Letters

Enigmas of Violence

"Violence and man's struggle to adapt" by Gilula and Daniels (25 Apr., p. 396) gives an informative survey of the psychology and sociology of violence, but we note a lack of emphasis on the neurophysiologic aspects of violent behavior in man. Our work with organic correlates of behavior, ranging from minimal brain dysfunction to temporal lobe epilepsy, has shown that assaultive or destructive actions are often the result of poor biological controls superimposed upon psychosocial situations. To be sure, such actions are "maladaptive," but we regard this term as bypassing the more thorough study of the aggressive individuals from the neurological, genetic, and psychiatric point of view.

We find two problems in most sociologic or philosophic discussions of human "violence." One is the lumping of personal, social, and political behaviors. The other is the implicit assumption that one is discussing individuals with unimpaired adaptive potential, whereas, at least 10 and probably 20 million Americans have impaired brain function which limits their potential to "understand, channel, and redirect aggressive energies."

The authors place emphasis on assassination. Assassins generate much attention, but we note no reference to the vast numbers of potentially violent individuals housed within our prisons —individuals who have done and will do far more harm to society than the assassin. To be sure, actions of criminals can be considered to represent poor "adjustment" or "coping behavior." Yet such terminology obscures the careful, meticulous, and scientific study of the man who cannot cope, adjust, or adapt. With respect to the topic of violence and mental illness, we draw to the authors' attention the equally large number of violence-prone patients who voluntarily seek psychiatric attention and who tend to receive global labels such as "psychopath" or "sociopath," labels that detract from adequate evaluation and management.

Certainly we cannot disagree with the authors' conclusions that violence is anachronistic and destructive. Without commenting on the obstacles to removing violence from society, we do make a plea that the brain of man be a proper study of mankind's violence—at least as far as individual acts of violence are concerned.

JOHN R. LION
GEORGE BACH-Y-RITA
FRANK R. ERVIN
Department of Psychiatry,
Massachusetts General Hospital,
Fruit Street, Boston 02114

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The article is a fine example of the confusion between science and morals, rhetoric and reality, so typical of modern psychiatry. Two illustrations should suffice.

1) The authors say that "Violence is destructive aggression. . . ." They do not say *who defines* what is "destructive"—and what is "constructive" or "self-defensive"—aggression. Yet most debates on this subject revolve around precisely this issue of *legitimization.* Indeed, our judgment of the principal professional activity of psychiatrists depends on it: Are involuntary psychiatric interventions (that is, the "diagnosis," "hospitalization," and "treatment" of individuals against their will) special instances of medical care, or the typical manifestations of psychiatric violence? Those who favor these practices support the former view, whereas those who oppose them support the latter.

2) The authors assert that "All assassination attempts but one were made by individuals who were seriously disturbed or even paranoid schizophrenics." In this connection, we must keep in mind that (i) many leading contemporary psychiatrists maintain that a criminal act is itself the symptom of mental illness; (ii) 1200 American psychiatrists, many of them prominent professors and practitioners, have diagnosed Senator Barry Goldwater as mentally ill, some attributing the specific diagnosis of paranoia or paranoid schizophrenia to him; and, (iii) over the years, psychiatrists have diagnosed every prominent historical figure—from Job to Hitler, from Jesus to Lyndon B. Johnson—as afflicted with one or another type of mental illness. In view of this, it is hardly surprising that most American psychiatrists regard the assassin of an American president or presidential candidate as "mentally ill." Were they to do otherwise—indeed, were they to declare him "mentally healthy"—they would call into question the meaning and function of involuntary psychiatric interventions, and hence the meaning and function of their own social role.

THOMAS S. SZASZ
Department of Psychiatry,
State University of New York,
750 East Adams Street, Syracuse 13210

Why was it necessary to introduce a subject that is purely political in nature and, in my estimation, foreign to the main thesis—the section on firearms control? Furthermore, it appears that the authors are improperly using this article as a means of giving publicity to their point of view.

They cite certain figures and statistics. Where did they come from? Are these data unbiased and reasonably true? For example, they claim that "more than two-thirds of the American people continue to favor stronger gun-control legislation." To prove this, they cite themselves! It is my contention that no one really knows the true state of affairs concerning firearms, that no true, honest poll has ever been taken. I challenge the whole picture as presented. . . .

PAUL E. SNYDER
4400 Centre Avenue,
Pittsburgh, Pennsylvania 15213

As the authors say, arguments on this subject have been ideological and emotional; and selected statistics have been used to make invalid inferences. Yet their own article suffers from the same problems, as shown by their use of Bakal's polemic, *No Right to Bear Arms* as a source of statistics. The original data are easily available in the annual *Uniform Crime Reports* (*1*) and in Wolfgang's *Patterns in Criminal*

Homicide (*2*). In my opinion, they do not support, and largely refute, the argument for stronger legislation. Discussion of the nature, enforceability, and probable effects of such legislation are perhaps out of place in *Science*, but I submit that the opposition case is much stronger than was presented. In view of FBI statistics showing that 82 percent of offenders were repeaters with an average of 6 arrests, 3 convictions, and 2 imprisonments, and of Wolfgang's finding that two-thirds of the killers in his study had previous arrest records, it appears that the problem of criminal violence can best be met by appropriate treatment of the relatively small number of known offenders. Such proposals would meet little objection, and would be far more efficient than attempts to regulate the entire population, most of whom are not and never will be killers.

DENZEL L. DYER
3401 West Broadway,
Hawthorne, California 90250

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Objectivity in the Courts

Walsh's comments (25 Apr., p. 411) concerning university faculty ties with industry and conflict of interest problems were most interesting. Maintaining a neutral status and a posture of objectivity is a most difficult task for today's university applied scientist or engineer. His talents are useful to both industry and government.

Universities normally accept faculty involvement in consulting, so long as it does not lead to erosion of academic performance, because they feel it contributes to rather than detracts from the individual's performance. The faculty member keeps up to date as a result of his contact with the "real" world and the students gain through their exposure to a teacher whose skills have been kept keen through use. The university in turn benefits through such contacts and the quality of the education it can offer.

When the faculty member is called upon to apply his expertise to an issue involving a government-industry confrontation, he can still make an "objective" contribution as a member of a state or federal commission or study group. But he may lose his objectivity and acquire the identification of an "industry" or "government" man if he has to testify in court or in regulatory proceedings. Whether real or imaginary, this identification remains with him. In the Santa Barbara case the state officials are requesting faculty members to appear at advocacy proceedings. Those faculty members who testify *for* the state may enter the courtroom as objective witnesses, but they will leave as advocates of a position. In fact, even if they do perform objectively, there is some question as to whether or not they have provided the service for which they have been paid.

The "public service" obligation of engineers or scientists working in universities supported by public funds raises a question. I note that California did not wish to use petroleum engineers from their own state agencies because "these men suffer from a reverse conflict of interest, since, as state employees, their objectivity would not seem as irreproachable in a courtroom as that of their university colleagues." Is it not likely that faculty members appearing on behalf of the state as part of their obligations as state university employees would soon be considered to be lacking objectivity as are all other employees of state agencies?

To my mind, under current circumstances, if industry or government wishes objective university faculty members, it cannot also expect them to appear on their behalf in the courts or at any hearings which involve personal advocacy.

JOHN J. SCHANZ, JR.
Industrial Economics Division,
University of Denver,
Denver, Colorado 80210

Slippery Water in Fire Hoses

All of us with Rand in New York City appreciated Etzioni's calling attention to our work as an example of what can be done for the cities ("Agency for technological development for domestic programs," 4 Apr., p. 43). Unfortunately, the specific work by Rand which he cited is mythical. We have *not* "found that in responding to a fire alarm it is more efficient to send, first, a jeep with a few firemen." In the New York *Times* (29 Apr. 1968), it is true, Peter Szanton was quoted as mentioning this unusual procedure—one that in related forms has been used in small western towns and in some European cities. But as the *Times* story made clear, he described its application to New York City not as a finding, but as "only an idea that is still germinating and far from ready for application."

In contrast, we can point to one recent example of successful technological innovation in fire protection. On 13 May, New York City's fire department demonstrated "slippery water"—water containing minute quantities of a special chemical that enables it to flow through fire hoses with far less resistance. In conventional hoses it will permit the delivery of large volumes of water over greater distances. Or, where needed, it will permit the use of a smaller, less bulky hose, allowing fire fighters to climb stairs and reach remote locations more rapidly. Edward Blum, leader of Rand's New York fire project, initiated this idea. It is now being developed and adapted by the fire department, helped by Rand and the corporation producing this chemical, Union Carbide. In this regard, one of Etzioni's arguments is most pertinent. Although New York is paying for this R & D, cities everywhere will be able to benefit from it. Until some means is created whereby all users of such research can share the costs, New York and other pioneering cities will be bearing a disproportionate burden.

DOUGLAS SCOTT
Rand Corporation,
545 Madison Avenue, New York 10022

What To Expect

Seabury's review of Michael's book, *The Unprepared Society* (4 Apr., p. 58), indicates that future Americans may expect "fatal air invasions over New York City." Our country already spends a disproportionate amount on military defense, while the fight against environmental deterioration is meagerly financed. Most Americans I think realize that "fatal air inversions" are much more likely than "fatal air invasions," but for those who do not comprehend the tragedy of resources allocated for arms rather than air, the confusion ought not to be multiplied by typographical errors.

DAVID R. MOUW
Department of Physiology,
University of Michigan,
Ann Arbor 48105