Berlin next to the *Pergamon Museum*, had been reduced to ruins during the Second World War and has now been reconstructed—indeed deconstructed—by David Chipperfield. Once operational, it will present ancient pieces according to current museology, but within an architectural setting that frames the remains of the 19<sup>th</sup>-century museology in newly added marble. Similarly, as historians, the simultaneous reflection on ancient objects *and* on their changing historiography is our daily work. We cannot help noticing the implicit time stamps in the papers of our historian predecessors. These stamps are not like the expiration dates on cups of yogurt—history of science does not have a central waste disposal—but each of them constitutes just another layer of documents for our historical work.

The present issue of the *Revue d'histoire des mathématiques* groups together three articles authored by French women historians, which illustrate in different contexts, this multiplicity of historical layers: Christine Proust studies the usage of graphemes for numbers and measures in a particular corpus of paleo-Babylonian tablets assembled during a 19<sup>th</sup>-century American excavation campaign. Caroline Ehrhardt provides a detailed analysis of a school examination in Galois's hand, against the backdrop of the well-known image—created since his premature death—of a rebellious genius. Between these two papers, Liliane Alfonsi contributes to our understanding of Étienne Bézout's work. Her task involves the confrontation not so much of fixed, common ideas—even though his name, at least in the French-speaking world, evokes an identity—but rather of the remarkable absence of earlier historical interest in this scientist of the *ancien régime*. The present issue of our *Revue* begins to provide those missing historical layers in Bézout's case; Alfonsi's scientific biography of Bézout—now in progress—will fill the lacuna.

This current issue of the *Revue* also contains my first editorial. Our hearty thanks go to Jeanne Peiffer for all of the tremendous effort she invested in the *Revue* during her term. With characteristic determination and attention to big projects as well as to minute details, she brought out two-thirds of the issues of the *Revue d'histoire des mathématiques* that have appeared to date. These volumes will continue to bear witness to the great

service she has rendered to the national and international community of historians of mathematics.

We have joined the *Journals under Threat* movement opposing unreasonable classification schemes for scientific journals in the humanities, specifically the incoherent attempt proposed by ERIH. Like many of our fellow journals, we therefore reprint hereinafter the concise letter of protest which has received wide international acclaim in the history of science community. The situation in France is very much in flux as I write, largely driven by the active protest movement against the multiple reforms advocated by the current government. This makes a short and neat assessment of the debate and of our position in it impossible. We refer instead to the special issue 2008/5 of the *Revue d'Histoire Moderne et Contemporaine* (freely available online) which offers historically informed analyses—with a view to the international situation—about evaluations and their criteria. As for the *Revue d'histoire des mathématiques*, it goes without saying that we will continue to uphold the highest criteria of quality. They are controlled by many national and international referees on whom we rely—and whom we would like to take the opportunity to thank tremendously for their faithful dedication.

Norbert Schappacher

### **Journals under Threat. A Joint Response from History of Science, Technology and Medicine Editors**

We live in an age of metrics. All around us, things are being standardized, quantified, measured. Scholars concerned with the work of science and technology must regard this as a fascinating and crucial practical, cultural and intellectual phenomenon. Analysis of the roots and meaning of metrics and metrology has been a preoccupation of much of the best work in our field for the past quarter century at least. As practitioners of the interconnected disciplines that make up the field of science studies we understand how significant, contingent and uncertain can be the process of rendering nature and society in grades, classes and numbers.

We now confront a situation in which our own research work is being subjected to putatively precise accountancy by arbitrary and unaccountable agencies. Some may already be aware of the proposed European Reference Index for the Humanities (ERIH), an initiative originating with the European Science Foundation. The ERIH is an attempt to grade journals in the humanities—including “history and philosophy of

science". The initiative proposes a league table of academic journals, with premier, second and third divisions. According to the European Science Foundation, ERIH "aims initially to identify, and gain more visibility for, top-quality European Humanities research published in academic journals in, potentially, all European languages". It is hoped "that ERIH will form the backbone of a fully-fledged research information system for the Humanities". What is meant, however, is that ERIH will provide funding bodies and other agencies in Europe and elsewhere with an allegedly exact measure of research quality. In short, if research is published in a premier league journal it will be recognized as first rate; if it appears somewhere in the lower divisions, it will be rated (and not funded) accordingly.

This initiative is entirely defective in conception and execution. Consider the major issues of accountability and transparency, the process of producing the graded list of journals in science studies was overseen by a committee of four (the membership is currently listed at <http://www.esf.org/researchareas/humanities/research-infrastructures-including-erih/erih-governanceand-panels/erih-expert-panels.html>). This committee cannot be considered representative. It was not selected in consultation with any of the various disciplinary organizations that currently represent our field such as the European Association for the History of Medicine and Health, the Society for the Social History of Medicine, the British Society for the History of Science, the History of Science Society, the Philosophy of Science Association, the Society for the History of Technology or the Society for Social Studies of Science. Journal editors were only belatedly informed of the process and its relevant criteria or asked to provide any information regarding their publications. No indication has been given of the means through which the list was compiled; nor how it might be maintained in the future.

The ERIH depends on a fundamental misunderstanding of conduct and publication of research in our field, and in the humanities in general. Journals' quality cannot be separated from their contents and their review processes. Great research may be published anywhere and in any language. Truly ground-breaking work may be more likely to appear from marginal, dissident or unexpected sources, rather than from a well-established and entrenched mainstream. Our journals are various, heterogeneous and distinct. Some are aimed at a broad, general and international readership, others are more specialized in their content and implied audience. Their scope and readership say nothing about the quality of their intellectual content. The ERIH, on the

other hand, confuses internationality with quality in a way that is particularly prejudicial to specialist and non-English language journals. In a recent report, the British Academy, with judicious understatement, concludes that “the European Reference Index for the Humanities as presently conceived does not represent a reliable way in which metrics of peer-reviewed publications can be constructed” (Peer Review: the Challenges for the Humanities and Social Sciences, September 2007: <http://www.britac.ac.uk/reports/peer-review>). Such exercises as ERIH can become self-fulfilling prophecies. If such measures as ERIH are adopted as metrics by funding and other agencies, then many in our field will conclude that they have little choice other than to limit their publications to journals in the premier division. We will sustain fewer journals, much less diversity and impoverish our discipline.

Along with many others in our field, this Journal has concluded that we want no part of this dangerous and misguided exercise. This joint Editorial is being published in journals across the fields of history of science and science studies as an expression of our collective dissent and our refusal to allow our field to be managed and appraised in this fashion. We have asked the compilers of the ERIH to remove our journals’ titles from their lists.

Hanne Andersen (*Centaurus*)

Roger Ariew and Moti Feingold (*Perspectives on Science*)

A. K. Bag (*Indian Journal of History of Science*)

June Barrow-Green and Benno van Dalen (*Historia mathematica*)

Keith Benson (*History and Philosophy of the Life Sciences*)

Marco Beretta (*Nuncius*)

Michel Blay (*Revue d’Histoire des Sciences*)

Cornelius Borck (*Berichte zur Wissenschaftsgeschichte*)

Geof Bowker and Susan Leigh Star (*Science, Technology and Human Values*)

Massimo Bucciantini and Michele Camerota (*Galilaeana: Journal of Galilean Studies*)

Jed Buchwald and Jeremy Gray (*Archive for History of Exact Sciences*)

Vincenzo Cappelletti and Guido Cimino (*Physis*)

Mark Clark and Alex Keller (*ICON*)

Roger Cline (*International Journal for the History of Engineering & Technology*)

Stephen Clucas and Stephen Gaukroger (*Intellectual History Review*)

Hal Cook and Anne Hardy (*Medical History*)

Leo Corry, Alexandre Métraux and Jürgen Renn (*Science in Context*)

Brian Dolan and Bill Luckin (*Social History of Medicine*)

- Hilmar Duerbeck and Wayne Orchiston (*Journal of Astronomical History & Heritage*)
- Moritz Epple, Mikael Hård, Hans-Jörg Rheinberger and Volker Roelcke (*NTM: Zeitschrift für Geschichte der Wissenschaften, Technik und Medizin*)
- Steven French (*Metascience*)
- Paul Farber (*Journal of the History of Biology*)
- Mary Fissell and Randall Packard (*Bulletin of the History of Medicine*)
- Robert Fox (*Notes and Records of the Royal Society*)
- Jim Good (*History of the Human Sciences*)
- Willem Hackmann (*Bulletin of the Scientific Instrument Society*)
- Robert Halleux (*Archives Internationales d'Histoire des Sciences*)
- Bosse Holmqvist (*Lychnos*)
- Michael Hoskin (*Journal for the History of Astronomy*)
- Ian Inkster (*History of Technology*)
- Marina Frasca Spada (*Studies in History and Philosophy of Science*)
- Nick Jardine (*Studies in History and Philosophy of Biological and Biomedical Sciences*)
- Trevor Levere (*Annals of Science*)
- Bernard Lightman (*Isis*)
- Christoph Lüthy (*Early Science and Medicine*)
- Michael Lynch (*Social Studies of Science*)
- Stephen McCluskey and Clive Ruggles (*Archaeoastronomy: the Journal of Astronomy in Culture*)
- Peter Morris (*Ambix*)
- E. Charles Nelson (*Archives of Natural History*)
- Ian Nicholson (*Journal of the History of the Behavioural Sciences*)
- Kathy Olesko (*Osiris*)
- Liliane Pérez (*Documents pour l'Histoire des Techniques*)
- Iwan Rhys Morus (*History of Science*)
- John Rigden and Roger H Stuewer (*Physics in Perspective*)
- Julio Samsó (*Suhayl: Journal for the History of the Exact and Natural Sciences in Islamic Civilisation*)
- Simon Schaffer (*British Journal for the History of Science*)
- Norbert Schappacher (*Revue d'histoire des mathématiques*)
- Claire Strom (*Agricultural History*)
- Paul Unschuld (*Sudhoffs Archiv*)
- Peter Weingart (*Minerva*)
- Stefan Zamecki (*Kwartalnik Historii Nauki i Techniki*)
- Huib Zuidervaart (*Studium. Tijdschrift Voor Wetenschaps- en Universiteitsgeschiedenis/Revue de l'Histoire des Sciences et des Universités*)