

of puzzles about the human mind. *The Mating Mind* will clearly stimulate thinking across a wide range of topics that are woven together under the rubric of sexual selection in humans. We will find it increasingly difficult to ignore the power of mate choice, a subset of Darwin's second theory, that is perhaps equally as important as natural selection for understanding how behavior evolves.

BOOKS: SECURITY POLICY

Terrorists and Toxins

John T. Finn

"Great men, great nations, have not been boasters and buffoons, but perceivers of the terror of life, and have manned themselves to face it." When Emerson wrote these words, he probably did not have chemical and biological terrorism (CBT) in mind, but policymakers concerned with the issue today would do well to heed his advice. The most effective preparations for CBT will be based on a realistic appreciation of the threat.

The United States has invested heavily in preparedness for CBT since the Aum Shinrikyo cult released sarin in the Tokyo subway in March 1995. But preparations have been centered on worst-case scenarios. Planners have focused on the staggering vulnerability of civilian populations to CBT while neglecting to assess the actual threat given the motivational and operational constraints on terrorists, such as the ideology, resources, and organizational structure needed to perpetrate CBT.

Toxic Terror provides a much-needed perspective by examining 12 terrorist groups and individuals that have allegedly acquired or used chemical or biological agents since World War II. Through their case-studies approach, the authors seek to ascertain the who, why, and how of CBT—the types of people and organizations that have attempted such attacks, their purpose in doing so, and their means of acquiring and delivering toxic agents—with the aim of contributing to an empirical basis for cost-effective preparedness.

Perhaps the most striking finding is that incidents of CBT have been infrequent and have caused relatively few casualties. Although the cases examined were chosen because they have been often cited in the liter-

ature on terrorism, only three involve groups that were successful. In 1946, "Avenging Israel's Blood," a group of Jewish Holocaust survivors, sought revenge by lacing with arsenic the bread of German prisoners of war. Over two thousand became ill, but it is not known whether any died. In 1984, the Rajneeshee cult used *Salmonella* bacteria to contaminate salad bars in an Oregon town in a plot to influence a local election. Hundreds were sickened, but no one died. And in 1995, the Japanese cult Aum Shinrikyo released sarin to delay an imminent police raid on its headquarters. Twelve were killed and more than a thousand injured. Significantly, these successful attacks employed low-tech means of delivery. Even Aum Shinrikyo, despite its vast financial resources and team of university-trained scientists, apparently failed to cause casualties in previous more-sophisticated attacks that involved aerosol dispersal of anthrax bacteria and botulinum toxin.

Four of the often-cited cases turn out to be apocryphal: no chemical or biological agents were sought, acquired, or used. This emphasizes the need to examine primary sources before accepting the authenticity of an incident. For example, the story of the Weather Underground's alleged 1970 attempt to obtain toxic agents from the U.S. Army's biological research facility at Fort Detrick, Maryland, originated in a *Washington Post* column that was never corroborated. Similarly, the allegation that sodium cyanide was incorporated in the 1993 World Trade Center bomb was based on an apparently spurious statement by a judge. Yet scholars of terrorism have cited one another in reference to these cases for

years, a phenomenon that one of the authors calls "incestuous inter-quote."

Another important finding is that CBT has been a diverse phenomenon. Objectives have ranged from assassination of federal tax officials (Minnesota Patriots Council, 1991) to extermination of most of humanity in order to repopulate Earth with a select few (the R.I.S.E. group in Chicago, 1972). Intended methods have ranged from spraying botulinum toxin from a modified attaché case (Aum Shinrikyo, 1995) to poisoning urban water supplies with potassium cyanide (the survivalist group The Covenant, the Sword, and the Arm of the Lord, 1986). Still, a few preliminary observations about the nature of CBT can be made.

Groups that have attempted CBT often have had a charismatic leader, a sense of

paranoia or grandiosity, an apocalyptic ideology, and a posture of "defensive aggression" against a real or imagined threat. Perhaps most important, none of the perpetrators had an outside constituency: isolated groups and loners are prone to distorted perceptions and do not risk alienating potential supporters by using CBT. ("We do not ask American people to support us; in fact, we



Terrorists on the street. Shoko Asahara (left) planned Aum Shinrikyo's deadly sarin attack on Tokyo's subways in 1995 to keep police from raiding cult headquarters.

don't give a damn whether they like what we have to offer or not," proclaimed the Alphabet Bomber, a disgruntled aerospace engineer who in 1974 threatened to attack the Supreme Court with sarin.) In contrast, politically motivated terrorists generally have not pursued CBT. Additional case studies are needed, however, to determine which traits of chemical and biological terrorists might help identify them because charisma, paranoia, and grandiosity are also found to varying degrees among, for example, leaders of political parties, large corporations, and academic departments.

The case studies suggest that mass-casualty CBT is unlikely because most terrorists lack the technical know-how to produce and deliver toxic agents on a large scale, although the threat posed by the availability of former Soviet bioweapons scientists should not be underestimated. Of more immediate concern is the use of toxic agents for small-scale terrorist attacks, such as assassination or food contamination. *Toxic Terror* also illustrates the importance of surveillance and intelligence in preventing CBT, as intervention by law enforcement foiled several of the plots.

It would be imprudent to place too much significance on these few cases, and policymakers must always prepare for a spectrum of attacks (including mass-casualty scenarios). Yet this book is a useful resource for evaluating the CBT threat, and its empirical methodology offers a powerful approach for future studies. *Toxic Terror* is also good reading. The authors provide fascinating glimpses into our darker nature with stories of ambition, greed, betrayal, and revenge—the real terrors of life.

Toxic Terror Assessing Terrorist Use of Chemical and Biological Weapons

Jonathan B. Tucker, Ed.

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The author is at the Center for International Security and Cooperation, Encina Hall, Stanford University, Stanford, CA 94305-6165, USA. E-mail: jfinn_cisac@yahoo.com

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