Commentary

Another Opinion

A Review of "Featured Reviews"

In 1995 the *Mathematical Reviews* (MR) introduced "Featured Reviews". Each month a small number of papers (about ten) are selected for this honor; reviews of these papers are highlighted in MR and available on the AMS Web site free of charge to *all* users (even those who do not subscribe to MathSciNet).

As chair of an unrelated committee, I happened to be present when the proposal for this new class of distinguished reviews was presented to the AMS Council in 1994. Advocates recalled how, in the early days of MR, it was possible to browse through the entire MR issue each month and identify the significant new papers in many different branches of mathematics. After lamenting the difficulty of doing something comparable today with issues containing over 4,000 reviews, the editors introduced the idea of "Featured Reviews" as a remedy. It was difficult to argue against such a well-intended proposal, and the Council readily approved it with little discussion.

Despite their accessibility, I did not take a close look at any "Featured Reviews" until, about a year ago, I found myself reading the "Results from Prior Support" section of a National Science Foundation proposal in which the principal investigators crowed that one of their papers had been selected for a featured review in MR. Although both the proposal and the paper were meritorious, my curiosity was piqued. I examined the 1995–96 "Featured Reviews", which were by then assembled in a book by the AMS.

Not surprisingly, many good and important papers were absent. Indeed, the editors had admitted from the start that this was inevitable. However, the quality and selection were far more uneven than I had expected. What are the implications of this? Being selected (or not) for a featured review seems likely to impact promotion and tenure even more than it does grant funding. Hence the responsibility of the Society in this endeavor is quite serious.

The AMS Web site asserts that the papers selected for "Featured Reviews" are "considered particularly important in the areas that they cover." The announcement for the collection of about two hundred reviews that appeared in 1995–96 asserts that it

> …identifies some of the "best" new publications, papers, and books that are expected to have a significant impact on…mathematics.…All of the papers reviewed here contain interesting new ideas or applications, a deep synthesis of existing ideas, or any combination of these.

Yet I could easily compile a modest list of papers not selected which many regard as more significant than those reviewed. In most of these cases the authors are senior and their work has been recognized in other ways. However, it may well happen that only one of two candidates being considered for tenure has had a paper selected for review. In that case, overlooking a paper could have a serious impact on a career.

One might argue that the solution is to improve the selection process at MR or point out that the selection processes for many other honors, such as postdoctoral fellowships and invited speakers at meetings, are also imperfect. However, most such honors have other purposes, e.g., providing research support or communicating recent mathematical results to a target audience. Do "Featured Reviews" serve a comparable useful purpose, or do they simply establish yet another flag for selected mathematicians to wave in front of deans and department chairs?

Certainly, communicating noteworthy mathematics to a broad audience is a laudable goal. However, the way that information is processed and distributed in 1999 is very different from that in 1941. Not only is the number of highly specialized papers orders of magnitude greater, but there are also new sources of exposition for nonspecialists. The AMS alone provides expository mathematics in the *Notices* as well as in the *Bulletin*, and many mathematicians find it desirable to read expository articles in other journals in related areas of science and engineering.

Do "Featured Reviews" fill an important additional need in the mathematics community? Is a database, which is an essential research tool, the right place for additional expository writing? I recognize that different expository venues do serve different needs. But I worry that "Featured Reviews" will be used primarily for a completely different purpose.

Those who are unfamiliar with "Featured Reviews" can find additional information on the Web at `http://www.ams.org/featured-reviews/`. Ultimately, the AMS is responsible to its membership. However, the Society can best serve its members when they let the leadership know how well its services, whether MathSciNet, "Featured Reviews", the *Notices*, or the *Bulletin*, meet their needs. I encourage readers who are concerned about these issues to make their views known.

—Mary Beth Ruskai
Associate Editor

Letters to the Editor

AMS and MAA Should Merge

The best suggestion I have heard in many years is to combine the AMS and the MAA. I support this merger 100% for the following reasons.

The AMS can legalize all of its union activities through the MAA. It can have its own union dues, union rag, and shop stewards. It can worry about unemployment, underemployment, non-national Ph.D.'s, minority counts, etc. And like all good unions, its members will all be entitled to a tenured job because they are union members, whether they want one or not.

It will place the K–12 union teachers in the same pot as their college counterparts who are complaining about the poor quality of teaching in the K–12 grades. It will give the K–12 teachers a chance to voice their complaints about the poor quality of instruction and examples they received in college. And this can all occur among their fellow union members.

The AMS would go back to the business of mathematics and delouse its publications of union flap. Even if the AMS's dues do not go down, at least the money would be in support of mathematics and not union issues.

—Dennis E. Harrison
Seattle, WA

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Handle Human Rights Abuses Even-Handedly

Though generally a fan of Allyn Jackson's writing in the *Notices*, I feel the need to criticize the selective political correctness in her report on the Berlin ICM (*Notices* **46** (1), pp. 39–42). While Hirzebruch had every right to address Germany's history in his Presidential Address, duly reported in the Jackson article, I have serious doubts about the closing paragraph of the article (which mentions China's human rights abuses in connection with the next ICM to be held in Beijing, as well as with abuses in Germany's past). I have yet to see a reference to American war crimes in Vietnam (or, for that matter, to the student killings at Kent, or to the widely criticized use of the death penalty, etc.) in either an announcement or a review of a mathematics conference held in the U.S. A similar point applies to all other former, present, or aspiring superpowers. The *Notices* should either systematically report on past or present human rights abuses in countries where mathematics conferences are held, or else it should refrain from doing so.

—N. P. Landsman
University of Amsterdam

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Textbooks Could Be Free

There has been considerable discussion in the *Notices* recently of journal prices and the related issue of textbook prices. Personally, I believe the issue of journal prices will ultimately be solved by the mathematical community's using the tools computers provide us to recapture the knowledge we produce and to make it as freely available as possible. That process has started, and while there are some problems, there is no way to stop it. There will be plausible arguments made along the way for the current system that is bankrupting our libraries, but in the end the obvious logic of "free theorems" will prevail. In the area of computer operating systems, the recent growth of Linux and other open source software has shown us the way.

As Richard Stallman has been telling us for years, there should be no property rights in knowledge. The same logic applies to textbooks. During my years of teaching I have written at least three complete texts which could be made available in electronic form for use by others. I am sure that I am far from unique and there are many such texts on disks. The TeX source for such texts should be made freely available, with the proviso that it not be diverted to commercial use. Students can either download such texts themselves, or they can be sold by the local copy shops, which provide course supplements at a fraction of the cost of a typical textbook.

Needless to say, there are excellent textbooks into which the authors have put considerable effort, so one may ask whether free textbooks will induce authors to perfect their texts in the same way. In fact, I think freely available texts will in the end evolve into much better texts. First, they can be freely revised by anyone, and the best current version need not have been created wholly by one person or a small group. Second, errors can be easily corrected as they are discovered. (One of my texts has probably been through at least ten revisions in fewer than ten years.) Third, no excellent text of limited marketability as determined by a publisher need ever "go out of print". I could go on, but I leave the other arguments to the reader.

—Leonard Evens
Northwestern University

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More about the March Cover

I enjoyed seeing Paolo Dominici's rendition of Barth's sixty-five node sextic surface, which appeared on the cover of the March *Notices*. This surface was first rendered by Stephan Endraß, who published a picture of it in the German counterpart of the AMS *Notices*, the *Mitteilungen der Deutsche Mathematiker-Vereinigung*, in October 1995. Those interested may find much more, including a rotating version of the same surface (as a movie) on the Endraß Web page, `http://www.Mathematik.Uni-Mainz.DE/~endrass/`, by clicking on "Surfaces with many nodes".

—David Jaffe
University of Nebraska–Lincoln

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Editor's Note: In addition, one may find an animation by Dominici, representing a flight through the sextic surface and going close to its double points, on the Barth Web page `http://www.mi.uni-erlangen.de/~barth`, by clicking on "Flight through the sextic".