

# Letters

## Human Suffering in Vietnam

Like the earlier article by Tschirley (21 Feb. 1969, p. 779), the article by Orians and Pfeiffer on "Ecological effects of the war in Vietnam" (1 May, p. 544) emphasizes the corrosive effects of defoliation on the ecology of Vietnam while mentioning only in passing the effects on Vietnamese society. A more reasonable ordering of priorities when evaluating the effects of the massive application of herbicides in Vietnam is: what are the health hazards to exposed people, what is the impact on their lives, what are the long-range effects on the Vietnamese society, and finally, what is the effect on the ecology. . . .

Only one paragraph is devoted to the crop destruction program, a program which has to date, as acknowledged by the Department of Defense, laid waste to over half a million acres, or about 10 percent of the arable land. (Other independent estimates give a much higher figure.) The impact of this deliberate spraying . . . on the Vietnamese society is enormous. People are forced to abandon their ruined fields and seek food in so-called "refugee camps" and cities. Orians and Pfeiffer note that Saigon has mushroomed from a city of 250,000 to one of 3 million, with a tremendous increase in the number of motorized vehicles, creating an air pollution problem in Saigon. Surely this is not to the point. . . .

The defoliation program is in large part purposefully directed against the rural population of South Vietnam. Donald Hornig, President Johnson's Science Advisor, has been quoted as saying, "it's all geared to moving people." Why move them? Samuel Huntington, an influential government adviser and former Chairman of the Council on Vietnamese Studies of the Southeast Asia Development Advisory Group, wrote in *Foreign Affairs* (July 1968): "When the direct application of theoretical and conventional powers takes place on such a massive scale as to produce a massive migration from countryside to city, the basic assump-

tions underlying the Maoist doctrine of revolutionary war no longer operate." Thus, people from the countryside are being driven into the cities and "refugee camps" where they can be more easily controlled. We are witnessing not only the deliberate destruction of the environment but also the deliberate destruction of a society.

The mistaken emphasis is reflected in the authors' recommendations. They urge the AAAS to begin studies of its own on the ecological effects of defoliation. A far better recommendation would be for the AAAS to extend the 30 December 1969 resolution calling for cessation of the use of the herbicides 2,4-D and 2,4,5-T to include the use of all herbicides in war and to form a committee to press for this end. . . .

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## "Political Rights" in Brazil

In "Migration of scientists from Latin America" (26 Sept., p. 1328), Nussenzweig analyzed South America's brain drain, including the spurious reasons often given for the dismissal of scientists in Brazil which often masked a personal vendetta. The Brazilian government has again divested itself of the services of some distinguished scientists. Early in April, it issued a decree depriving ten biologists of their "political rights" and forced them into retirement from their positions at the Instituto Oswaldo Cruz, the renowned institute for research in tropical medicine and hygiene. These scientists represented specialties in physiology, mycology, helminthology, and entomology. Some are internationally recognized authorities and have been at the institute for most of their professional

lives. As far as I know, all are intensely patriotic, like most Brazilians, but if they want to continue their work, it will probably be necessary for them to leave their country. They are Tito Cavalcanti, Masao Goto, Herman Lent, Domingos Machado, Haity Moussatché, Sebastião José de Oliveira, Augusto Cid de Melo Perissé, Hugo de Souza Lopes, Fernando Braga Ubatuba, and Moacyr Vaz de Andrade.

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## College Grades:

### Predictors of What?

Although I am sympathetic to and supportive of the points Kirk makes in his letter (9 Jan.) regarding black students and college success, I must comment on his statement that "college grades are poor predictors of anything in postcollegiate biographies."

The idea that college grades are unrelated to anything in "real life" seems to be a permanent fixture in the mythology of academia, despite overwhelming evidence to the contrary. To be sure, the correlations are not as high as those between entrance tests and grades, but indications of a positive relationship are nonetheless clear. To cite an older study, Havemann and West (1), in a survey of college graduates of all ages, noted that those who had been A students tended to earn more than those who had earned B's, who in turn earned more than those who had earned C's and D's. The difference between A students and the others was particularly marked, especially in science, medicine, and law. A more recent study was conducted by Oden (2), who classified members of Terman's gifted group (who were then in their 50's) according to a number of success-oriented characteristics and selected a "most successful" and a "least successful" group for further investigation. There were many interesting and significant differences between the two groups, but the one that is relevant here is that the most successful group had a much higher percentage of A students and had been awarded far more academic honors than the least successful.

College professors are, after all, only one category of a great many people

who evaluate and pass judgment on an individual's performance during his lifetime. If the study of personality has shown anything at all it is that people are more consistent than otherwise, and it is hardly surprising that the kind of success we display in coping with the problems we encounter during college tends to be characteristic of the success we have in other areas. There are many individual instances of uneven and inconsistent performance, of course, but they tend to attract notice because they are unusual. The general trend, however, is toward a general consistency in individual performance which is in turn reflected by consistencies in the way different judges, official and otherwise, evaluate the same individual's performance. This tends to be true irrespective of whether the judges are teachers, employers, workers, casual acquaintances, one's family, or even one's students. This basic consistency in behavior of both the evaluated and his evaluators shows up in positive correlations among measures of such variables as grades, leadership, social adjustment, and general problem-solving ability.

The fact that behavior tends to be consistent does not mean that it cannot be changed, but rather that changes do not occur very readily. It is a major function of education to bring about desirable changes, and our failures may be in a large part due to our reluctance to attain a more meaningful understanding of the phenomena we are trying to modify.

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#### References

1. E. Havemann and P. S. West, *They Went to College* (Harcourt Brace, New York, 1952), p. 160.
2. M. H. Oden, *Genet. Psychol. Monogr.* 77, 3 (1968).

### Langmuir's Seeding of Hurricanes

References to early attempts at modifying a hurricane by cloud seeding, such as those of Gentry ("Hurricane Debbie modification experiments, August 1969," 24 Apr., p. 473), are incomplete without mention of Irving Langmuir's seeding of a Florida hurricane on 13 October 1947, several hundred miles off the East Coast. In describing this experiment in 1948, he said, "The main thing that we learned

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