

## Study of Terrorism Emerging as an International Endeavor

*West Berlin.* The past decade has been pocked with frequent and often highly dramatic episodes of political terrorism. In addition to the steady background of bombings and indiscriminate murders carried out by nationalist groups, there has been a handful of international terrorist actions, colossal in their viciousness and daring, that have stimulated awareness of terrorism as truly a global problem. Two such incidents occurred in the same year—1972—when Japanese gunmen shot up Israel's Lod Airport at the behest of the Palestine Liberation Organization, and later when Palestinians took Israeli athletes hostage during the Olympic games in Munich, resulting in the slaughter of 11 Israelis.

Since then, Western democratic governments have stepped up their efforts to develop systematic methods of dealing with terrorism. Meanwhile, academics have spawned what has been termed a "vast cottage industry" devoted to the study of the political, social, and psychological causes and effects of terrorism.

Terrorism conferences are becoming increasingly frequent. In 1977, Evian, France, was the setting for the first conference of its kind: a gathering of academics and government officials to map out research strategies for better management of terrorist threats and proper handling of situations—hostage-taking and skyjacking—where many lives depend on the sort of strategy that the officials in charge adopt.

Last month West Berlin was the setting for Evian's successor—the "international scientific conference on terrorism." This may have been the first major multidisciplinary conference devoted not to strategies for dealing with terrorism but to investigating its causes, particularly the factors causing the upsurge of terrorist groups in advanced industrialized democracies, principally Germany, Italy, and Japan in the 1970's.

The meeting, financed by the West Berlin and German governments with help from the Volkswagen Foundation, probably had its main value in bringing together people who otherwise rarely cross each other's paths. Of the 60 participants from eight countries, most of them Germans and Americans, more

than one-quarter were psychologists and psychiatrists. There were government officials, including Canada's man in charge of police and domestic intelligence and the State Department's terrorism chief Anthony Quainton. There were men from the U.S. Secret Service, the Federal Bureau of Investigation, and the New York City police department.

Considering the range of persons in attendance, it is hardly surprising that no new consensus was reached; indeed the "open session" for public and press held at the end of the conference featured many of the same generalities put forth in the press conference held at the beginning, which attracted about 60 reporters.

Although the press was excluded from the goings-on in between—not so much for security reasons but because the sessions would otherwise have been inundated by German reporters seeking to feed the huge public appetite for terrorism news—it was possible to get an impression of how academics are trying to get a grip on this hydra-headed subject.

The participants, who were divided into five task forces, took two basic approaches in looking for causes of terrorism. One focus was on the psychology of individuals who become terrorists, a subject that has received little attention in writings about terrorism; the other was on social and cultural factors that seem to breed terrorism.

It has been much debated whether there is such a thing as a "terrorist personality." One version of this concept was vigorously advanced by two American psychiatrists, David Hubbard, who heads his own Aberrant Behavior Center in Dallas (Hubbard is well known for his book profiling American skyjackers), and F. Gentry Harris of Marin County, California. They have concluded that most terrorists probably suffer from faulty vestibular functions in the middle ear. (This, by the way, has also been advanced as a factor in the etiology of schizophrenia.) They reason that a person with such a problem—which affects balance and causes dizziness and other symptoms—can very likely suffer stunted interpersonal development, fail to develop normal relationships, become an

outcast, and engage in various compensatory and attention-getting behaviors that could culminate in terrorist activity. Harris, who says "I'm more and more convinced of organic problems," explained to *Science* that he, Hubbard, and a number of other professionals around the world belong to an informal "consortium for the study of coercive aberrant behavior," whose members have examined 80 imprisoned (non-skyjacker) terrorists in 11 countries. He says "strong similarities" have been evident in the personalities of the terrorists—they are typically obsessed with notoriety, sovereignty, and martyrdom—and "85 to 90 percent gave clear clinical evidence of vestibular abnormality." Such abnormality, he says, is manifested through such indicators as a history of learning to walk late, dizzy spells, visual problems, and general clumsiness.

Another psychiatrist advanced the idea that most terrorists will be found to have suffered from inconsistent mothering. Adolphe Jonas, an American who heads the Institute of Sociobiological Medicine in London, contends that bad mothering interferes with a child's normal social development and results in an individual who is emotionally numb or "turned off" and suffers from a constant state of "dysphoria," which is relieved only by extreme stimulation ranging from drug-taking to acts of vandalism and cruelty, suicidal gestures, and in some cases terrorism.

Taking yet another tack was British author Jillian Becker, author of a book on German terrorists called *Hilter's Children?* Becker said her interviews with terrorists gave no support to the bad mothering theory although she did find that terrorists were "primarily out to satisfy their own emotional needs." She portrayed Ulrike Meinhof of the Baader-Meinhof gang as an idealist "inclined to seize on the views of those she wanted to be loved by" and attributed gang member Gudrun Ensslin's fanaticism in part to having been brought up in a Swabian pietist family excessively moralistic and intolerant. She found the urge to martyrdom to be universal, and quoted "Carlos," mastermind of the hijacking of oil ministers from the OPEC meeting in Vienna, as telling Iran's oil minister Yamani, "I want to be a hero."

The Americans at the conference generally seemed more intrigued with personality theories than were the Germans, who seem far more preoccupied with trying to figure out why their society breeds terrorist groups. For example, Wilfried Rasch, a forensic psychiatrist at Berlin's Free University, perceived Ger-



*Richard Löwenthal, political science professor at the Free University; Berlin's secretary for science and research Peter Glotz; and Robert Kupperman of the U.S. Arms Control and Disarmament Agency preside at opening press conference in Berlin's Hotel Kempinski.*

man terrorists more as frustrated idealists than as cases in pathology. Rasch was the psychiatrist appointed by the court to examine four members of the Baader-Meinhof gang to see if they were fit to stand trial. He told *Science* that he found them to be "intelligent," even "humorous," and displaying no symptoms of psychosis or neurosis, and "no particular personality type." His opinion was that "they all started out with a serious social commitment, and not to become great terrorists." He felt that overreaction on the part of the public and press to their early forays caused them to feel compelled to live up to their image by engaging in ever more violent acts.

The Germans' inclination to look for the problems in society rather than in the individuals was reflected in a speech by Peter Glotz, West Berlin's secretary for science and research. Calling terrorism "the most burning of burning problems" in his country, he related it to the peculiar discontents of formerly authoritarian societies, in which loss of traditional values combined with headlong materialism has ostensibly created a lost generation of young people disgusted with their elders and lacking outlets for their idealistic impulses. ("There is no place for idealism in this country," said Rasch.) Terrorism has become a stimulus for a good deal of German introspection—Glotz, who decried the "structural violence" of society, characterized terrorism as "but a distorted image of this society." He claimed that today's youth sensed itself to be the "superfluous generation without perspective or hope for the future." Richard Löwenthal, a prominent professor at the Free University, enlarged on these themes, expressing the belief that terrorism reflected nothing less than "a crisis of Western civilization."

But a wide consensus could not be

formed even around such broad generalizations as these. Indeed, some views were diametrically opposed. Bowyer Bell of Columbia University, for example, clearly did not fall in with the Glotz-Löwenthal view. According to Bell, "contemporary 'terrorism' is an indication of transnational security, order, and prosperity, and the improbability of general war." Bell further contended that "an efficient democracy without a nationalist problem does not have a terrorist problem." That takes care of England (which has a nationalist problem) and Italy (which is not an efficient democracy), but as another participant noted, Germany by any reasonable definition is an efficient democracy.

There seemed to be general agreement that there is no entity that can be labeled a "terrorist personality," but otherwise it is not clear whether there was any point in investigating terrorists' psyches at all. As Israeli psychologist Ariel Merari pointed out, "It seems that the identification of typical personality characteristics of terrorists has only one clear value. . . . That is in negotiating with terrorists in bargaining situations such as kidnapping and barricade-hostage incidents." And in such situations, of course, knowledge about the particular individual involved is far more relevant than any composite generalizations.

With so little agreed on, it is not surprising that prognostications hardly rose above the level of speculation. Some participants felt that terrorism has been vastly overrated and that we are already witnessing the decline of the terrorist era, at least in Germany. Others, such as historian Brian Jenkins of Rand Corporation, saw a big future for terrorism, which he characterized as having become "an established mode of conflict." Jenkins said that international ties among terrorist groups are increasing and predicted the emergence of a cadre

of "free-lance" terrorists who go into it as a way of life rather than for ideological reasons. He went so far as to suggest that terrorism may become a form of "surrogate warfare" among nations.

It is currently fashionable to predict the imminent advent of an era of nuclear terrorism. But this was pooh-poohed by several participants. A scenario of wide-scale human destruction by terrorists is the sort of thing that is thought up "in the MIT faculty lounge," says Bowyer Bell. It is not in the interests of terrorists to alienate potential sympathizers by killing a lot of people; besides, making a big bomb or, to take another scenario, poisoning a city water supply is a very difficult technical and logistical undertaking.

One of the few points on which there did appear to be considerable agreement was the need to investigate further the "dynamics" of terrorist groups. Indeed, to an onlooker deprived of access to the working sessions, one of the clearest impressions was that modern terrorism is very much a group phenomenon and that terrorist activities are catalyzed not so much by "terrorist personalities" as by a particular combination of personalities. Lone assassins (or would-be assassins) and lone hijackers, at least those seen in the United States over the past 15 years, do not fit into the terrorist mold. Psychiatrists have characterized these people as failures who move on the fringes of society and who are too unstable—and often psychotic—to be accepted into a terrorist group. Several people have posited that it takes the convergence of three types of people to make a terrorist group—the charismatic leader, or ideologue, who supplies the intellectual rationale and cohesive personal force; the psychopathic personality, whose motivations fit more in the criminal than the political mold and who has no qualms about treating others as objects; and the follower, a socially marginal individual who discovers purpose and identity in being part of the group and is willing to carry out orders. The first two types were clearly evident in the Baader-Meinhof gang, with journalist Ulrike Meinhof supplying the ideology and Andreas Baader, by all accounts a manipulative individual with vicious tastes, the criminal element.

Brian Jenkins noted that terrorist groups have much in common with some of the religious groups that have been springing up (an observation made just before the world heard about the Jonestown massacre): They have in common charismatic leaders and a "millennialist" view of the world (in one case, a reli-

gious hereafter, in the other, a political utopia). Members are eager to subsume their identities to the cause to the point where they are attracted to the idea of sacrificing their lives for it. Such groups deliberately isolate themselves from the rest of the world, which is a very effective way of encouraging paranoia and solidifying the group's belief in the reality it has created for itself.

Adding interest to terrorism as a group phenomenon is the fact that almost all modern terrorist groups come from the less oppressed strata of society. Even historically, Walter Laqueur has written, "they are elitists, contemptuous of the masses, believing in the historical mission of a tiny minority."

A paper prepared in 1976 by the U.S. Air Force lends weight to this generalization with sociological data collected on more than 350 terrorists in 18 organizations from Latin America, the Middle East, Europe, and Asia. The authors found that terrorists were typically in their early 20's, urban, and from the upper middle class. Two-thirds of them had some university training, mainly in the humanities, social sciences, law, and medicine. Terrorists were usually recruited in the universities, where they were first exposed to Marxism. The authors quoted a saying that there was a Tupamaro for every upper-class Uruguayan family. The only group that did not conform to this profile was the Irish Republican Army, which is mainly a working-class movement and is also the only movement lacking significant participation of women.

The involvement of women is clearly a phenomenon worthy of more examination. It has often been represented as an "aberrant" extension of feminist movements. Jonas, at the conference, offered an alternative, sociobiological explanation—that primate females can become very violent when defending their young, and perhaps female terrorists shed ordinary inhibitions against violence for the parallel purpose of protecting the "oppressed."

The "science" of terrorism—compared by Laqueur to the science of chemistry in the 17th century—has a long way to go. Much information has been gathered on the mechanisms of terrorism—the organization, financing, tactics, and communications—but there is little knowledge available to be put to practical use. So far, all we have learned is "how to solve yesterday's problems," is the cheerless assessment of Robert Kupperman, chief scientist at the Arms Control and Disarmament Agency who compares terrorist groups to fast-mutat-

ing organisms that are always a step ahead of the latest antibiotics.

The field may have a more predictable future than terrorism itself. A new international journal, *Terrorism*, made its appearance last year. The American Psychiatric Association has a new task force on terrorism. And behavioral scientists have a new organization to encourage

political investigations—the International Association of Political Psychology, which held its first meeting in September.

So whether terrorism is on the wane or whether it is on the way to becoming the surrogate warfare of the future, study of the problem, abetted by the active interest of governments everywhere, can be expected to thrive.—CONSTANCE HOLDEN

## OSHA Carcinogen Policy Delayed

Laboratory researchers apprehensively awaiting announcement of a federal policy on occupational exposure to carcinogenic chemicals have several more months to bite their nails. The policy, expected from the Occupational Safety and Health Administration (OSHA) by 1 January, has been delayed, probably until March. The agency, however, appears to have already tipped its hand on the issue of greatest interest to academic researchers: whether or not academic and other labs will be exempt from the policy, which has been criticized as costly and unfairly burdensome (*Science*, 3 November). The verdict, if the agency's own review of the criticism is to be believed, is that a blanket exemption will not be granted, but special exceptions may be allowed on a chemical-by-chemical basis. The war, it seems, has been lost, but the battle won.

The review of the criticism appears in a "regulatory analysis" of the OSHA proposal prepared by OSHA officials for the public hearing record. It was prepared under an agreement between OSHA and the inflation fighters in the White House Council on Wage and Price Stability (CWPS) that some estimate of the total cost of the policy would be calculated. The report, along with a rebuttal by CWPS, was released on the hearing's closing date, prompting the chemical industry to get the hearing record reopened for a final say and leading to the delay in the policy's announcement.

OSHA has contended all along that the cancer policy would in essence impose no costs peculiar to itself, since the normal process of standard-setting for carcinogens would merely be accelerated. As a result, the "regulatory analysis" deals with many issues besides cost, and among them is the question of an exemption for labs. Two ways to exempt labs and other users of small quantities of hazardous chemicals are available, the analysis says. One is to establish an action level, usually a fraction of the permissible level of exposure to a chemical, which if never exceeded in a lab would exempt the lab from most provisions of the policy, such as continuous air monitoring. Another possibility is to set a "percentage exclusion" level, which would enable labs that handle small concentrations of hazardous chemicals in mixtures to escape the policy's requirements. Neither was "proposed as part of the cancer policy because the Agency believes they may not be appropriate in all cases of carcinogen regulation," the analysis says.

Both forms of exemption can be considered in the hearings on the separate categories into which each chemical must be placed, however (confirmed carcinogen, suspected carcinogen, and not a carcinogen), where there is an opportunity for public comment; OSHA's analysis indicates that the agency will in fact be amenable to such exemptions when warranted. "In many cases, imposing continuing measurement obligations where exposure levels are very low taxes the limit of reliable measurement and diverts resources from other efforts while providing little additional reduction in exposure," the agency acknowledges. Noting the comments received from laboratory researchers along these lines, the agency nevertheless concludes that "these issues are particularly suited for resolution in individual substance proceedings," raising doubts, of course, about whether OSHA has actually saved any work for itself by proceeding with the broad standard: each controversial issue laid over to the separate hearings on each chemical diminishes the usefulness of setting the broad policy.—R. JEFFREY SMITH