It's a Big Year for Einstein Memorabilia

But Academy Statue Project Arouses Criticism of Its Appropriateness and Style

The centennial of the birth of the century's most famous scientist, Albert Einstein, seems to be rolling over U.S. scientists with something like bearable force. But, before long, things could become worse. A remarkable range of celebrations, symposia, and memorials have been planned in the United States and abroad, from India to Israel, for the shy violinist who said that he never learned how to add, but who nonetheless revolutionized physics and astronomy.

But some of the commemorations have met with less than unanimous acclaim. In this category is a statue of Einstein which the National Academy of Sciences plans to unveil in April on its grounds near the Lincoln Memorial and the Mall in Washington, D.C. The project, which Academy sources say will cost $1.5 million to $1.8 million, has become a subject of some controversy among scientists and local artists, and is even the target of a move to stop it altogether.

The Academy's president, Philip Handler, who is largely responsible for the statue, says the monument will complement Washington's statuary collection of generals and presidents, and will remind the public of the importance of science to public life. Handler is raising funds nationally to make the statue a gift, as he is fond of saying, "from American scientists to the American people." Handler says that some 130,000 letters have been sent out since early December. Some $275,000 has been received and checks are coming in at a rate of 100 a day. Among the donors will be large companies such as IBM, but Handler explicitly does not want the Einstein statue to be the gift of a few big companies; he wants it to be supported by "a cross section of the scientific community and its friends."

Robert Berks, the Long Island sculptor who is now casting the seated figure of Einstein, says his monument will help interest the public in science. The large granite base will be near ground level on the Academy's lawn, and the seated figure's head will be 12 feet above the base. "Anyone can climb into his lap and sit with him," Berks says. The granite disk that anyone sitting on his lap will look down at will represent a sky with 2936 stars, which will be described in a legend. Berks says that "anyone with an astronomy book can sit there for hours and work out which star is which." Berks hopes to inspire young people: "You know, so many of our youngsters are turning away from science. . . . In the future youth can get inspiration from this work. They will look at the figure and know that this is the highest level of what the human mind can do, and think 'Well if he can do it, I can do it.' " (*Science*, 1 December 1978, p. 951).

Robert Berks's statue of Mary McLeod Bethune, black educator, in Lincoln Park.

Berks had been looking for a sponsor for the statue for years, apparently, and finally got the Academy commission through the offices of Senator Harrison Williams (D-N.J.), the powerful chairman of the Senate Labor and Public Welfare Committee. Williams also heads a subcommittee overseeing the National Endowment for the Arts, on whose council Berks served. Williams is also on the board of the Kennedy Center in Washington, D.C., for which Berks sculpted a huge head of the late President. Berks mentioned his wish to do a full-scale Einstein sculpture (he had done a bust of the scientist from life in 1953) to Williams, who sent his staff looking around Washington for available land, according to Albert Eisenberg, Williams's legislative aide. After contacting the General Services Administration, the federal procurement agency, the staff found that the Academy might be an interested sponsor. The project got under way, Eisenberg says, after a meeting between Williams, Berks, and Handler. Handler presented the idea to the Academy's governing council and showed them a small-scale model of the statue, and the council approved the loan, which the fund-raising campaign is now trying to pay back.

Asked whether the powerful senator was in the habit of helping out every sculptor who comes to him, Eisenberg said that monument projects are relatively rare. "We didn't say 'Please take this,' " Eisenberg says. "We said 'This is something you all might be interested in.' . . . Williams was just trying to do something nice." This sanguine view is not shared by other sculptors who do public monuments, such as Boston's Maria Pineda, who says that the Academy, like other major institutions, should have held a competition. And the Washington Project for the Arts has written to Handler saying he should have consulted a variety of sculptors before making a selection.

Congress was also enlisted to help the project when it was discovered that the Academy did not have title to all the land needed for the memorial; under some 50-

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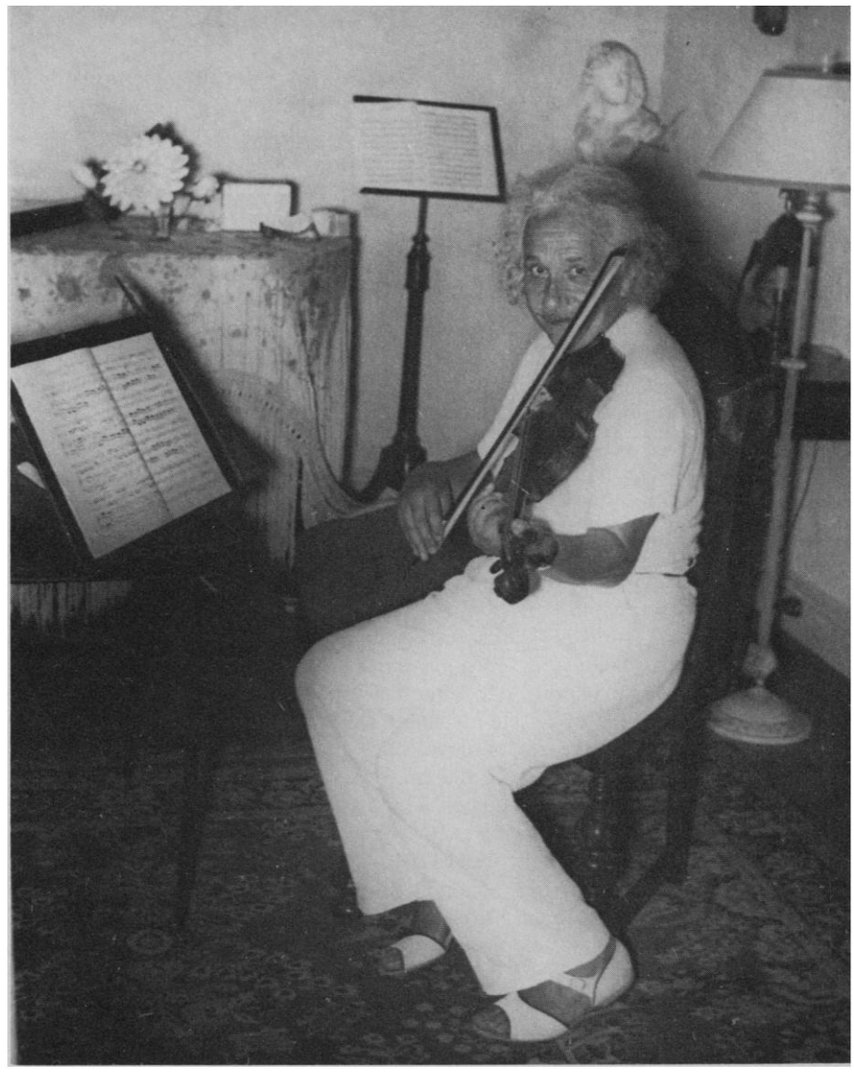
year-old arrangement, a piece of the city block on which the Academy stands and which it maintains as its grounds, legally belongs to the public. However, the Academy, with the aid of powerful Congressmen Phillip Burton (D-Calif.) and Senator Henry Jackson (D-Wash.), had a brief amendment tacked onto a major parks bill in the last Congress. It transferred title to the parcel to the Academy "to erect and maintain a memorial to Albert Einstein."

The project became a subject of heated controversy last December, starting with editorials in the *New York Times* and Washington *Post*, and some unfavorable art reviews. Criticism has also grown among scientists, and to a limited extent within the Academy. Esthetic objections to Berks's rough "bubble gum" style have prompted two Washington museums, one gallery, and the Washington Project for the Arts to write Handler calling the image "grotesquely ponderous," "pitifully misconceived," and a "monstrosity." "Certainly the National Academy of Sciences should have a searching mind instead of accepting a dull memorial," wrote the Protetch-McIntosh Gallery.

To boot, Handler's gift "from American scientists" clearly lacks the support or enthusiasm of some senior U.S. scientists. The scientists have been objecting on esthetic grounds too, but have also argued that the self-effacing Einstein, who used his great fame only for specific social causes, would not want to be made a graven idol of monument size. If a statue must be erected, they add, the Berks design is inappropriate: the star map has an astrological connotation and the pose—of a seated Einstein holding an open book of his formulas—makes him look stupid: "He's sitting there, staring at $E=mc^2$ as though he can't remember it," says one senior physicist at a major school. Moreover, the image, critics say, does not include any reference to Einstein's career of fighting against fascism, for peace, on behalf of refugees, and the like.

But in an ironic commentary on the statue controversy, some of the most prominent physicists, who even knew Einstein, would not let themselves be quoted by name as criticizing the statue because, as one said, "Phil [Handler] is not a guy who takes criticism lightly." A famous East Coast physicist who thinks the statue is "the worst piece of socialist realism outside the Iron Curtain" did not want to be quoted by name for fear of losing influence with Handler. A typical reaction came from the president of a major West Coast university, who also did not want to be quoted by name, and who was unenthusiastic about the statue. He said: "I'll probably end up sending some money but only because it's inevitable."



Albert Einstein [*Photo courtesy of Einstein Exhibit, Museum of History and Technology, Smithsonian Institution, Washington, D.C.*]

Paul Forman, curator of modern physics at the Smithsonian Institution, is going a step further and trying to get the statue project stopped. "So far as the Academy is concerned this is a terrible albatross which they are intending to drape around their own necks. In future years their successors will wince as they pass by it on the way to meetings. Handler will go down in the oral history of the Academy—because it won't be in the written history—as the man who saddled us with this dishonest piece," he says. Forman is contacting members of the Academy to hear their views and urge them to oppose completion of the statue.

Forman also contends that Berks's claim to have had some special connection to Einstein, because Einstein once praised his work, is not meaningful. Einstein posed for a great many artists and sculptors, Forman says, to the point that, once, in filling out a questionnaire that asked for his profession, Einstein jokingly wrote in: "Artists' Model."

All this criticism has statue proponents and sculptor Berks retorting in kind. Handler argues that the esthetic criticisms are made by people who do not like the Kennedy head, but that he believes the Einstein statue will resemble more Berks's statue of Mary McLeod Bethune, a black heroine, located in Lincoln Park on East Capitol Street in Washington. George S. Hammond, a former member of the Academy council, told *Science* that the argument that the $1.6 million could be better spent "can be made about any work of art. We [scientists] are miserly with our resources." The argument that Einstein would not have wanted the statue is irrelevant, Hammond says, because "We're doing this for ourselves." And Handler cites a letter of Pliny the Younger, who said that given the choice, one should erect a statue of a modest man rather than a boastful one. Berks, for his part, cites a quotation he says comes from

Einstein's own writings. "Of what is significant in one's own existence one is hardly aware. . . ."

Berks blames the wave of criticism on the art critic of the Washington *Post*, who started it all with unfavorable articles, although he didn't even stay through the slide show about the Einstein memorial that Berks gave for the Washington press. Berks told *Science* the monument compares to "the work of Michelangelo and the ancient Egyptians." Asked what statue in history it would most resemble, Berks said, "It will live as long as the Moses of Michelangelo." And he notes that the monument is designed to last 5000 years, past even the demise of human language. "I'll have the last laugh because the statue will outlast all these people."

Aside from the statue fuss, the 1979 centennial may see some movement in the long-developing effort to have the huge volume of Einstein's unpublished papers see the light of day. Since his death in 1955, some 21 file drawers of Einstein's papers have been kept at the Institute for Advanced Study in Princeton, where Einstein worked. The papers include unpublished scientific manuscripts, which could shed light on both his intellectual development and his relationship to contemporary science. Also important to the history of science is his correspondence with other major physicists including Max von Laue, Erwin Schrödinger, Max Planck, and Otto Stern. Historians of the 20th century might find interest in unpublished correspondence with Mahatma Gandhi, Jawaharlal Nehru, and Sigmund Freud, among others. And the material regarding the founding of Israel and the Hebrew University of Jerusalem will be of interest to scholars of Zionism. According to John Stachel, the editor of the collection, Einstein's biographers have barely drawn on this material; one reason being that the papers are only now being indexed and copied so that they can be accessed by scholars.

The papers are the property of the Einstein estate, whose executors, Otto Nathan and Helen Dukas, signed a contract in 1971 with Princeton University Press to publish them. Stachel was hired in 1976, and in 1977 the National Science Foundation awarded the first of two planning grants to pay for the copying and indexing.

But at the moment, it is not clear how the massive publication project will be funded. Experts say that to pull together such a collection could take 15 to 20 years and cost $100,000 to $200,000 a year. In other words, the project could cost $1.5 million to $4 million, and this, Princeton press chief Herbert Bailey says, would not include the cost of actually publishing the volumes, which could run another $1 million. At the moment, a private donor has endowed the job of the collection's editor, and the National Science Foundation is expecting to receive a formal proposal to fund the publishing project. But some people have suggested that private contributions during the centennial go to this "living monument" to Einstein.

The most comprehensive listings of other Einstein related activities—television shows, exhibits, films, symposia, and the like—have appeared in the *Chronicle of Higher Education* (11 December 1978, p. 9) and *Physics Today* (November 1978, p. 88). Significant among the many things planned in the United States and abroad is the Institute for Advanced Study's symposium from 4 to 9 March. This will involve celebrated scientists, particularly physicists, who will capitalize on the recent revival of interest in proving Einstein's theories. President Carter is expected to address the group, the Institute says.

The Institute is also sponsoring a traveling exhibit and film for the general public and is raising money to support young scientists and endow an Einstein chair, the sum needed for the latter being on the order of $1 million.

But the most sweeping intellectual effort will be at the Hebrew University in Jerusalem, from 14 to 23 March, where a star-studded cast of internationally known scholars will gather to discuss and evaluate Einstein's relationship to many aspects of the 20th century.

Psychologist Jean Piaget will discuss Einstein's influence on his field; and art expert Meyer Schapiro will talk on relativity in 20th-century art. There will be panels on Einstein in the context of the Germany of his time, and on his impact on Jewish thought and the Jewish world. Daniel Bell will talk on "The Shock of Uncertainty" and Nobel economist Kenneth J. Arrow will talk on "Physics as a Metaphor for Economics." A separate session will be devoted to Einstein and the nuclear age, which presumably will get into his championship of peace. There will be separate sessions on unified field theory, general relativity, theories of gravity, and quantum chromodynamics. So, while it may be hard to get through 1979 without stumbling across some meeting, book, exhibit, or other item or Einstein memorabilia, they all may remind us that in some ways Einstein's legacy *is* the 20th century.

—DEBORAH SHAPLEY

Chinese and Americans Similar in "Temperament"

Edward C. T. Chao, a China-born research geologist in the U.S. Geological Survey's office of energy resources, believes scientific cooperation will flourish between the United States and China, in part because he thinks Americans and Chinese show a marked "similarity of temperament."

Chao, who has made several trips to his native country since relations between the United States and China took a dramatic turn for the better in 1972, presented at the AAAS meeting in Houston a paper on the state of the geosciences in China and the prospects for cooperation between American and Chinese geoscientists. In his visits to Chinese universities and earth sciences institutes, Chao found his Chinese colleagues to be "frank, friendly, and at ease," and willing to discuss their work with him in a remarkably open manner.

Chao says the Chinese scientific delegations that have come to the United States have been similarly impressed by the friendliness and openness with which they have been received here. On the other hand, on visits to the Soviet Union, Chinese scientists have found the Russians "cold or indifferent, and not easy to get to know."

Chao came to the United States as an adult in 1945, at the close of World War II, while his parents remained in China (his father, aged 92, is still alive and Chao visited him last year in Peking). He had received a bachelor of science degree in 1941 from the National Associated University of China in Kunming and worked for the next several years for the Geological Survey of Szechwan Province. He did his graduate work at the University of Chicago and received his Ph.D. in 1948.

According to Chao, Chinese geoscientists are "very dominantly trained on the job," for advanced graduate training is not available at the Chinese universities. Of an estimated 800,000 Chinese engaged in geology-related activities, some 50,000 to 60,000 have had 3 to 5 years of professional training, although "very few" (probably less than 1 percent) have had formal training of the kind represented by

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