

SCIENCE

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LETTERS

Psychological Matters

Psychologists search *Science* regularly hoping to find articles about the scientific study of behavior. It was thus a pleasure to find the Editor himself dialoging so knowledgeably with Dr. Noitall about psychological matters ("The attractiveness of gloom," Editorial, 17 Jan., p. 265).

Even in frivolity, however, it is important to get the facts straight. Dr. Noitall says that "evolution has provided *Homo sapiens* with an unconditioned reflex that automatically blames the people one has despised all along." There is no such unconditioned reflex. The described reaction, while assuredly psychological, is a learned phenomenon, much more complex than even a conditioned reflex, and is amenable to empirical investigation. Scientific study is needed on the behavioral development and occurrence of hostility and aggression. One hopes that *Science* will be an ever more hospitable place for publication of such research.

Another serious point, inspired by the genuine humor of the editorial: Dr. Noitall responds to the happy observation that life expectancy continues to increase, as a benefit of disease control, with the prediction that among gloom and doom people "panic will spread through the population when they read about the epidemic of deaths through natural causes." The fact is that as death by disease diminishes, through public health, biomedical, and technological advances, death and debility particularly among the young increase proportionately from accidents, suicide, homicide, excessive drinking, drug-taking, and dangerous sexual practices. Behavioral misadventures now exceed all diseases combined as the cause of death in young people, at least to age 35. Behavioral science—psychological studies—can show us how they happen, to whom they happen, what the developmental and behavioral mechanisms are whereby these life events take place, and what interventions may successfully impede their occurrence.

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I am stunned to hear that blaming the people one has despised all along is a learned response rather than an unconditioned reflex. It is the first mistake I have made since second grade. I apologize to Dr.

Lipsitt and to all psychologists and will lobby to get more behavioral science into *Science*.—**Apologetically, Noitall**

Education Resources

Philip H. Abelson's editorial about the role of the National Science Foundation's Energy Research Centers (ERCs) program in improving our nation's competitiveness (7 Feb., p. 661) should increase the awareness of the benefits of cooperative industry, government, and university programs. The success of the ERCs should help to bring down the institutional and cultural barriers that separate these sectors, an essential step toward improved competitiveness.

However, focusing on universities alone as the educational instrument to improve competitiveness is not sufficient. The National Science Foundation and the Department of Education funded a study that reported that U.S. schoolchildren ranked among the lowest in the world in science and math skills (1). If we expect to be competitive in the future, a program similar to the ERCs that focuses on improving elementary and high school science and math education is also needed.

The House Committee on Education and Labor and the House Committee on Science, Space, and Technology are addressing this issue legislatively. Do the science, technology, and education communities recognize the importance of a commitment of scarce resources to this area?

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REFERENCES

1. *Learning Science: The Second International Assessment of Educational Progress* (Educational Testing Service, Princeton, NJ, 1992); *Learning Mathematics: The Second International Assessment of Educational Progress* (Educational Testing Service, Princeton, NJ, 1992).

Tuberculosis Rebounding

Obviously, with stentorian comments such as "There are no good molecular biologists left in the area" and "all the good biochemistry on