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SCHOLARLY JOURNALS

Librarians Seek to Block Merger Of Scientific Publishing Giants

Research librarians have asked the U.S. government to block one of the biggest ever science publishing mergers as part of a battle against spiraling subscription prices and the growing concentration of ownership of academic journals. Their target is the European journal giant Reed Elsevier, which last week announced that it will swallow American rival Harcourt General for $4.5 billion, creating a global company with more than 1500 journals, including a substantial fraction of all biomedical titles.

Company executives say the deal will improve efficiency and benefit consumers by bringing related titles under one roof. But librarians say that their experience with past mergers suggests that this one will drive up journal prices and reduce the flow of scholarly information. The planned union of Reed Elsevier and Harcourt "will have severe repercussions for libraries, researchers, and the public," predicts Duane Webster, executive director of the Association of Research Libraries in Washington, D.C., which represents 121 of the largest research collections in North America. "This transaction should be prevented," he wrote to U.S. Department of Justice regulators on 27 October, the day the deal was announced.

The current confrontation began in June, when Harcourt General—a $2 billion publishing empire based in Chestnut Hill, Massachusetts, that owns nearly 450 scientific and technical journals—announced that it was for sale. Its $700 million science, medical, and technical division includes several prominent presses, such as Academic Press and W. B. Saunders, that publish scores of highly cited titles, from *The Journal of Molecular Biology* to *Icarus*, a planetary science journal.

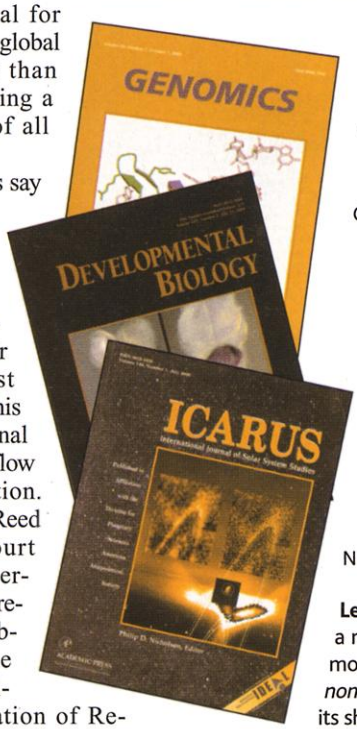
Attracted by the prospect of adding such thoroughbred titles to its existing $1 billion stable of 1100 journals, Reed Elsevier officials entered the bidding after forming an alliance with another rival, Toronto, Canada–based Thomson Corp. Under the pact, the two companies will carve up Harcourt, with Reed Elsevier getting Harcourt's journal and K–12 textbook divisions, and Thomson buying Harcourt's higher education and professional services businesses for $2 billion. "The strategic fit is excellent," Reed Elsevier CEO Crispin Davis said in a statement from London. "The combined businesses will have strong positioning across the entire scientific, technical, and medical spectrum."

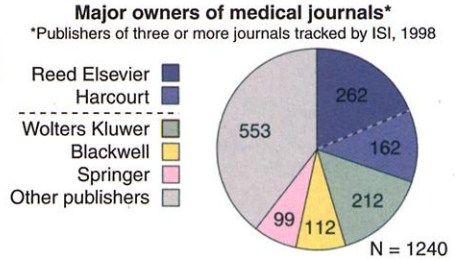
It's not known how U.S. or European antitrust regulators will view the deal. But although Reed Elsevier officials said they expect no serious opposition, Webster is pressing for a complete review. In the past 2 years, he notes, the number of major biomedical publishers has shrunk from 13 to eight. Another megamerger would "enhance the market power of the merging companies and significantly increase" prices, he predicts. Over the last decade, he suggests, consolidation has allowed commercial publishers to increase subscription prices far faster than the rate of inflation, prompting research libraries to trim subscriptions by 6% while spending 170% more on titles. The association wrote a similar letter to Justice officials in September after Harcourt put itself on the auction block.

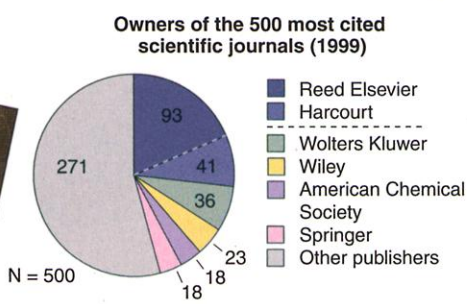
Webster's warning is backed up by research by Mark McCabe, an economist at the Georgia Institute of Technology in Atlanta, who analyzed publishing mergers while working for the government. In a recent paper analyzing the impact of two mergers on biomedical journal prices, McCabe found that subscription prices for Elsevier's new titles jumped by an average of 27% within a few years after its purchase of Pergamon Press in 1991. Similarly, Lippincott titles purchased by Kluwer the same year jumped by 30% over the same period. "Harcourt's titles could experience similar double-digit increases" under Reed Elsevier, McCabe predicts, particularly because Harcourt's journals are, on average, lower priced than Elsevier's.

Commercial publishers dispute McCabe's analysis, however. They say the increases stem from adding pages and color and improving editing and design, as well as rising printing costs and currency fluctuations. Some argue that further concentration in the industry may actually make burgeoning online databases—such as Reed Elsevier's Science Direct—more useful by giving computer users access to hundreds of titles at a time. "More journals under one umbrella can be easier and better for users," says one executive.

But McCabe believes regulators "should not let this deal pass without a careful second look." It appears to fail at least one traditional test of antitrust law, he says, by creating a company that controls more than one-third of a given market—in this case, the market for high-quality biomedical jour-







Leading the pack. Research librarians are opposing a merger that would give Reed Elsevier ownership of more than 1500 journals, including Harcourt's *Genomics*, *Developmental Biology*, and *Icarus*, and boost its share of biomedical titles and highly cited journals.

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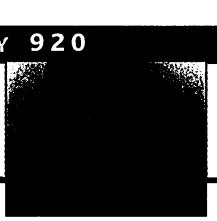

nals. By his count, the new company would own 424, or 34%, of 1240 mainstream biomedical journals tracked by the Institute for Scientific Information (ISI) in Philadelphia, Pennsylvania. Analysis by *Science* of other ISI data showed that the merger would also give Reed Elsevier 134 of the 500 most cited journals (see graphic).

If regulators do find an antitrust problem, Reed Elsevier may be forced to sell some journals, analysts say. But few of those contacted by *Science* believe that requirement would kill the deal—although European regulators did sink Reed Elsevier's last proposed megamerger, with Dutch giant Wolters Kluwer, in 1998. Any hint of trouble for this merger may not surface for months, however, as analysts predict the regulatory review could continue well into 2001. **–DAVID MALAKOFF**

U.K. MAD COW DISEASE

Report Flags Hazards Of Risk Assessment

LONDON—What happens when the premise underlying a scientific risk assessment is wrong and, as a result, the risk is vastly understated? In the case of so-called mad cow disease, or bovine spongiform encephalopathy (BSE), people die, an industry suffers, and a country panics.

Last week an independent panel issued its report (www.bse.org.uk) on how the British government has responded to a BSE outbreak over the past 15 years that has claimed 81 human lives and counting, led to the slaughter of 176,000 cattle, and cost the government $7.5 billion. The 16-volume report, written by a three-member panel chaired by senior appellate judge Lord Andrew Phillips, concluded that the practice of feeding cattle with the remains of dead cattle spread BSE "like a chain letter" through the British herd before anyone knew what was happening. It also describes how an incorrect assumption by a scientific panel of how BSE would behave played into a desire to assure the public that the health risks were negligible—with tragic consequences. "At the heart of the BSE story lies the question of how to handle hazard—a known hazard to cattle and an unknown hazard to humans," it says.

The panel rejects the original assumption that BSE derived from scrapie, a 200-year-old disease in sheep that is not transmitted to humans, and embraces the current view that BSE and its human variation, called variant Creutzfeldt-Jakob disease (vCJD), may have emerged in the 1970s from a genetic mutation that went unnoticed in a single cow. Although the report concludes that the crisis was unavoidable, it says that the epidemic could have been curbed with the swifter introduction of regulations intended to keep infected meat out of the human food chain. Phillips says a research "supremo" might also have helped to spot gaps in the scientific effort, including proposing "experiments to test the scrapie hypothesis origin."

Reactions to the report have been generally favorable. "By and large, the report's grasp of events and what drove people is about right," says Chris Bostock of the government's Spongiform Encephalopathy Advisory Committee, which will review the report. But some scientists worry that the government may be getting off too lightly. The report "looks exceedingly useful, but it's not aggressive enough," says Stephen Dealler, a microbiologist at Leeds General Hospital. Dealler is one of several scientists denied access to a clinical collection of brains from slaughtered cows held by the Ministry of Agriculture, Food, and Fisheries (MAFF). The report states that there should be open access to such material for researchers. A MAFF spokesperson says that the ministry is preparing a response to the report.

The Phillips panel, convened in January 1998, was asked by the government to establish the history of the emergence and identification of BSE and vCJD until 20 March 1996—when the British government announced that BSE might be transmissible to humans. The panel was also charged with assessing the adequacy of the government's response, "taking into account the state of knowledge at the time." The report concludes that the government took the right measures, such as excluding those parts of the carcass from the human food chain thought most likely to pose a risk of spreading infection across species, but that decisions were "not always taken in a timely fashion." For example, animal-feed traders misinterpreted a 5-week grace period to clear existing stocks of infectious material as an indication that the risk was low and, therefore, continued to sell the stock after the ban went into effect.

Nor were the best people recruited to give advice in the early days. "There were a number of people not only in this country, but in Switzerland and the U.S., who could have been approached and weren't," says panel member Malcolm Ferguson-Smith, a professor of clinical genetics at Cambridge University.

The policies were also undermined by politicians, policy-makers, and scientists playing down the BSE threat to humans. One key element was a 1989 report on the potential BSE risk to humans by a committee headed by Richard Southwood, a professor of zoology at the University of Oxford, that was based on the assumption that BSE was likely to behave like scrapie and not infect humans. Although Southwood's report said that the consequences could be very serious if that assumption were wrong, that message was rarely repeated in public utterances. "Those at the 'coal face' were getting the message that there was little risk of BSE spreading to people," says Ferguson-Smith.

Paper trail. The BSE inquiry took 33 months and resulted in a 16-volume report, which was delivered last week.

"So they were thinking, 'What does it matter if we chuck a bit from the carcass into the wrong bin and it is processed into human food.' "

In many ways, the BSE-vCJD picture is as murky today as it was when the British government first struggled to come to grips with the nightmarish outbreak. It's still far from certain, for example, how many people may succumb to vCJD, or even why BSE infects humans in the first place. The panel's

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