A First Course in Operations Research

The lead March feature article about George Dantzig, on page 351, lists early courses in Operation Research. But in January–March 1956, I took a course in OR at Caltech, given by Samuel Karlin. He told us on the first day (January 4) that he thought it was probably the first-ever undergraduate course in OR.

Linear programming was one of the topics covered.

It is peculiar that Karlin’s name never appears in the article—for one thing, he left Caltech for Stanford in 1956, ten years before Dantzig (and Cottle) went to Stanford. I suppose that they knew one another, and I wonder why Karlin was omitted.

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(Received February 26, 2007)

Is JAMS Area-blind?

Ordinarily the solution to an important long-open problem is an occasion for celebration. One of the most famous problems in lattice theory is Dilworth’s half-century-old Congruence Lattice Problem, whether the congruence lattices of lattices are exactly the distributive algebraic lattices. In January 2006 Friedrich Wehrung submitted his 14-page solution to the Journal of the AMS. At a recent meeting of the full board the editors acknowledged the referees’ highest praise but rejected the paper for lack of “interaction with other areas of mathematics”.

Lattices arise naturally in many areas of mathematics and have been widely applied in computer science and elsewhere. The congruence lattices of algebras are algebraic (Birkhoff-Frink 1948), and all algebraic lattices so arise (Grätzer-Schmidt 1963). The congruence lattices of lattices are furthermore distributive (Funayama-Nakayama 1942); Dilworth showed in the 1940s that all finite distributive lattices so arise, subsequently extended by Huhn in 1985 to distributive algebraic lattices with \( \aleph_1 \) compact generators.

Wehrung refuted the general case with an application of Kuratowski’s little-known Free Set Theorem. In earlier work he had applied it to measure theory and K-theory, reminiscent of the versatility of Cohen’s forcing counterexamples in logic.

Judging from this rejection and the areas represented in recent JAMS volumes, the flagship journal of the AMS would appear to specialize in some areas at the expense of others. Whereas fully a quarter of its papers since its 1988 inception have been in algebraic geometry and number theory, some areas including lattice theory aren’t even on JAMS’s radar.

Yet JAMS’s masthead mission statement, “This journal is devoted to research articles of the highest quality in all areas of pure and applied mathematics,” implies that it is area-blind. JAMS could change the statement, but then what would the AMS be without a journal in which the leading results in all areas can compete on a level playing field?

On behalf of the area of lattice theory, the undersigned therefore petition the AMS to encourage JAMS to live up to its mission statement.

More information about the Congruence Lattice Problem and its solution can be found at http://clp.stanford.edu.

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(Received April 1, 2007)

Reply to Davey, Henriksen, Marković and Pratt

Submissions to JAMS are initially handled by individual editors, and only about 15 percent of the most promising manuscripts go to the full editorial board for a final decision. Wehrung’s paper was one of these, and the board—consisting at the time of the undersigned—certainly recognized the importance of his work. However we had to make some hard choices, even involving short papers like Wehrung’s. After considering the matter quite carefully, we finally decided not to accept the paper.

We would caution against trying to read too much into a single editorial decision. JAMS gets substantially more first-rate submissions than we are able to accept, and we end up declining many top-notch papers (often with glowing referee reports) in all areas of mathematics. We appreciate that there can be disagreement about the decisions involved in selecting among outstanding manuscripts. But we reaffirm that JAMS is committed to publishing highest-quality research across the full spectrum of mathematics.

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Correction

In the feature article on Oswald Veblen (Notices, May 2007), lines 4, 5, and 6 on page 617, column one, should read “Over the summer the Carnegie Corporation and Rockefeller Foundation awarded grants of US$60,000 and US$12,000, respectively”, not “Rockefeller Foundation and Carnegie Corporation” as printed.

—Steve Batterson