

We mathematicians are losing the race.

I am furious! I am [expletive deleted] furious! While we believed we had succeeded — be it at considerable expense — in convincing all Wall Street analysts that it would be premature to be too explicit about the problems of the Hosannah Press, BUSINESS WEEK (of September 1, 1980) blew the gaff! And it did not do so in an inconspicuous comment, but it devoted a complete Special Report to the situation! Am I, as Chairman of the Board of Mathematics Inc., allowed to be furious?

Hosannah Press is a more or less independent daughter of ours, and flourishing she was! She published the well-known series "Better Mathematics for the Millions" at reasonable cost; she hired genuine mathematicians (from us) to provide the material, but the royalties (to us) used to be no more than 10% of the turnover. As I said, she was a fairly independent daughter, and that's the way it should be.

But things have changed. The first disturbance of the financial relations was caused by computerized typesetting, which significantly reduced the production costs of mathematical books (which used to be healthily high on account of all the formulae). The next assault came from Xerox

and all the Japanese copiers in its wake. But the complete distortion of the price balance came with the wide-spread acceptance of the microfiche!

The market is just enormous: on microfiche you can produce a book for about  $1/100$ th of the original price, and they are so small that a shelf can store a thousand times as many books. A booming new industry, you would expect.

Forget it! Our mathematicians are not keeping up with the advances in printing technology. From a physical point of view, a publication is now so cheap that royalties have risen to more than 90% of the total cost. With such a ridiculous price balance, the financial independence of our -in the meantime grown-up- daughter becomes, of course, a farce, and you cannot blame her for accusing us of lagging behind.

We have shown her representatives what measures we had taken, such as our ISAPS (Interactive Semi-Automatic Proof System) and even the more impressive TDF (Theory Development Facility). The first one enables an average mathematician to increase his proof productivity from 30 to 60 lines a month, the second one allows a mathematician with a minimum of skills to produce up to a 100 times as much text as he has keyed in.

But our daughter's representatives were not impressed at all. As one of them explained to us, we are only skimming the production process. For an effective cost reduction we need to design completely new axioms and inference rules, so natural and intuitively clear that even a child - not to mention the printer himself - can develop all the mathematics needed to fill the publications.

The only thing we could do was to promise humbly to our grown-up daughter that we would do our best. We asked her what she would do during the shortage of really cheap mathematics. "Don't worry, Daddy," she said, "I just allocate 50% of my expenses to marketing."

In a way it is quite rewarding to see that an important journal like BUSINESS WEEK devotes a Special Report to Mathematics Inc. Semper floreat et crescat!

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