

tion, Should we give this guy more money? Who cares which Federal regulation it goes under?"

Buzzelli continues, "The fundamental question is, What actions by a scientist are so bad that the government should act to protect public funds?" The other-serious-deviations clause puts the judgment "squarely in the lap of the scientific community," he argues, and without it, scientists will lose the privilege of interpreting professional ethical standards. Despite his diehard defense of the other-serious-deviations

clause, Buzzelli fears it won't be included in OSTP's final guidelines.

Many university ombudsmen and others who deal with claims of scientific misconduct agree that not all problematic behavior fits under the FFP label. Nevertheless, they want to limit the legal definition of scientific misconduct. The point, says AAAS's Frankel, is that universities should show they can handle these matters effectively, "and the government should only intervene for a limited number of cases."

TONI FEDER

Anger Grows over Sale of Rare Books

Scholars are outraged over a British University's sale of rare math and physics texts, which they claim was hasty, secretive and unethical.

Last summer, Keele University, near Manchester, sold its Turner collection—1400 or so books and pamphlets that had been donated 30 years earlier by a civil servant named Charles W. Turner—plus about 200 related books that the university had added to the collection. The prize of the collection was eight books from Isaac Newton's library, with his markings and dog-eared corners pointing to specific passages, as well as a page of his lecture notes, handwritten in Latin, about rainbows, plus notes on ancient chronology on the back of the page.

The university sold the collection for £1 million (\$1.6 million). The campus library will use the money to buy undergraduate textbooks, to conserve special collections and to catalog and

digitize books, says Keele librarian Martin Phillips, who admits he is "not at all surprised" that people are riled about the sale.

The collection also included 16 incunabula (pre-1501) texts, among them six items bound together with wooden boards and a sheepskin spine; astronomical works by Johannes de Sacrobosco, including the first printed book to use more than two colors; and the first printing of Euclid's *Elements* (1482). Also in the collection were copies of the first three editions of Newton's *Principia*, and works by René Descartes, Johannes Kepler and Galileo Galilei. From the 18th and 19th centuries there were works by William Thomson (Lord Kelvin), James Clerk Maxwell, Hermann von Helmholtz, Augustin Louis Cauchy and others.

Lies, lies, lies

Word of the sale didn't get out until November, when John Denniss, a member of the British Society for the History of Mathematics (BSHM), asked to use the collection. Outrage among scientists, historians and librarians in the UK and abroad continues to grow as new details surrounding the sale emerge.

For example, despite the university's assurances that the buyer, "a major, anonymous, private" collector, would keep the collection intact and in the country for the "foreseeable future," at least one book has turned up at an auction in New York, and other titles have been spotted in a dealer's catalog. What's more, notes David Singmaster, a mathematician retired from London's South Bank University, applica-

tions have been made for export licenses, which are required for items valued above £39 600, for 11 Turner titles.

Says John Fauvel, a former BSHM president, "Keele's claim to have sold the collection to a private individual was a lie. Keele's claim that the collection would stay in the UK was a lie. Keele's claim that the collection would not be broken up is a lie. It's lies, lies, lies."

Critics of the sale are especially angry that Keele University didn't offer the collection to other public institutions in the UK. The university insists other public institutions wouldn't have bought the full collection, as they already own copies of many of the books, and that they couldn't have afforded it anyway. "More lies," counters Fauvel. "I and many others believe they made no inquiries. We have asked the librarians at the Royal Society, Trinity College at Cambridge"—which has the largest collection of Newton's works—"the British Library and so on, and none of them knew anything about the sale. They could have tried to raise the money. £1 million is not a big sum nowadays."

In fact, the university may not even have gotten a fair price for the collection, says Singmaster, noting that a first edition of Newton's *Principia* recently fetched £200 000. Furthermore, the university was forced to repay the British Library £10 000 for a grant it had received in 1988 to conserve books in the collection.

But what angers critics the most, says Fauvel, is that the university's "selling the collection, and not making sure that it goes to a similar kind of institution, is a total betrayal of Turner's trust. They may have had a legal right. But they certainly had no moral right."

In late February, the university senate, which last summer had voted narrowly against selling the collection, decided to launch an inquiry into the sale. Critics have also written to Chris Smith, the UK minister for culture, media and sport, urging him not to grant export licenses for Turner books. In the longer run, says Singmaster, "we would like to see the laws amended so that export decisions for items belonging to collections could not be considered singly."

Hugh Torrens, a Keele professor of the history of science and technology, wants to make sure that "other university authorities never act in this way again. No one should be allowed to make such sales with such speed and secrecy." Agrees Fauvel, "A public collection being turned into a private one shouldn't be tolerated without open discussion."

TONI FEDER



APRIL EMILIO SEGRE VISUAL ARCHIVES

THE FRONTISPICE OF GALILEO'S *Dialogue concerning the two chief world systems* (published in Florence, 1632), one of the books in the former Turner collection, depicts Aristotle, Ptolemy and Copernicus.