Letters

Outrageous Writing Enrages Editors

Woodford's article, "Sounder thinking through clearer writing" (12 May, p. 743), points up a problem which I, and many others in corresponding positions elsewhere, have faced. As editors of scientific journals, we are all too well aware of the abominable writing in the articles we publish. The problem is: What can we do about it? There simply is not time to rewrite every paper (even if I were sure of being able to do so without distorting the meaning in many cases). Nor is there time to carry on the correspondence it would take to get authors to do the job themselves. There is nothing that outrages a scientist more than to wound his pride of style. He will accept being told that his work is wrong, at least if the error is explicitly demonstrated; he will even accept some criticism of presentation, in broad respects; but he will roar with anguish if he is told that his writing is simply bad.

I am delighted to know that someone somewhere is actually attacking the problem where some progress may be made. I only wish there were more like him.

GEORGE L. TRIGG
Physical Review Letters,
Brookhaven National Laboratory,
Upton, Long Island, New York 11973

. . . One trend [in writing] is the use of the passive voice. The third person passive voice in a report not only sounds pompous (and hence impressive), but it also allows the writer to duck personal responsibility in case of an unfavorable result. "The malfunction of the rocket was caused by an incorrect programming sequence," for example, is a statement that almost makes the destruction of an expensive piece of machinery seem like an act of God rather than the result of somebody's error. Examples of sliding responsibility by employing the third person passive are by no means limited to the aerospace field. . . . I would urge that a simple composition course be given to science and engineering students during their last semester before graduation, and that they be graded unmercifully (not on a curve), and that the result count heavily in the determination of the student's final standing. If this seems a bit harsh, let me offer the observation that sometimes drastic surgery is necessary to remove a malignant growth.

STEPHEN A. KALLIS, JR.
112 Central Street,
Acton, Massachusetts 01720

Woodford says of the "scientific scholarly" author:

> He takes what should be lively, inspiring, and beautiful and, in an attempt to make it seem dignified, chokes it to death with stately abstract nouns; next, in the name of scientific impartiality, he fits it with a complete set of passive constructions to drain away any remaining life's blood or excitement; then he embalms the remains in molasses of polysyllable, wraps the corpse in an impenetrable veil of vogue words, and buries the stiff old mummy with much pomp and circumstance in the most distinguished journal that will take it. Considered either as a piece of scholarly work or as a vehicle of communication, the product is appalling.

What a splendid piece of technicolor prose! The imagery has no relation to the subject under discussion; the first sentence will unquestionably win the all-*Science* distance title for volume 156, and—best of all—the newly-choked corpse of literary turns into a mummy and then a vehicle within two lines. Woodford deserves plaudits for digging out such a ripe example, but *Science* has made it appear as a part of his own text—indeed, some might conclude that he had written it *himself.* At the very least, *Science* owes the community of scientists who depend on scientific editors some reassurance that this is not so. It is always worrisome to think that one's idols have feet of clay wrapped in an impenetrable veil of vogue words.

DONALD KENNEDY
Department of Biological Sciences,
Stanford University,
Stanford, California 94305

In itself Woodford's article is lively and lucid—I have seldom read a more delightful extended metaphor than the description of the fate of a paper in the hands of the "scientific scholarly" writer—its thesis is sound and exceedingly important. . . .

RUTH N. SCHWEBKE
Department of Plant Pathology,
University of Wisconsin, Madison 53706

Human Genes and Open Spaces

Iltis (Letters, 5 May) likes open spaces, wild mountains, clean lakes, flowers, and spring songbirds. Whatever made him believe that I appreciate these things any less than he does? In "Changing man" (27 Jan., p. 409) I wrote that "we must certainly prefer an adaptedness to the present environments, not to those long defunct," and this seems to me a reasonable preference. Does Iltis wish mankind to abandon its industrial civilization, go back to a hunting and gathering economy, live in caves or lean-tos? This could not be done even if it were desirable. The point of no return was passed long ago. Therefore, we have to seek adaptation of our genes to our civilization, and of our civilization to our genes. And let us by all means conserve and protect as much of nature's beauty and of open spaces as the vital needs of the increasing human populations permit.

THEODOSIUS DOBZHANSKY
Rockefeller University,
New York 10021

Most of us must sympathize with the petulance voiced by Iltis at the undesirable side-effects of the population explosion (Letters, 5 May). Some of his arguments, however, are not well selected.

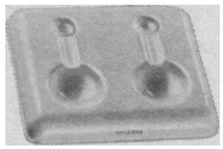
It is true that in driving along the New Jersey Turnpike or the Bayshore Freeway one is confronted with ecological devastations. Nevertheless, a few miles north of the Turnpike, mallards build their nests on Sourland Mountain. A short distance to the south are the marvelous wild flowers of the New Jersey Pine Barrens, as described by the *New York Walk Book*, where "miles of impenetrable swamps and boggy expanses present vistas more like those of the tropics than of a northern state, as well as opportunities for getting lost" (*1*).

Iltis predicts, among other things, that

SPECIFY NALGENE LABWARE

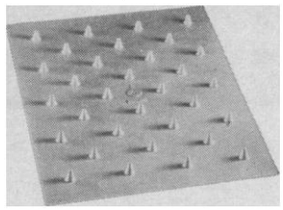
UNBREAKABLE NALGENE® LABORATORY AIDS...

DROPPING BOTTLES. 15-250 ml sizes. Specially designed top for dispensing liquids by the drop. Dispenser is an integral part of closure.



SPOT PLATE. Molded of high-impact polystyrene. Two 0.1 ml and 1.0 ml test wells connected by shallow trough. Applications include spot testing for pH, chlorine; soil tests, agglutinations. Best for field use.

UNITARY DROPPER. One-piece molded of F.D.A.-approved polyethylene. Non-wetting material, rounded tip and bellows-type bulb provide excellent drop formation. 25-30 drops per ml.



PROTECTIVE DRAWER INSERT. Protects glassware from breakage yet doesn't waste drawer space. 14" x 18"; can be easily cut to fit any drawer.

Specify Nalgene Labware from your lab supply dealer. Ask for our 1967 Catalog or write Dept. 2107, Nalgene Labware Division, Rochester, N.Y. 14602.

NALGE
NITTER PFAUDLER CORPORATION

the music of Beethoven will soon be an incomprehensible curiosity. If there is one thing that our age of electronic technology has done, it is to bring the symphonies of Beethoven to new millions of people, whose enjoyment shows no signs of abatement. Iltis finds cacophony in the music of Roger Sessions. But 150 years ago, the music critics objected to the dissonances in Beethoven's First Symphony, until 10 years later the turbulent music of the *Eroica* produced a new wave of complaints by other critics who then said that the earlier First Symphony was a model of formal excellence. Is it possible that these critics of Beethoven were the prototypes of Iltis?

Iltis doubts whether Dobzhansky remembers "what it was like to walk the dunes in solitude or to swim in the ocean." One might get a better idea of Dobzhansky's familiarity with solitude by attempting to retrace the remote montane journeys made by that redoubtable pursuer of *Drosophila pseudoobscura.*

THOMAS H. JUKES
Space Sciences Laboratory,
University of California, Berkeley 94720

Reference

1. R. H. Torrey, F. Place, Jr., R. L. Dickinson, *New York Walk Book* (American Geographical Society, New York, ed. 3, 1951), p. 301.

Can Aldabra Be Protected?

The proposed establishment of a joint U.S.–British communications center on the island of Aldabra between the northern tip of Madagascar and the African mainland demands that United States biologists act promptly under the auspices of the International Biological Program (see Revelle's editorial, 24 Feb., p. 957). This island is a veritable zoological curiosity shop which should be preserved in its natural state. The 60-square-mile (155.4 km^2) atoll is virtually a living natural history museum, the home of an almost extinct giant land tortoise (*Testudo gigantea*) and of rare birds such as the red-footed booby and the flightless rail.

As long ago as 1871 Charles Darwin and others became involved in a similar (and successful) effort to prevent commercial development on the island. It is only one of two locations in the world where these great land tortoises still exist. In addition, about 10 percent of the approximately 170 species of plants on the island are found nowhere else.

Apparently the British and American governments want this island for a radio and tracking station, serviced by a 9000-foot (2.74-km) landing strip. Only about 100 people currently inhabit the island—certainly a fraction of the number that would arrive with the development of the communications center. It should be possible to locate these facilities elsewhere, either by contract with mainland nations, such as Tanganyika, or with the island of Madagascar, or on other islands to the east. It is suggested that the National Academy of Sciences join the Royal Society in Britain (which has already started to work on this problem) in urging their governments to select another site. While these negotiations may require unusually complicated international scientific cooperation, they would be worth every effort if the unique fauna and flora of this island are to be protected.

DONALD J. ZINN
Department of Zoology,
University of Rhode Island,
Kingston 02881

Rite of Penitence

Ethical problems involved in animal research have been discussed in *Science* from time to time. You might, therefore, be interested in the following item from *The Korea Times*, Seoul, Korea, of 30 May 1967:

A memorial service will be observed today at the National Institute of Health for animals killed in a series of medical experiments. Before the tombs of the animals, Buddhist monks will recite sutras and a celebrant will burn incense and offer wine, while the officials of the institute pay tribute to the memory of the animals. The service for the animals, according to Dr. Yu Il-pyong, director of the animal division, is aimed at assuaging the officials' sense of penitence over killing "innocent animals" rather than to console the dead animals.

"The workers here seemed to think that, by holding a memorial service, they can convince themselves they did not kill the animals out of malicious intention," said Dr. Yu.

The National Institute of Health, located in Pulgwangdong, conducts medical experiments on about 50,000 animals a year. Some are used to get preventive medicine and others for curative medicine.

JOHN W. MCCRARY
300 North Washington Street,
Alexandria, Virginia 22314