## Einstein online

By Andrew Robinson

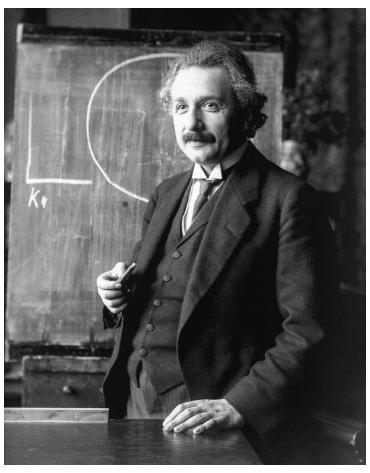
he goal of the Digital Einstein Papers is to provide free online access to The Collected Papers of Albert Einstein (1). This ongoing series of print archives currently consists of about 1000 writings, drafts, speeches, notebook and diary entries, lectures, notes, and calculations-both published and unpublished. It also contains Einstein's correspondence: some 12.500 letters written by him and some 16.500 letters written to him. Altogether, the collection contains about 30,000 unique documents, comprising a written legacy comparable in size to that Napoleon Bonaparte, twice that of Charles Darwin and Gottfried Leibniz, and several times that of Isaac Newton and Galileo Galilei, as noted by Diana Kormos Buchwald, the current director of the Einstein Papers Project, which publishes the print volumes (2).

While marveling at the scope, expert presentation, and astonishing accessibility of the newly digitized papers, I can't help but recall a comment by Einstein himself, who wrote the following aphorism to a friend in 1930: "To punish me for my contempt of authority, Fate has made me an authority myself (3)."

From the time he published the general theory of relativity in 1915, and especially after its astronomical corroboration in 1919, Einstein knew the historical value of even his casual jottings. Indeed, he donated the manuscript of his comprehensive exposition of general relativity to the Hebrew University of Jerusalem for the university's official opening in 1925.

The Collected Papers of Albert Einstein was launched in the United States in the

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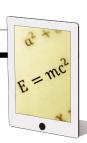


1980s in collaboration with the Albert Einstein Archives at the Hebrew University of Jerusalem. Originally based at Boston University, in 2000 the project moved to the California Institute of Technology, where Einstein worked as a visiting professor in the early 1930s. The first printed volume appeared in 1987. Today, there are 13 volumes, with companion volumes that contain English translations. The current collection spans Einstein's life and career up to 1923. A 14th volume will be published in the spring of 2015, and many more are promised. The forthcoming volumes will cover the last three decades of his life, which included his emigration from Germany to the United States, World War II, and the evolution of nuclear weapons.

Thus far, about 7000 pages, representing 2900 unique documents with dates up to 1923, have been digitized. The contents of each new printed volume will be added to

**The Digital Einstein Papers** 

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the online archive roughly 2 years after publication.

Navigating the site is easy and intuitive, whether you wish to read each volume like a printed book or go straight to a document listed in the contents page. Equally effortless is the advanced search facility, which permits the user to search a chosen volume or all 13 volumes for every reference to, say, "light quanta" or Einstein's close friend, physicist Paul Ehrenfest. Still more impressive is the way the documents are linked. At the click of the mouse, each document heading takes the user to either the original version or a highquality English translation, and hyperlinked footnotes take the user to the document's specific record at the Einstein Archives Online (4). In addition, documents can be printed out as hard copies. It is difficult to imagine what more could be required, even by the most specialized researcher. The new online archive seems to embody Einstein's celebrated remark

"Everything should be made as simple as possible, but not simpler."

But did Einstein actually say these words? If you search the archive with the phrase "as simple as possible," you obtain five results—none of which references this remark. In fact, it seems that no reliable source for it has been located by scholars (5). Perhaps it will be addressed in some authoritative, dismissive footnote of a future volume of *The Collected Papers*.

## REFERENCES AND NOTES

- The Collected Papers of Albert Einstein, www.einstein. caltech.edu/what/published.html.
- D. Kormos Buchwald, in A. Robinson, Einstein: A Hundred Years of Relativity (Abrams, New York, 2005; 2015), Afterword.
- 3. B. Hoffmann, *Albert Einstein: Creator and Rebel* (Viking, New York, 1972), p. 24.
- 4. Albert Einstein Archives, www.albert-einstein.org.
- 5. A. Calaprice, Ed., *The Ultimate Quotable Einstein* (Princeton Univ. Press, Princeton, NJ, 2013).

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