

. . . Those who reject the scientific "establishment" apparently share the contemporary conviction that social, economic, and political conditions can only be improved by radical change. Although I cannot agree to the abandonment of science because it "could be perverted and used for evil purposes," I cannot find fault with James Shapiro's decision to forsake a promising scientific career for activism consistent with such ideology.

I do find fault, however, with James K. Glassman's decision to abandon a career of accurate reporting with a number of misleading statements; for example: "The original site [of the Affiliated Hospitals Center] was abandoned, largely because of student protests that use of the site would mean displacement of 180 black families." The original plans for the Center were rejected because of serious financial problems, according to F. Stanton Deland, president of the board of trustees of the A.H.C. Those plans did require the removal of 180 units from the housing market, but less than half that number were occupied by families and few of those were black families. These and other relevant facts appear, among other places, in past issues of the *Harvard Crimson*, which Glassman obviously does not read although he was a Harvard student and it is the students' newspaper.

The land Harvard owns in Boston was not purchased for investment purposes but for the construction of health or educational facilities, and for student housing. Responsible officials of both Boston and Cambridge have urged Harvard to reduce its impact on the urban market by housing its own students. The Harvard Corporation, accordingly, committed itself to construction of 1100 units of new housing—including sufficient new housing to replace that on land to be used for the construction of modern health facilities. Some issues such as where the replacement housing will be constructed and what rents will be are unresolved. This is not to say, however, that officials are not discussing the appropriate issues with the residents of Harvard-owned housing.

Social problems are no longer only problems but often are made political issues. The politicalization of a problem can obstruct even the best efforts to seek rational solutions. Harvard is actively seeking to minimize its impact on Boston's crowded housing market. An effort of the size proposed must

include concern for the needs of many groups—married students, employees, and the community-at-large as well as the 180 tenants of Harvard-owned housing. Replacement housing is another issue and Harvard has placed the needs of present tenants above those of other groups. It is one thing for present residents to negotiate issues that affect only them; it is something else for one group to determine Harvard's total housing effort in Boston.

STEPHEN J. MILLER

*Office of the Dean,
Harvard Medical School, Boston,
Massachusetts 02115*

Esthetics of Asymmetry

In his alternate explanation of some studies regarding Trinity Chapel in Canterbury Cathedral, Barmore concluded that the deviation of the nave axis from the choir axis resulted from an error by the builder (7 Nov., p. 772), and stated that such errors are common even now: that the axis of the nave of Washington Cathedral deviates from the axis of the choir by about 2°.

The deviation of the Washington Cathedral nave axis from the choir axis was laid out by Philip Hubert Frohman, F.A.I.A., our cathedral architect who is still living. The deviation was created intentionally without the slightest degree of error and was done for esthetic reasons to enhance the visitor's view when entering the eventual west portal doors. It would be an insult to the George A. Fuller Company, builders of this cathedral since 1910, to think that their engineers had not the ability to lay out axis lines correctly. The offset of the nave axis to the choir axes is 1 in 48. This results in an angle of 1°11'38". When the center section of the west portal doors are built, their center point will be 5 feet 7 45/64 inches north of the projected axis of the choir.

Iconographers and clergy frequently like to assume that a broken axis in a cathedral represents the broken or hanging body of Christ from the cross. This has nothing to do with the fact in Washington Cathedral. The architect planned it to give, in his judgment, the best visual perspective and prevent the converging of lines at the east end of the cathedral, such as one sees on distant railroad tracks.

RICHARD T. FELLER

*Clerk of the Works, Washington
Cathedral, Washington, D.C. 20016*

Defense of Science

Weinberg, in his article "In defense of science" (9 Jan., p. 141), refers to scientific muckrakers as journalists who "see corruption in the scientific-political system" and suggests that "it would be more accurate to say their sensibilities are hurt by the existence of a scientific politics."

In deciding what is "accurate" surely it will not suffice to raise issues of "corruption," "self-service," and "venality" without addressing them seriously. In deciding what is accurate it is pertinent to ponder the results (1) of a survey of "Scientists' Views on Ethics and Responsibilities" conducted in 1967 among AAAS members by an ad hoc study group under the chairmanship of Anatol Rapaport. This survey showed strong support for a code of ethics and responsibility for practicing scientists, analogous to codes which govern some other professions (medicine and law). Specifically there was very strong support for the creation of procedures to deal with cases of alleged plagiarism.

A valid "defense of science" requires special objectivity in collecting and weighing evidence which is allegedly adverse to the scientific community, and a vigorous implementation of solutions to bona fide internal problems. Shouldn't this be one of the first of the responsibilities for social engineering to which Weinberg says scientists and technologists should address themselves?

What has happened to the AAAS ad hoc study group which did the "Study of Scientists' Views on Ethics and Responsibilities"? What is being done to implement the findings? When do we start?

LAWRENCE CRANBERG

*Department of Physics,
University of Virginia,
Charlottesville 22903*

Reference

1. L. Cranberg, *Bull. At. Sci.* 24, 39 (1968).

Latin America: Bedeviled Science

Nussenzweig in "Migration of scientists from Latin America" (26 Sept., p. 1328) has presented a discouraging picture of the technical and political problems of research and teaching in Latin America. I participated in the First Latin American Solid State Physics Institute in January 1969 and was able to visit a number of Latin American