

key words, data, diagrams, or whole paragraphs of elucidation."

Gingerich's quest has also resulted in a better understanding of just how ineffectual was the attempt at Copernican suppression by the Catholic church. Annoyed by Galileo's polemics, the church in 1616 put Copernicus on the *Index of Prohibited Books*, "until suitably corrected." For the only time in its history, the Inquisition also spelled out the expected changes. About a dozen cosmological passages that sounded too much like laws and descriptions were to be changed so they seemed more hypothetical. However, Gingerich finds that few first editions have been censored, and most of these, according to his reconstruction for the year 1620, were in Italy. And the censorship clearly did not slow the Copernican revolution in Catholic countries such as Spain or France.

Today copies of Copernicus are again in demand, this time among investors and booksellers. A first edition goes for \$50,000. Back in 1934 it went for about \$800. And the price is expected to rise as potential buyers enter the market. Universities in Japan, for instance, have purchased three out of the last dozen copies put up for sale.

Potential profits have even tempted a nonowner. Gingerich this past summer was called in by the FBI as an expert witness in an investigation. A book had mysteriously shown up in a Washington, D.C., bookstore on consignment. The Franklin Institute in Philadelphia claimed it was one of several rare books that had been stolen. Gingerich, who early in his census had taken notes on the Franklin Copernicus, flew to Washington and met with the FBI at the bookshop. On the inside cover were two spaces that once held bookplates, just like the Franklin book. "It fit like lock and key," says Gingerich. "The shop owner said, 'Take it away, it's yours.' " The FBI is now holding the book until the case comes to trial.

Even after the abducted Copernicus goes back to the Franklin collection, Gingerich's quest will be anything but complete. He hopes other copies will materialize before he commits his census to print, an act of finality he has put off for years. He estimates the print run for the first Copernican edition at 400 to 500 copies. Some have perished over the centuries, but Gingerich feels certain there are copies that have eluded his grasp. "There may be as many as 50 of them out there," he said in an interview after his talk. "Every once in a while a new one unexpectedly shows up."

—WILLIAM J. BROAD

Einstein Papers Coming On

In the year since the legal trammels were removed, the project to publish the Einstein papers has made substantial progress, but still faces major financial and editorial questions. A manuscript for the first volume is expected to be completed in late 1983 and publication is scheduled for 1984. At the anticipated publication rate of a volume a year and an estimated total of 35 volumes for the complete edition, the project will run well into the next century.

A major issue, because Einstein wrote mostly in German, is the amount of English translation to be included. That point appears to be the most difficult one in negotiations between the project, based at Princeton University Press, and the National Science Foundation (NSF), which is regarded as the likeliest source of sustained support for the project.

The project was delayed for nearly a decade by a dispute between the press and the Einstein estate (*Science*, 17 July 1981, p. 309). A year ago the legal impediments were lifted and the way cleared to publication. Funds from the press and the Sloan Foundation enabled the papers editor, Boston University physics professor John Stachel, to keep going on preliminary work. This year, a private gift of \$1 million by Harold P. McGraw, a publishing executive and Princeton alumnus, provided an endowment for editorial work. Only part of the income from the gift is available for the project, however, since part is also used to maintain the principal because the funds are to be converted to an endowment for a Princeton professorship when the Einstein papers project is complete.

Prospects for long-term funding hinge on current negotiations with NSF. The foundation provided funds for the project in the early 1970's until the legal impasse developed; signs appear favorable for a resumption of support if details can be agreed on. The project application requests a grant of \$1.4 million over 5 years to fund editorial work—the press will pay publication costs. Since the NSF history and philosophy of science program is working under the tight budgets that prevail in federal agencies these days, it is unlikely that the project will get the full amount unless other divisions of NSF with an interest in the papers chip in.

Differences on translation remain the major snag. The project proposal to NSF calls for publication in the dominant languages of the papers—German and English—with other languages translated into English. A main argument against extensive English translation of the German text is Einstein's renown as a stylist in German. Stachel describes the Einstein style as "deceptively simple" and extremely difficult to translate well. Inclusion of extended English translations would increase the burden on the editors, delay publication, and increase costs.

The NSF view is that the published papers will be essentially a research tool and that a translation will make them more useful to the research community. As one NSF official put it, the question is which consideration should govern, the cost of the time of the translator or of the time of the researcher? Underlying, the NSF position is a recognition of the current linguistic limitations of U.S. scholars. What now seems probable is that NSF will agree to a 1-year grant to move the effort forward. The grant would include funds for a translation experiment to determine whether a satisfactory plan can be worked out. A longer term grant would presumably follow.

The planned first volume will contain the earliest material from the archive. The intention is to group the documents into two parallel series of volumes, with letters in one series and other documents in the second.

The status of the papers was affected early this year when the trustees of Einstein's literary estate transferred control to the ultimate heir under the will, Hebrew University in Jerusalem. The trustees were Otto Nathan, who had figured centrally in the dispute over the papers, and Helen Dukas, Einstein's long-time secretary. Miss Dukas died shortly after signing the transfer. The original archive, which has been lodged at the Institute for Advanced Study in Princeton, is expected to be shipped to Israel soon. The Princeton press and Hebrew University are now in a partnership which is said to be harmonious.—JOHN WALSH