We can make a change

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We *Can* Make a Change

On October 27, 1928, the Dutch mathematician L. E. J. Brouwer, well known for the fixed-point theorem named after him, received a telegram from Erhard Schmidt advising him to refrain from any action in relation to two letters he was about to receive until after speaking to Carathéodory, who was expected to visit. When Carathéodory arrived, Brouwer opened the letters. One of these was from Hilbert, who bluntly wrote that he was no longer able to cooperate with Brouwer because of their widely differing views in matters concerning the foundations of mathematics. Hilbert had therefore asked permission from the editorial board of *Mathematische Annalen* to end the editorship of Brouwer with that journal. Brouwer considered this a blatant injustice and decided to take up the challenge. But at the end of the conflict—named a "frog-and-mouse battle" by Einstein—and despite an appeal by Brouwer to Hilbert's wife, Brouwer had to leave. He was furious and decided to found his own journal. He negotiated with the Dutch publisher Noordhoff, who agreed, and Brouwer attracted a large editorial board consisting of forty-seven mathematicians, including many famous names. In 1934 the first issue of *Compositio Mathematica* appeared.

But soon the shadow of the events in Germany—we are speaking of the 1930s—reached *Compositio Mathematica*. Bieberbach wrote to Brouwer that there were too many Jewish names on the editorial board and suggested their removal. Brouwer refused, and Bieberbach withdrew from the board. After Germany invaded Holland in 1940, freedom of the press was lost, and the publication of *Compositio* came to a halt in 1941.

After the war it took a long time before publication of *Compositio* was resumed. Noordhoff started preparation in 1948, but the first issue appeared only in 1951. The period of intrigue that ensued was later referred to by Brouwer as the "Theft of *Compositio*". The result of the intrigue was that Brouwer lost control over the daily matters of the journal, although his name remained on the cover.

A new period for the journal arrived with the managing editorship of Frans Oort, who brought the journal back in the 1970s to a high level. Mumford's famous *Compositio* papers on the compactification of moduli of curves and abelian varieties mark that change.

I became managing editor in 1993, succeeding Jozef Steenbrink. I became worried about the regular price increases that Kluwer Academic Publishers, the successor of Noordhoff, imposed. These price increases threatened the orderly systems that had governed publishing in mathematics (and other sciences as well) for many years. So we considered options.

During the intrigues around *Compositio* in 1951, a foundation with the name of *Internationaal wiskundig tijdschrift COMPOSITIO MATHEMATICA* (international mathematics journal C.M.) had been founded. Brouwer's quarrelsome character may have led to this measure, which in hindsight now looks so prescient. The aim of the foundation was to publish the journal, and it owned the name of the journal. This fact enabled us to look around for another publisher.

I contacted the American Mathematical Society to ask whether they were interested. To my pleasant surprise there was an immediate answer from AMS publisher John Ewing with a very attractive offer. I also contacted the London Mathematical Society, who also made an attractive offer. Other offers were also received. It was very difficult to choose between the favorable offers of the AMS and the LMS; in the end we decided on the basis of geography to choose the LMS. We had to delay moving to the new publisher till the contract with Kluwer expired (December 2003), and as of January 2004 the change took effect. The launch of the reborn journal was at the Phoenix meeting of the AMS last January.

The journal moved to the LMS on the understanding that the price would fall considerably. We also took the occasion to reformat the journal to six issues on a larger page size but with the same annual mathematical content. The LMS manages the publication of the journal and has an agreement with Cambridge University Press (CUP) to market and distribute the journal on their behalf.

The price has fallen by a third, and this marks a permanent shift to a lower pricing policy. Any surplus income will be shared between the LMS and the Foundation Compositio Mathematica to be fed back into mathematical programs and travel grants. This is important for all learned societies. Like the AMS, the LMS is dependent on its income from publications to run many of its activities; and if we can recycle some of the money from publishing back into LMS programs, we keep the money flowing within the mathematical community.

We hope that mathematicians will send a message to highly priced journals by asking their libraries to switch subscriptions from expensive journals to less expensive ones. We appreciate how difficult it is to persuade libraries to take on anything new, but think of the consequences if no one shifts subscriptions: it will be a vindication of the attitude that mathematicians are price insensitive and publishers can charge what they like. Conversely, if libraries take on new subscriptions to less expensive journals, we can show that there is a point to publishers lowering prices.

We hope that the move of *Compositio* will be followed by similar moves of other journals. I am sure that learned societies, like the LMS and the AMS, will be very eager to support initiatives that lead to cheaper journals and create the conditions under which our libraries can survive.

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Letters to the Editor

Review of Mathematics of Juggling

I have read and carefully considered the review by Allen Knutson (AK) of my book *The Mathematics of Juggling* (TMOJ), which appeared in the January 2004 issue of the *Notices*. The review is misleading, sloppy, and demonstrably unfair, and consequently I feel it is important to respond. (Details are available on my website, `http://www.maths.monash.edu.au/~bpolster/juggling.html`.)

Readers should be aware of other available reviews of TMOJ, more detailed, informative, and strikingly more positive, such as the review on the MAA Read This! website: `http://www.maa.org/reviews/mathjuggling.html`.

AK is worried that among the mathematicians, jugglers, and educators that TMOJ has been written for, only the mathematicians will be able to get anything out of this book. The prerequisite for understanding most (not *all*!) of the material in TMOJ is a basic knowledge of modular arithmetic. Who can do this? Everybody! Of course, this does not mean that everybody will be able to read the book from cover to cover, just as being able to walk does not enable one to complete a marathon. People who are tempted and curious enough to pick up a book on the mathematics of juggling, because of this minimal prerequisite, should definitely have a fair chance at understanding whatever they will find of interest in the book, and I have tried my best to increase those chances. The title really says it all, doesn't it? If you pick up a book with the title *The MATHEMATICS of Juggling* and if you are disappointed that it contains too much math, then, well, what can I say?

I am still puzzled how a book like TMOJ, on a topic as innocent as juggling, could have produced such a violent reaction from anybody. I do hope that AK's negative response was not partly due to AK himself working on a book about the mathematics of juggling for a couple of years and that by publishing TMOJ first I may have stepped on his toes. Clearly, TMOJ is not the book that AK wishes to write, and I'd be the first one to admit that it is not perfect. However, I am also convinced that readers deserved a much more informative review and I a much fairer one.

—Burkard Polster
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Postdocs Can't Follow Kirby's Advice

I just read the opinion piece in the february 2004 issue of the *Notices*.

As a postdoc I am under a considerable amount of pressure to attempt to publish in "the best" journals (whatever that means) in order to advance my career (obtain the best tenure-track job I can, etc.).

At this stage of my career I don't really have the luxury of boycotting a high-priced journal that is at the top of my field. One can argue whether there are comparable journals available that are not high-priced, but the fact of the matter is that I will be judged based on the journals where my work appears; so if a high-priced journal is considered to be the top relevant one available (again, in terms of perceived quality rather than actual quality), then it is in my best interests to pursue publication in such journals.

Posting on the arXiv is definitely a great thing to do, and I do that whenever I submit a paper for publication. But many of the people in this field (most? I'm not sure how many postdocs and grad students there are compared to everybody else) would not be wise professionally to follow the advice implied in the article.

It's all well and good for an established mathematician to alter his/her publication practices in accordance with this opinion piece, but this is a far less viable option for a significant portion of the profession. The hiring committees will be looking for us to publish in many of those journals. (I think I smell a prisoner's dilemma here.)

—Mason Porter
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Textbooks Should Be Cheaper Too

Rob Kirby's February 2004 opinion is a lot more than just an opinion. It is the accurate and indisputable description of a deplorable state of affairs, if only of part of it. There is another, analogous and equally deplorable, situation: textbooks that should be written to help faculty teach their courses wind up forcing them to teach whatever will maximize the profits of a shrinking number of increasingly larger corporations at the expense of their very own students.

The only place where I would disagree with Rob Kirby is where he says that "It is hard to think of useful alternatives between the extremes, for we mathematicians will probably be outsmarted by those motivated by $100 million." He does mention that "one could post one's papers" but does not say why it might not work. I would like to point out in this respect that the solution might be found in the growth of the Free Software Movement and the Open Source Philosophy. But not being myself a research mathematician, I will leave it to others to discuss the issue.

Cooperative publishing of a textbook ex nihilo over the Net would not be simple. Yet the development in a first stage of "proto-texts" to be augmented by the end-faculty user would in fact be sufficiently simpler than that of awesome open-source software such as Linux, Mozilla, and OpenOffice so as to be well within the capabilities of "the rest of us".

One problem that immediately comes to mind is the divergent views faculty will have of how to present

just about any mathematical item. On the other hand, this might be a problem only until there are enough such projects going so that most volunteers would be able to find one to their liking.

In any case, the main problem with creation has always been distribution. Is there a chance that the Internet might be offering us the solution to this very old problem?

Of course, the technical knowledge needed to develop the framework necessary to ensure that such a collegial development is sufficiently coordinated and smooth to produce a finished text in a finite amount of time is quite formidable. Might one express the wish for the AMS to foster the development of a package that would facilitate this kind of endeavor?

—Alain Schremmer
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Another View of *Never at Rest*

Professor Steven G. Krantz takes Richard Westfall's biography of Newton (*Never at Rest* from Cambridge University Press, 1980) to task as "ponderous" and "prolix". He does this in the context of praising James Gleick's more recent biography of the same subject. Since Prof. Krantz has a reputation as a judge of style, his indictment of Westfall's writing may discourage prospective readers from even picking up the volume. It is, after all, substantial.

Neither adjective seems borne out by examination of the biography. The book is large, but Cambridge's having put out a paperback edition enables one to carry it without suffering deformation of the spine. The author is examining a great deal of material, as he is concerned with setting out the background for Newton's accomplishments as well as exploring some of the byways of Newton's work that is not directly in line with modern science (alchemy, for example, and Biblical chronology). To provide explanation and documentation for such a wide range of subjects tied together by Newton takes space, but the result is not necessarily "ponderous".

One of the attractions of Westfall's biography (by contrast with many earlier treatments of Newton) is its readability. It hardly seems fair to condemn a scholar's attempts to make his discussions more lively as "prolix". The book could only have been shorter by reducing some of the text to outline form, and then the accusation of scholarly dryness would have been hard to avoid. Westfall's ability to present material about infinite series in an absorbing fashion that does not drag on forever is a tribute to a rare mixture of scholarship and writing.

This is not to deny the value of Gleick's biography; just to point out that it is filling a different role from Westfall's. Westfall provides the basis on which subsequent generations of Newtonian scholars can build, and Gleick can both examine the original materials and benefit from Westfall's own interpretations. If Gleick enables us to see further, it is by standing on the shoulders of giants in scholarship, as well as in mathematics. Westfall's biography is too readable to be allowed to remain too long at rest.

—Thomas Drucker
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The *Notices* invites readers to submit letters and opinion pieces on topics related to mathematics. Electronic submissions are preferred (notices-letters@ams.org); see the masthead for postal mail addresses. Opinion pieces are usually one printed page in length (about 800 words). Letters are normally less than one page long, and shorter letters are preferred.

About the Cover

The cover photograph shows Armand Borel and Harish-Chandra in Princeton, presumably about the time they were writing their classic paper on the reduction theory of arithmetic groups. Borel's daughter, Dominique, commented, "As a child I remember being over at the house of Harish-Chandra, who lived right next door, during very warm weather (at the time my father and HC were working most intensely together) and the two of them pacing back and forth across the lawn over and over and over again in deep discussion. The synergy was so strong!"

The copy of the photograph that we used was contributed by Lily Harish-Chandra. Thanks to Borel's Institute colleague Enrico Bombieri for bringing the photograph to our attention, as well as for scanning it.

—Bill Casselman
Covers/Graphics Editor
(notices-covers@ams.org)