Letters

English Ivy

It is ironic that it should fall to my lot as a graduate of both Harvard and Cambridge to have to remind Eric Hutchinson ("Politics and higher education," 27 Nov. 1964, p. 1139) that the school President Kennedy drew most heavily from for his cabinet was not Harvard, but Oxford.

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Air Pollution and the Decay of Monuments

Pack's enlightening article "Meteorology of air pollution" (27 Nov. 1964, p. 1119) is of great importance to the geologist engaged in research on the durability of structural and monumental stone in differently corrosive atmospheres. The firing and open venting of fossil fuels in humid and semihumid climates have caused millions of tons of corrosive substances to be blown into the air. These soon return to the ground through rain washout or dry fallout near the sources of pollution and inflict devastating damage to stone in urban areas, where the rate of stone decay is doubled or tripled under prevailing adverse atmospheric conditions.

The existing classification of the corrosiveness of an atmosphere for the stone industry or the metal corrosion engineer is relative and inadequate. "Urban," "heavy industrial," "suburban," "marine," and the like are the qualitative terms presently in use. The Prevention of Deterioration Center of the National Academy of Sciences–National Research Council, as well as the stone industry, will urgently need accurate data on rates of weathering in various environmental conditions. For the researcher, the corrosiveness of an atmosphere should be expressed with index numbers computed by the meteorologist from a number of important variables—annual precipitation rate, *p*H of rainwater, rainwater temperature, raindrop size, concentration of active ions in rainwater, and others. An accurate prediction of rates of stone decay or metal corrosion for various regions depends on these variables. The stone consultant will remain in the dark as long as the corrosiveness of the atmosphere cannot be determined on a quantitative scale. Meteorologists have put computers to use for weather forecasting. Perhaps the computer could be used also to handle the large number of variables for the calculation of the "corrosiveness index."

This is another example of an interdisciplinary project, in which various earth sciences should cooperate. The geologist and the meteorologist could save our monuments from premature decay by the proper selection of stone for given local atmospheric conditions.

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Assumption

"All genes do not act all the time, as was *assumed* before recent work" is *Science*'s caption to Littau's autoradiograph of calf thymus nuclei (20 Nov. 1964, p. 1077; emphasis added). This is an unhappy elision of history. In *Embryology and Genetics* (Columbia Univ. Press, 1934), T. H. Morgan explicitly considered the view that "different batteries of genes come into action as development proceeds," and that the activity of genes could be affected by protoplasmic regions about them.

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Galileo: Falsified Record

A recent article by R. E. Gibson ("Our heritage from Galileo Galilei," 18 Sept. 1964, p. 1271) and letters in response to it (20 Nov. 1964, p. 997) reflect an erroneous impression which it is important to correct—that is, that in 1616 Galileo was officially forbidden to "hold, teach, or defend" his condemned doctrine. Let me quote from the Wilkins Lecture, 1964, by G. de Santillana, as published in *Proceedings of the Royal Society, Series A*, August 1964, p. 448:

> The trouble is, that the famous injunction was a forgery: a false record carefully planted by the Inquisitors in their secret file, in case it might come in handy. It did. Galileo had never dreamed of it, and that explains why he did not ask the Pope for explicit clearance before he raised the dangerous subject again. The forgery, or rather the plant, has been proved beyond doubt by historical research over a century, and the best proof is that when I published the findings in systematic form in 1955, not one authorized voice was raised to contradict me, although a fascinating amount of evasive action was taken since that time.

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Several recent letters concerning Galileo and the Church (20 Nov., p. 998; 1 Jan., p. 8) have referred to Arthur Koestler's article in the London *Observer* of 2 February 1964. For the benefit of those on this side of the Atlantic who do not have ready access to this source, let me suggest the October-November 1964 issue of *The Critic*, which carries the same article, entitled "The greatest scandal in Christendom." *The Critic* is published by the Thomas More Association, 210 West Madison Street, Chicago, Illinois.

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"Cancer Virus" Feared

. . . In my practice I am beginning to find nurses, nurse's aides, and relatives more hesitant about handling or touching the cancer patient because they are already convinced, from newspaper reports, that cancer is caused by a virus, and they know viruses are "catching." Let the eager-beaver cancer experts hold their enthusiasm for fame and glory in check. Or let them at least make clear that contact with a cancer patient is as likely to give a nurse cancer as putting her finger into hot butter or walking barefoot on a macadam road. . . .

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