Chapter 1
An Idea Whose Time Has Come?

The terrorist of yesterday is the hero of today, and the hero of yesterday becomes the terrorist of today. In a constantly changing world of images, we have to keep our heads straight to know what terrorism is and what it is not.

Eqbal Ahmad

Were the 1990s a decade of exceptional violence? Perhaps, when compared to the terrorism carried out in the 1980s. Is this violence diminishing in the first decade of the twenty-first century? Given the events of September 11, 2001, and the subsequent "war on terrorism," this is clearly not the case. But even the violence of the last decade of the nineteenth century and the first decade of the twentieth century was clearly less than that of the decades during which the world experienced the trauma of two global wars. There was certainly less loss of life than during the years in which the Indochina conflict raged. In fact, fewer lives were claimed by political violence during the past decade than by traffic accidents on U.S. highways annually.

So why is so much attention directed toward developing policies to cope with terrorist violence today? It is easy to simplify or to generalize too much about this critically important phenomenon, and it has attracted what could be considered an inordinate amount of attention, compared to other major problems of our times, such as global debt and world hunger. Terrorism has been the subject of countless speeches by political leaders and the impetus for numerous initiatives and conferences by foreign policy experts. The drama of terrorist-directed events such as those outlined in the Selective Chronology of Recent Terror (see p. xxi-xxiv) attracts enormous attention in the press and on television worldwide. Terror-violence did, in many respects, become a method of warfare during the latter part of the twentieth century. In the twenty-first century, terrorism itself has become a target of "war" on the part of the international community, clearly increasing the level of violence and the number of victims.

Indeed, in the wake of the events of September 2001, a global "war on terrorism" has begun to be waged, led by the United States and sanctioned by the United Nations. While the initial context of the "war" took place in Afghanistan, neither the toppling of the Taliban leadership nor the disruption of the al-Qaeda network in Afghanistan sufficed to "win" this new war. Terrorism is an ancient "enemy" with roots in many cultures and followers in many creeds. A "war" against such an enemy will not be quickly brought to a successful conclusion.

Certainly terrorism has been waged by a wide variety of individuals and groups. It has been a favorite tactic of national and religious groups, individuals whose ideologies fall on both the left and the right of the political spectrum, and nationalist and internationalist movements. It has been used as an instrument of state policy. It has been directed against autocratic as well as democratic regimes although political democracies have been the most frequent target. At times, it has been an instrument of last resort for movements of national liberation whose political attempts to change the system have failed; at other times, it has been deliberately chosen by such movements before other political options have been attempted.

States have sponsored terrorism outside their own frontiers and have used terrorism as a weapon against their own citizens. Terrorism remains, paradoxically, both an instrument
designed to force radical social and political changes and an instrument of oppression in seeking to prevent such changes.

Even with the increased use of terrorist violence, or perhaps because of its proliferation, there remains a great deal of confusion as to what the term terrorism really encompasses. Many definitions of terrorism are encoded political statements. Too often the term is used in a pejorative sense, attached as a label to those groups whose political objectives one finds objectionable. To study this phenomenon, we must first establish a workable definition—workable in that it has sufficient precision to allow us to identify the phenomenon when it occurs. Terrorism is a politicized term; its definition must, therefore, be politically acceptable.

MODERN DEFINITIONS OF AN OLD CONCEPT

Terrorism is a phenomenon that is becoming a pervasive, often dominant, influence in our lives. It affects the manner in which governments conduct their foreign policy and the way corporations transact their business. It causes alterations in the role and even the structure of our security forces. It forces us to spend huge amounts of time and money to protect our public figures, vital installations, citizens, and even our system of government. It influences the way we travel and the places we travel to see. It even affects the manner in which we live our daily lives. Our newspapers, radios, and televisions inundate every waking moment with vivid details of terrorist spectaculars from all corners of the globe.

But what is terrorism—this "it" to which we attribute so much influence today? Before we can assess just how great a threat "it" poses and exactly whom "it" threatens, we need to determine what "terrorism" is. And it is precisely this problem of definition that has caused political, legal, and military leaders to throw up their hands, metaphorically, in discouragement.

Because terrorism is a political as well as a legal and military issue, its definition has been slow to evolve. Not that there are no numerous definitions available—there are hundreds. But few of them are of sufficient legal scholarship to be useful in international law, and most of those that are legally useful lack the necessary ambiguity for political acceptance. As Eqbal Ahmad noted, "Officials don't define terrorism because definitions involve a commitment to analysis, comprehension, and adherence to norms of consistency."

The problem of defining terrorism is not insuperable, but it must be handled with caution in order for subsequent use of the term to have meaning. To say that the number of terrorist incidents is rising annually has little meaning unless it is precisely clear what such an incident is and is not.

It helps to put the term into an historical perspective. Terrorism is not a modern phenomenon. The admixture of religion and politics fomenting terrorism in many areas today has a counterpart in the hashashin of the Middle Ages. Incidents such as the Achille Lauro hijacking in 1985 have precedents dating back many centuries. The statement that "one man's terrorist is another man's patriot" illustrates the historical continuum of conflict under which terrorism is operationally defined.

Ideology has always had an ambiguous relationship with terrorism—at one point justifying and at another condemning the same act. Theorists (and practitioners) of both the left and the right have advocated the use of what has been termed "terrorist" violence. Understanding the context of the ideological debate helps to illuminate the justifications offered in contemporary times for terrorist acts.

It also helps to assess the ideological commitment of the perpetrators of terrorism. Profiling modern terrorists is one way of assessing terrorism's current commitment. An understanding of the impact of group dynamics is also useful in critiquing the rationale behind such acts. Patterns in the type of recruiting done among groups committing terrorist acts lend substance to these profiles of modern terrorists.
While the official definition of terrorism adopted by many countries today limits application of the term to nonstate actors, terrorism is not strictly a phenomenon committed by individuals or groups. In fact, terrorism as a political term derived from state terror. So any analysis of the ways in which states use terrorism as an instrument of foreign and domestic policy offers vital insights, particularly when a war, such as the one initiated by the United States in Iraq in 2003, is premised to some degree on the commission of state terrorism by the leader deposed in the ensuing conflict.

Some states are involved in the network emerging among individuals and groups involved in the commission of terrorist acts. Opinions differ as to the extent, cohesiveness, and ideological commitment of this network, but evidence of its existence is beyond reasonable dispute. Nations such as Iraq, Syria, and Iran have repeatedly been accused of involvement in state-sponsored terrorism. The linkage between states and terrorism will be explored in depth later, focusing on questions such as: How is the terrorism financed? What are its targets? The emergence of what is termed netwar as a pattern for some modern terrorist groups and the creative use of money transfer systems like hawala offer opportunities to plumb the murky depths of the "terror network."

Understanding of why and who leads to questions of how. Profiles of terrorist events offer thumbnail sketches and disturbing insights into the how of terrorism. The depth of media involvement in the making of a "terrorist spectacular," for instance, can provide useful clues to why this is so sensitive an area of democratic policymaking. Analysis of potential targets and weapons raises crucial and frightening questions for democratic systems.

The response of the systems—legal, military, and political—to the threat and reality of terrorism is, of course, crucial to any understanding of the problem of terrorism today. The willingness as well as the capacity of the international community, and of an individual nation, to respond to this form of "warfare" is critical to any assessment of the role of terrorism in shaping our world. The difference between the responses to domestic, as opposed to international, terrorism may also be critical as democratic nations seek ways to respond to terrorism without sacrificing fundamental principles.

Democracies, throughout history, have been the effective targets of terrorist attacks, because democratic systems must "play by the rules" and thus cannot respond in comparable fashion to terrorist attacks. Autocracies and totalitarian systems are able to respond more easily to terrorist acts with terrorist acts, which sometimes serve as an effective deterrent, but democracies cannot make such responses. A comparative look at counterterrorism in the democratic systems of the United States and New Zealand in Chapter 12, with their enactment of laws and security systems, offers insights into the patterns of terrorism and response characteristic of democracies today.

Ultimately, the question may not be how nations can eliminate terrorism but rather how much the likelihood of terrorist acts can be prevented, and the amount of terrorism a state can tolerate. New laws and new technology are changing the face of terrorism, but since it is not vanishing, then new thresholds for "acceptable" violence may well be emerging. With the development of effective and accessible chemical and biological as well as nuclear weapons, these thresholds may determine the survival of humanity.

This discussion in no sense covers all that could be said about terrorism. This is a contemporary review of current acts of terrorism. Definitions of terrorism, like the act itself, continue to undergo changes. The definition suggested in the following section highlights certain important facets of the issue, answering some questions while raising a multitude of others. Such a study can provide a frame of reference from which it should be possible to analyze this phenomenon—the instrument and the nemesis of rulers, governments, and citizens.
CRUCIAL COMPONENTS OF TERRORISM

While it has not been possible, yet, to create a universally acceptable definition of terrorism, it is both possible and necessary to specify certain features common to the phenomenon. This in turn makes it feasible to create an operational definition of this term. Acts possessing all of these attributes could then be identified as terrorist acts with some consistency, making data analysis of this phenomenon more meaningful. Without falling into the political quagmire of attempting to label individuals or groups as "terrorist," certain types of actions could be identified as terrorism, regardless of who commits them, for however noble a cause.

Let us consider a loose definition of contemporary terrorism. It must of necessity be "loose," because its elements tend to form a variety of compounds, which today fall within the rubric of terrorism. For the purposes of this investigation, terrorism will be defined as a synthesis of war and theater, a dramatization of the most proscribed kind of violence—that which is deliberately perpetrated on civilian noncombatant victims—played before an audience in the hope of creating a mood of fear, for political purposes.

This description of terrorism has a number of crucial components. Terrorism, by this definition, involves an act of violence, an audience in which a mood of fear is created, targeted civilian noncombatant victims, and political motives or goals. Each of these elements is contained in the definitions currently in use by national and international agencies.

While there are significant differences in established American definitions of terrorism, they do share common elements suggested in the definition above. For example, the U.S. Department of State uses the definition incorporated in Title 22 of the United States Code, Section 2656f(d):

premeditated, politically motivated violence perpetrated against non-combatant targets by subnational groups or clandestine agents, usually intended to influence an audience.

The U.S. Department of Defense defines terrorism as:

the unlawful use, or threatened use, of force or violence against individuals or property to coerce and intimidate governments or societies, often to achieve political, religious, or ideological objectives.  

The U.S. Federal Bureau of Investigation (FBI) also includes these key elements in its definition of terrorism:

the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.

There are a few significant points to note from this quick examination of definitions:

1. The definitions are of acts of terrorism, not of people or of groups. Thus, applying the term "terrorist" to an individual or a group is not supported by the definitions at this point.
2. The definitions do not include state terrorism; although, states have certainly committed far worse acts of terror than any group or individual has yet accomplished. State terrorism is often ignored in state-generated definitions of terrorism, for political reasons. Although the United Nations has generated a dozen treaties dealing with terrorism, it has not reached agreement on a universal definition of terrorism.
The basic criteria—acts of violence, designed to create a mood of fear in an audience, for political/social motives, targeting people not engaged in combat—are, incorporated into many modern definitions of terrorism in use today. Each term deserves some clarification in order to formulate a clear set of parameters for this frequently misunderstood and misused concept.

**Violence, Audience, and a Mood of Fear**

First, note that terrorism, is fundamentally a violent act. Sit-ins, picket lines, walkouts, and other similar forms of protest, no matter how disruptive, are *net* terrorist acts. Violence—the threat of violence where the capacity and the willingness to commit violence are displayed—is endemic to terrorism. The violence need not be fully perpetrated—that is, the bomb need not be detonated or all of the passengers aboard an airliner killed—in order for it to be considered a terrorist act. But the capacity and the willingness to commit a violent act *must* be present.

This violence need not be lethal to human targets to meet these definitional criteria. Violence is destructive, but the destruction need not necessarily take lives; it may instead disrupt lives without destroying them. For instance, the modern phenomenon known as cyber attacks could be called a form of terrorism, because it is certainly potentially disruptive, although not necessarily lethal to human targets. The violence is against a system, rather than a physical human body, but the disruption and the mood of fear induced are potentially devastating.

This means, then, that it is the *perception* of the audience of that violent potential that is crucial to classifying an act as terrorism. Terrorism is,—as Brian Jenkins noted two decades ago, essentially theater, an act played before an audience, designed to call the attention of millions, to an often unrelated situation through shock—producing situations of outrage and horror, doing the unthinkable without apology or remorse. Unlike similar acts of murder or warfare, acts of terrorism are neither ends in themselves, nor are they often more than tangentially related to the ends sought. They are simply crafted to create a mood of fear or terror in that audience.

This mood is not the result, moreover, of the numbers of casualties caused by the act of violence. Automobile accidents cause greater numbers of injuries and deaths each year in the United States, without necessarily invoking a mood of terror among other drivers. Nor is it the deliberate nature of the death inflicted that causes the audience response. Individuals are murdered in nonpolitical, nonterrorist acts throughout the world each year without provoking widespread fear.

**Victims: The Right Place—But the Wrong Time**

Instead, the creation of this mood of intense anxiety seems specifically linked to the nature of the victim of terrorist acts. As one scholar notes:

> To qualify as an appropriate victim of a terrorist today, we need not be tyrants or their sympathizers; we need not be connected in any way with the evils the terrorist perceives; we need not belong to a particular group. We need only be in the wrong place at the wrong time.

Terrorism is, thus, distinguished from guerilla warfare by deliberate attacks upon civilians not engaged in combat and the separation of its victims from the ultimate goal—the "playing to an audience" aspect of a terrorist act. Terrorism can be distinguished from legal acts of warfare and ordinary crimes of murder. As David Fromkin points out:

> Unlike the soldier, the guerilla fighter, or the revolutionist, the terrorist... is always in the paradoxical position of undertaking actions the immediate physical consequences of which are not particularly desired by him. An ordinary murderer will kill someone because
he wants the person to be dead, but a terrorist will shoot somebody even though it is a matter of complete indifference to him whether that person lives or dies.5

Put more simply, the difference between a terrorist act and a similar crime or war activity is that terrorist acts are perpetrated deliberately upon civilian noncombatant third parties in an effort to coerce the opposing party or persons into some desired political course of action. Victims are chosen, not primarily because of their personal guilt but because their deaths or injuries, the disruption of their lives, will shock the opposition. Terrorist acts, in other words, are constructed to deliberately "make war" on persons not involved in combat situations.

This distinction will need some explanation. The laws of war permit waging war between national armies, within certain humanitarian limits. Even for the enemy in a violent protracted conflict, some types of behavior (such as genocide and torture) are expressly forbidden, and certain basic amenities are required to be preserved (regarding such issues as the treatment of prisoners of war).6 "War" as waged by terrorist acts violates these rules in that those deliberately destroyed are not principally armed military opponents, but the hapless civilians. Rules of international behavior, particularly those that pertain to political responsibility and military obligations, offer maximum protection to the civilian noncombatant, regarded as "innocent persons" even in time of war. Terrorism makes a practice of persistent, deliberate harm to precisely that type of person.

The distinction between a terrorist act and a legitimate act of guerrilla warfare is not always clear. In Iraq today, the distinction between terrorist acts and acts of revolutionary violence (which are legal under the laws of war) is often difficult for soldiers and civilians alike to determine. An individual explosive device (IED) planted at a roadside or near a recruiting station is not clearly targeted at civilians, but frequently generates nonmilitary casualties. If the device is placed in a market, frequented by primarily civilians, then the line is clearer in marking the event as a terrorist act. But if it is placed on a highway most often used by military forces and is not triggered deliberately when a busload of ordinary people passes, this is less clearly terrorism and more likely to be judged an act of revolutionary or insurgency violence—destructive, but not terrorist in nature, as it did not deliberately target innocent people.

The point here is that the terrorist deliberately chooses to invoke injury on the civilian noncombatant in an effort to shock the political or military audience. Injury to those not engaged in combat, thus, is not an undesirable accident or by-product, but the carefully sought consequence of a terrorist act.

A terrorist act is committed, not against a military target necessarily nor against the person in direct opposition to the perpetrators, as the ultimate goal is not usually the death of one leader. Unlike the terrorism practiced by nineteenth-century anarchists, twentieth-century terrorist acts are deliberately aimed against civilian noncombatants, third parties whose loss of well-being can be expected to evoke a desired response from the opposition and/or the audience watching the event throughout the world.

It is important to note here that the terms civilian and noncombatant are used in this working definition of terrorism. There are two critical problems with this designation. The first is that the term civilian is not easily applied in low-level guerrilla warfare, where many who engage in such conflict are never formally enrolled in any army nor are they issued any materials that would identify them as soldiers (uniforms, identification tags, and the like). Therefore, their status as "civilians" will always be called into question, making application of the term terrorism to the acts against them potentially subjective.

The problems with using the term noncombatant is similarly rooted in a desire to prevent subjective use of the term terrorism. Many of the world's military are engaged today in what are termed peacekeeping activities, which in theory at least should be a noncombat status. The term peacekeeping itself does not appear in the UN Charter, so there is a lack of clarity as to what peacekeeping really is and what the rules for such activity should be. Thus, the soldiers
engaged in this type of activity could be regarded as combatants or noncombatants, depending on the political view of the group or government reacting to their activities. This confusion as to definition, and hence to status, makes the application of the term terrorism to attacks on such military units potentially pejorative and legally vulnerable. When clarity of definition for peacekeeping makes it possible to determine whether or not military engaged in such activity are combatants or noncombatants, it is potentially confusing to use this term in a working definition.

The problem with confusion in the definition of "terrorism" is clearly demonstrated in the data tracking and analysis of contemporary acts of terrorism. As Case Study 1.1 illustrates, the "real" number of terrorist incidents altered dramatically in 1998 and again in 2006, not necessarily reflecting an actual increase in incidents but indicating a difference in the definition of the attacks being recorded.

The need for a universally applicable definition of terrorism is clear, but the ability to generate such a definition and to apply it consistently has not yet developed, even within one country. Tracking "trends in terrorism" when the definition of such acts remains in flux makes such data analysis questionable. While engaged in a "war on terrorism," it is clearly vital that an operational definition be both developed and consistently applied today.

Although the definitional problem is not yet resolved, the focus on civilian noncombatant victims highlights another disturbing aspect of modern terrorism. Until recently, although most of the victims of terrorism were civilian noncombatants, they were also relatively few in number. In those terrorist incidents recorded in the 1950s and 1960s, the number of casualties was relatively small. Experts speculated that perhaps the terrorists felt a need to avoid alienating certain groups of people or portions of society. Perhaps it was also true that terrorists "... want a lot of people watching, not a lot of people dead."7

But the attacks in 2001 that took place in New York and Washington, using fully loaded passenger airplanes to crash into crowded centers of commerce and government, heralded a loosening of the threads constraining terrorists in their search for victims. As the craving for a worldwide audience increases among groups utilizing terrorism, the increasing tolerance of that audience for violence may actually be pushing terrorists to widen their target range to create a more spectacular event for their audience.

Thus, as the violence becomes more randomized, it is being directed against a wider range of persons. Children are becoming targets, as-the massacres at the Rome and Vienna airports, the tragedy at Beslan, and attacks on school buses in Ireland and Israel clearly demonstrated. Ironically, this increase in innocent targets may well be a direct result of a viewing audience no longer as interested in attacks on military attaches or political figures.

Political Quicksand

The definition of an act of "terrorism" matters. For the purposes of this text, it will be defined as an act of violence perpetrated on innocent civilian non-combatant in order to evoke fear in an audience. One further component, however, is necessary for this definition to be operational. As it stands, such a definition could reasonably be applied to actions taken by professional athletes on the playing field!

The addition of a "political purpose" to the concept of terrorism continues to create enormous legal problems. Although establishing parameters for this concept of political purpose is crucial, particularly in light of the fact that political crimes and criminals enjoy special status under international law for centuries, the concept remains largely undefined.

Much of the confusion today results from a misperception that the presence of political motivation is sufficient to establish the political character of an action. An extradition case in 1980 clearly stated that, "An offense is not of a political character simply because it was politically motivated."8 The prevailing Anglo-American rule of law, derived from in re Castroni,
contains two basic criteria for determining the "political" quality of an action. These requirements, simply stated, were that (1) the act at issue must have occurred during a political revolt or disturbance, and (2) the act at issue must have been incidental to and have formed part of that same revolution or disturbance.9

A political motive thus may be termed necessary but it is not sufficient to earn for an action a "political offense" status under international law. Nicholas Kittrie suggested that a "pure political offense" would consist of acts "which challenge the State but affect no private rights of innocent parties." By this definition, a political revolution or disturbance is an essential ingredient in which the political offense plays only a part. Moreover, the offense must bring harm only to the State, while protecting innocent parties from harm through reasonable precautions. This has the effect of narrowing the classes of acceptable victims.

Political assassination by organized revolutionaries careful to cause as little harm as possible to innocent persons remains protected to some extent within the political offense provisions of international law. Hence, the assassination of the Grand Duke Sergius might qualify for political offense status, while the mob violence of the Paris Commune would clearly not.

Obviously, the political element of an act of terrorism adds considerable confusion, both in the legal and the political realms. Although it is a necessary component to a definition of terrorism, it is so ambiguous a concept that it is often a two-edged sword, offering insights into the causes of an act while providing gaping loopholes in the law through which perpetrators of heinous acts continue to slither.

What distinguishes terrorism, then, from purely political actions may be the illegality of the violence employed, primarily in terms of the victims of the offenses. What distinguishes the terrorist of today from the football player, the political assassin, and the revolutionary engaged in regular or irregular warfare may be the lack of legitimacy that his or her actions enjoy under international norms. By its very nature, terrorism involves the deliberate disruption of norms, the violation of generally accepted standards of decency, including the laws of war as they apply to the innocent and helpless.11

Because this is a confusing and contradictory area in the definition of terrorism, it is useful to review the issue once more. What is it, then, which distinguishes the terrorist act from other acts of war, as well as from other political or common crimes? Few would argue that wars, whether between or within states, could or should occur without violence, without the inflicting of injury and death. As individuals we may deplore the violence, but as nations we have recognized its inevitability and have accorded it a limited legitimacy.

But international rules have been created and accepted that govern the acceptable types of violence, even in war. The international community does not forbid the use of all violence; it does, however, suggest basic rules for the use of violence. Many of these rules are directed toward the protection of civilian populations. Even in the life-and-death struggles between nations, these laws focus on minimizing of danger of injury or death to non-combatants, civilians with neither military or political rank nor involvement in the conflict.12

Political motivation, then, is not a lever by which acts of terrorism can be justified under international law. On the contrary, international law makes it clear that, regardless of the motive, some acts of political violence are never acceptable.

**TYPOLOGIES OF TERRORISM: USEFUL TOOLS**

At this point, let us look at some typologies of terrorism. Feliks Gross, a leading authority on revolutionary terror, has suggested that at least five types of terror-violence exist:

1. Mass terror is terror by a state, where the regime coerces the opposition in the population, whether organized or unorganized, sometimes in an institutionalized manner.
2. Dynastic assassination is an attack upon a head of state or a ruling elite, precisely the kind of terrorism that the international community tried to criminalize in the mid-nineteenth century.

3. Random terror involves the placing of explosives where people gather (such as post offices, railroads, and cafes) to destroy whoever happens to be there. "Algerian revolutionaries left bombs in public places in Paris," one scholar notes, "in apparently convinced that one Frenchman blown to bits was pretty much like any other."\(^{13}\)

4. Focused random terror restricts the placing of explosives, for example, to where significant agents of oppression are likely to gather (as in the aforementioned case of the Polish-Jewish Underground).

5. Finally, tactical terror is directed solely against the ruling government as a part of a "broad revolutionary strategic plan.

Such a typology leaves some guerrilla activity enmeshed in the terrorist label. Although numerous other typologies of terrorism have been offered by various scholars, review of them in detail would not significantly contribute to the development of a workable definition of contemporary terrorism. However, a few important points of interest can be made about these typologies. One is that most typologies developed today include some form of state terrorism as well as individual and group terrorism. What Feliks Gross terms "mass" terrorism is described by U.S. State Department analyst Thomas Thornton as "enforcement" terror,\(^{15}\) and by political scientist Paul Wilkinson as "repressive" terror.\(^{16}\) Whatever the label applied to this particular type of terror, it is obvious that some consensus exists on the propriety of including some repressive state tactics in the classification of terrorist acts.

The typologies also suggest that a wide variety of acts have been encompassed under the rubric of terrorism, including many engaged in by revolutionary groups, and composed of both internal activities and activities that cross state lines, but all of which are politically motivated and directed toward some end other than the immediate act of violence. These observations serve both to fortify the conclusions already drawn concerning the distinctive nature of terrorist acts and to highlight certain points of dissension that may contribute to the clouding of our understanding of this term.

**USING TACTICS AS LABELS**

Before summarizing the conclusions concerning a working definition of terrorism, one further point needs to be emphasized. Both the typologies of terrorism and the working definition of terrorism being offered treat terrorism as a tactic, not as a goal. This is important if the term terrorism is not to be used or misused by governments unsympathetic to a group's cause. To describe a particular action as a terrorist action does not, and should not, in any sense define either the group or the cause for which it uses that tactic as terrorist.

It is true that if an individual, group, or government chooses to use this particular tactic repeatedly, those observing the actions will associate the tactic with those individuals. Continued or prolonged use of such a tactic by any group or government contributes to the perception of that group or government as terrorist by the audience for whom the crime is committed. This is not necessarily accurate, nor is it inaccurate: it is simply a natural phenomenon.

This is true to some extent of groups that repeatedly engage in terrorist acts. The frequency with which they engage in such actions, and to some degree the openness with which they do so, will certainly have an effect on whether their audience views them as terrorists. This does
not mean that the ends toward which they strive are bad, somehow tainted with the opprobrium of terrorism. It simply means that the audience for whom the terrorist acts are generally staged has mentally associated the actors with the actions taken in pursuit of the cause.

This is, of course, a very narrow line of reasoning, one not clearly understood by the general public, which is often the audience for terrorist events. That same public frequently attaches a terrorist label to individuals and even to groups who engage on a fairly regular basis in terrorist acts. But in terms acceptable in the legal and political community, it is only the act that can accurately be labeled as "terrorist"—not the individual or the group and certainly not the cause for which the tactic is employed.

Members of a group cannot engage in questionable or even blatant activity on a regular basis and not be tainted with the negative labels associated with such actions. Members of Mafia families, although they may themselves be several steps removed from the actual commission of organized crimes, are nevertheless viewed by both the general public and by law enforcement agencies as being linked to, and part of, those deplorable actions. So it is with terrorism. Those who commit it, and those whose groups or governments have chosen to use it as a tactic, cannot escape the label of "terrorist" given them by the very audience toward which such acts are directed. The justice of a cause rarely is sufficient, in that audience's view, to excuse the use of such a tactic. Certain acts can be described by definition as terrorist acts whether they are carried out by democratic governments in pursuit of reasonable policy goals or by armed revolutionaries fighting for freedom against tyranny.

**CONCLUSIONS**

Terrorism, then, is an act composed of at least four crucial elements: (1) It is an act of violence, (2) it has a political motive or goal, (3) it is perpetrated against civilian non-combatants, and (4) it is staged to be played before an audience whose reaction of fear and terror is the desired result. This definition eliminates football players, lunatics on a killing spree, and the assassin who tries to kill a bad ruler from the label of terrorist. All acts of violence are not terrorist acts; however, heinous the acts may be.

Unfortunately, the line between acceptable types of violence and unacceptable types is not always clear. Violence by revolutionaries and by the state is sometimes difficult to categorize clearly as terrorist, even given the working definition evolved here. Further study of the history, ideology, and individuals involved in terrorist acts may increase our understanding of this important but confusing term.

**DISCUSSION**

Using the definition in a practical application is one method of increasing one's understanding of the usefulness and limitation of the definition. Listed below are two brief sketches of what were termed by some observers to be terrorist acts. Use the four criteria in the definition of terrorism suggested in this chapter to decide whether these incidents were, in fact, terrorist acts. Try also to decide which type of terrorism, if any, was involved, using any one of the typologies mentioned.

1. In November 2003, a U.S. transport plane carrying soldiers engaged in peacekeeping and nation building in postwar Iraq was shot down by a surface-to-air missile. Sixteen of these soldiers, who were being transported to planes to take them on the first stage of their journey home for a brief leave, were killed. Iraqi groups seeking to force the United States out of their country claimed responsibility for the attack.

2. On May 21, 2009, a suicide bomber struck a crowded market in the southern Baghdad district of Doura, killing at least twelve people and wounding twenty-five others. Three United States soldiers were also killed in this attack.
3. Just before dawn on October 23, 1983, a suicide vehicle laden with about 2,500 tons of TNT blew up the U.S. Marine headquarters near the Beirut, Lebanon, airport. Around 230 people were reported killed, most of them as they slept. The Free Islamic Revolutionary Movement claimed responsibility for the action.

4. In April 1999, an attack by two students at Columbine High School in a suburb of Denver, Colorado, resulted in the deaths of fifteen, while more than twenty people were wounded, some of them critically. The attackers, identified as Eric Harris, 18, and Dylan Klebold, 17, both juniors at the school, reportedly laughed and hooted as they opened fire on classmates after they had booby-trapped the school with pipe bombs. Harris and Klebold were members of a group calling itself the Trenchcoat Mafia, outcasts who bragged about guns and bombs, and hated Blacks, Hispanics, and student athletes.

**ANALYSIS CHALLENGE**


**SUGGESTED READINGS**


**NOTES**


9. *In re Castroni* \Q.B.\ 149, 156, 166 (1891).
14. Ibid.
Chapter 2
Not a Modern Phenomenon

Ironically, perhaps, terrorism in its original context was also closely associated with the ideals of virtue and democracy. The revolutionary leader Maximilien Robespierre firmly believed that virtue was the mainspring of a popular government at peace, but that during the time of revolution must be allied with terror in order for democracy to triumph.

Bruce Hoffman

HISTORIC ROOTS

Terrorism is an act with deep historic roots, and one which has evolved, like the individuals, groups, and systems that commit it, over time. The fundamental characteristics of a terrorist act have not, perhaps, changed, but the associated tactics, targets, weapons, support systems, and even motivations have substantially changed in recent years. Understanding that this phenomenon has been a part of human history for centuries is useful as long as it is balanced with an awareness that, while the basic elements identifying the act as "terrorism" remain the same over time, the act itself continues to evolve in sometimes startling and often challenging ways.

Even though the word terrorism originated during the French Revolution and the Jacobin Reign of Terror (1792-1794), individual acts of terror-violence can be traced back at least to the ancient Greek and Roman republics. By some definitions, the assassination of Julius Caesar in 44 B.C. was an act of terrorism, to the extent that a modern political assassination is defined as terrorism. Modern political science, at any rate, tends to treat assassination, the murder of a political leader, as a terrorist act. During ancient times, conquerors created a mood of fear in their realms by exterminating whole populations or forcing them into exile. The Romans created terrifying symbols of the consequence of opposition by crucifying prisoners—nailing or tying them to a cross or wooden platform from which they would slowly die a very painful, very public death. Terrorism carried out by rulers was clearly not uncommon centuries ago.

Group terrorism became more common as early as the Middle Ages. In fact, the word assassin comes from an Arabic term, hashashin, which means "hashish-eater," or "one addicted to hashish." It was used to describe a sectarian group of Muslims who were employed by their spiritual and political leader, Hassan I Sabah, to spread terror in the form of murder and destruction among religious enemies, including women and children.

Accounts of Marco Polo’s travels include tales of murder committed by these assassins, acting, it was supposed, under the influence of hashish or other such drugs. Even the Crusaders, who killed not only fighting men but also women and children in their effort to take Jerusalem from Muslim hands, made mention of this group of fanatics and the terror they inspired. This religious sect, a splinter group of Ismaili Muslims in the late eleventh century, was believed to take the drug hashish prior to committing acts of terrorism on the spiritual and political opponents of their caliph, Hassan I Sabah.

The potent combination of religious and political fanaticism with intoxicating drugs made the legacy of the "Brotherhood of Assassins" formidable. Narco-terrorism, as the linkage between drugs and terrorism is often termed today, will be described in greater depth in a later chapter. The impact of religion in stimulating terrorism must also be examined further, as it has become once again a potent force in the modern world, as the events of September 11, 2001, demonstrated.
Another brotherhood of assassins emerged from a combination of religion and politics in the 1890s. The Hur Brotherhood, whose roots were in the Sind region of British India, resembled the earlier Islamic Brotherhood of Assassins. Although this later brotherhood was suppressed, after considerable bloodshed, another Hur rebellion occurred in Pakistan in the mid-twentieth century. Much of modern Pakistan's terrorism from its Sikh minority derives from that group's religious and political dissatisfaction with Muslim Pakistan's leaders. Religion and politics continue to take innocent lives in this turbulent region of the world as India and Pakistan, both nuclear powers, stand poised on the brink of war over Kashmir.

There is an important point, which must be made here. Islam is not, in any sense, a violent religion. Neither is Christianity, Judaism, or any of the other religions in whose name violence has been carried out. However, the mixture of religion and politics has throughout history resulted in violence, frequently against innocent victims, which makes it, according to the definition suggested in Chapter 1, terrorism. The Middle East, as the home of three major world religions, has been plagued by a variety of violent religious sects. Today, nations such as Iran have witnessed—and some have fostered—the creation of violent sects, whose blending of religion and politics resembles that of the Brotherhood of Assassins. Table 2.1 offers a brief insight into the diversity of a few of these radical religious groups and their locations.

The fedayeen, the Islamic "self-sacrificers," perceive themselves as engaged in a "holy war" against threats to their religion and culture. This type of war—being waged by more militant sects such as the Taliban in Afghanistan and Osama bin Laden's al-Qaeda network—is similar in many respects to the Brotherhood of Assassins of the Middle Ages. Like the Assassins, modern fedayeen find strength in the promise of a reward in paradise. Unlike the earlier sect, however, these modern zealots believe they will receive their reward in a spiritual paradise, not in the courtyard of the caliph, with drugs and sex. Religion serves as the narcotic that motivates their actions and deadens their consciences to the horror of the slaughter that they inflict on innocent persons.

Thus, the mixture of religion, politics, and narcotics in the commitment of terrorism today is not new, but continues to be quite deadly. History enables us to place current mixtures such as these in context, which makes understanding easier. It has not yet made it possible for governments or organizations to prevent the explosion of these potentially lethal elements.

STATE TERRORISM

The use of "irregular, illegal, and violent means" has never been limited to lone political assassins. The execution of Marie Antoinette on October 16, 1793, was one of the first incidents actually called terrorism. In this instance, the terrorists were not trying to overthrow the government—they were the government! The Committee of Public Safety, led by Robespierre, chief spokesman of the Jacobin party, governed France during the tumultuous period known as the Reign of Terror (September 1793-July 1794). It is from this period, during which an estimated 20,000 people were killed, that the word terrorism evolved. Throughout history, terrorism by a state has been much more lethal, claiming many more lives than that carried out by individuals or groups.

Modern terrorism thus derives its name from a gross example of state terrorism, acts of terrorism that a state commits against defenseless victims, rather than from terror-violence by a lone assassin or small, fanatic, nonstate group. Although most state-crafted definitions of terrorism do not include terrorism initiated by a state (focusing instead on substate groups), states continue to be involved in a wide variety of violent acts, many of which meet the criteria of terrorism, against their own citizens and those of other nations.
Consider the case of piracy. From the sixteenth century forward, pirates have been considered by lawmakers to be the "common enemies of humanity." William Blackstone's Commentaries referred to piracy as "an offense against the universal law of society." Yet both England (for whom Blackstone wrote) and America (whose law frequently cites his precepts) licensed privateers, private ships outfitted as warships and given letters of marque and reprisal, allowing them to make war on vessels flying foreign flags.

Under the reign of Queen Elizabeth I of England, the Elizabethan Sea Dogs, privateer ships sailing under the protection of the English flag, carried out acts of piracy against the Spanish fleet. American privateers played a fairly significant role in both the American Revolution and the War of 1812. Both nations commissioned pirates to carry out acts of terror-violence for them on the high seas, acts that both nations publicly deplore as "offenses against humanity" in their courts today. Modern terrorism continues to occasionally take the form of piracy, but today the piracy is of aircraft as well as sea vessels.

**TYRANNICIDE: "TO GO TOO FAST"**

The leaders of state perceived by individuals or groups as "unjust" or "terrorist" have been historically the target of another type of act characterized as "terrorism." Assassination has been both an ideological statement and a powerful political weapon, using the vehicle of the doctrine of tyrannicide, the assassination of a (tyrant) political leader. Throughout Italy during the Renaissance, tyrannicide was widely practiced, while in Spain and France during the Age of Absolutism, it was at least widely advocated. One of the leading advocates of the doctrine of tyrannicide as an acceptable solution to political repression was a Spanish Jesuit scholar, Juan de Mariana, whose principal work, De Regis Institutions, was initially banned in France.

In the words of Mariana we find much of the same political justification as that used by leaders of national liberation movements today. Mariana asserted that people necessarily possessed not only the right of rebellion but also the remedy of assassination, stating that "if in no other way it is possible to save the fatherland, the prince should be killed by the sword as a public enemy."

Only ten years after Mariana's words were uttered, the king of France, Henry III, was assassinated by the monk, Francois Favaillac. Many leaders since that time have been struck down by persons who claimed to have acted as instruments of justice against a tyrant. Even U.S. president Abraham Lincoln's assassin, John Wilkes Booth, saw his act in such a light, as evidenced by his triumphant shout, "Sic semper tyrannis!" (Thus always to tyrants!).

During the latter part of the eighteenth century and early nineteenth century, the divine right of kings theory, that kings rule by divine appointment, began to lose its political grip on Europe. As the theory of the existence of a social contract between a people and their government began to gain acceptance, those who carried out political offenses such as tyrannicide gradually found a more benign atmosphere in which to act.

As one acting to right the wrongs committed by government, the political assassin was no longer regarded with universal disfavor. Georges Vidal, a leading French legal scholar, noted:

> Whereas formerly the political offender was treated as a public enemy, he is today considered as a friend of the public good, as a man of progress, desirous of bettering the political institutions of his country, having the laudable intentions, hastening the onward march of humanity, his only fault being that he wishes to go too fast, and that he employs in attempting to realize the progress which he desires, means irregular, illegal, and violent.

Not until the middle of the twentieth century was the murder of a head of state, or any member of his family, formally designated as terrorism. Even today, those who commit the
political crime of murder of a head of state often enjoy a special protection in the form of political asylum, a type of sanctuary or refuge for a person who has committed such a crime granted by one government against requests by another government for extradition of that person to be prosecuted for this political crime.

Just as rulers in previous centuries claimed a "divine right" to rule, political assassins, like those committing murder in the name of religion, frequently claimed to be acting as "divine instruments" of justice. The robes of martyrdom have been donned as readily by political as by religious zealots. Like religious fanatics, political assassins have no hesitation in acting as judge, jury, and executioner, assuring themselves and others that their appointment to these offices were made, not by them, but by a "higher" will or authority.

The concept of jihad, or holy war, continues to permeate the mixture of religion and politics in the many parts of the world today. The words of al-Qaeda spokesman Suliman Abu Gheith in a videotaped statement on Al Jazeera in October 2001, echoed this ancient concept when he stated that:

_allah says fight, and for the sake of allah, uphold the name of allah ... I thank allah for allowing us to start this jihad and ask allah to give us victory in the face of our enemy._

**GUERRILLA WARFARE: SELECTIVE VIOLENCE**

Since the French Revolution, terrorism and guerrilla warfare have become increasingly difficult to separate clearly. Guerrilla warfare is, essentially, _an insurrectionary armed protest, implemented by means of selective violence._

To the extent that the violence remains "selective" and the choice of targets military rather than civilian, it is possible to distinguish between guerrilla warfare and terrorism.

The term guerrilla, meaning "little war," evolved from Spanish resistance to the invasions of Napoleon in 1808. This war on the Iberian peninsula, in which Spanish guerrillas were aided in making increasingly successful attacks on French encampments by the British military, has become a prototype for the twentieth-century wars of national liberation. In such contemporary struggles, indigenous vigilante groups are often supported openly or covertly by the military of other nations.

Ideology and nationalism combined with terror-violence in the Internal Macedonian Revolutionary Organization (IMRO), a group that made its first appearance in 1893. For several years the IMRO waged guerrilla warfare, sometimes employing terrorist tactics, against the Turkish rulers of their region. As in the Iberian conflict, other nations both assisted and interfered in the struggle. Bombings and kidnapping, as well as the murder of civilians and officials, were frequent in this "little war." Violence escalated into the Saint Elijah’s Rebellion in August 1903, which was dealt with ruthlessly by Turkish authorities. This struggle left thousands dead on both sides, at least 70,000 homeless, and 200 Macedonian villages in ashes.

Turkey’s suppression of nationalist struggles on the part of its Armenian population in the early part of the twentieth century generated accusations of genocide and helped to create Armenian groups willing to engage in terrorist activities today. These activities, which include bombings and murder reminiscent of the IMRO, have been directed less by nationalism than by a desire to have revenge for the ruthless suppression of that earlier nationalism. Savagely suppressed nationalism spawned vengeful terrorism by individuals and groups whose demands are perhaps even harder to satisfy than were those of the nationalists of earlier decades.

Events of the 1990s in the former Yugoslavia give credence to the concept that repressed nationalism can, in a resurgent form, exact a bloody toll on innocent civilian populations. In the turbulent years before World War I, the Balkan states were engaged in a wide variety of revolutionary violence. Brigands, calling themselves comitatus (committee men), covertly
the catalyst for a series of events that, within a month's time, grew into a global conflagration.

Revolutionary terror-violence triggered international devastation on a scale unprecedented at that time. Conflict in and around Sarajevo in the 1990s is partially explained by this early pattern of revolutionary terror-violence. At least twice within the twentieth century, revolutionary terror-violence was unleashed by groups, governments, and militias against the civilian population within the same region. Memory of violence against women and children within families is hard to relinquish, and repetition of such violence within less than a century makes the creation of a sense of common identity (nationalism) and reconciliation between populations within that region perhaps an impossible goal.

Revolution is not by definition terrorist events. Indeed, many have been successfully carried out without resort to terrorist tactics. It is increasingly difficult, however, for an untrained and sparsely equipped indigenous army to wage a successful guerrilla war against a strong national standing army. With mounting frustration in the face of apparently insurmountable odds, it is easy to resort to terror-violence to achieve by psychological force what it is not possible to achieve by force of arms.

Perhaps nowhere else in this century has the role of liberationist combined more thoroughly, until recently, with that of terrorist than in the actions of the militant group usually known as the Irish Republican Army (IRA). Britain's suppression of Irish nationalism in the early twentieth century generated "martyrs" for the cause of the rebellion led by the fledgling IRA. This group's guerrilla campaign of murder and terror, growing out of the Sinn Fein movement in 1916, provoked the British to respond with a counterterror campaign. Although this revolutionary terrorism may be said to have stimulated the creation of an independent Irish Republic, the violence did not end with this "success." In the mid-1950s the Provisional IRA (PIRA) began a second wave of anti-British terror, which continued until 1994. For the next decade, efforts to secure a just and lasting peace have been repeatedly damaged by the groups that splintered from the PIRA, unwilling to move toward peace without fully achieving independence for the whole of the island.

This struggle offers insights in several respects. In addition to being a blend of nationalism and terrorism, it is also a contemporary example of the potent mixture of religion and politics. Catholic Ireland has long resented Protestant Britain's domination of its politics. Northern Ireland, which remains under British rule, is predominantly Protestant, with a Catholic minority.

Thus, the lines of battle are drawn along both nationalistic and religious lines. Catholics in Northern Ireland have tended to support a unification of those northern provinces with the Republic of Ireland, while Protestants in Northern Ireland have demanded continued British rule. The legacy of hatred and mistrust bred by generations of violence is so bitter that it is unlikely to end the violence seemed, until the end of the twentieth century, sponsoring by Greece, Serbia, and Bulgaria, roamed the countryside. In the worst, not the best, tradition of revolutionaries, these brigands terrorized their fellow citizens, burning, murdering, and robbing all who stood in their way.

World War I was, in fact, triggered by a transnational assassination that had its roots in revolutionary terrorism. A secret Serbian revolutionary organization, popularly known as the Black Hand, was both an organization employed by the Serbian government as an unofficial instrument of national foreign policy and a lethal weapon of political protest against the Austro-Hungarian Empire. On June 28, 1914, a 19-year-old Serbian, Gavrilo Princip, trained by the Black Hand, murdered the heir to the imperial throne of that empire, Archduke Franz Ferdinand, in Sarajevo. This assassination was the catalyst for a series of events that, within a month's time, grew into a global conflagration.

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CYCLICAL NATURE OF TERROR

Violence, particularly terrorist violence, has too often created a cycle of violence, with those against whom the terror-violence is first carried out becoming so angered that they resort to terrorism in response, directed against the people or institutions regarded as responsible for the initial terrorist acts. Each violent act frequently causes equally violent reactions. When the violence is unselective, when innocent people are victimized, the reactive violence is also likely to break all the rules in the selection of targets and thus be terrorist.

Most revolutionary groups assert that it is terrorism by the state that provokes, and by its presence justifies, acts of terror-violence by nonstate groups. The relationship between terror-violence by the state and that of nonstate groups and individuals is evident in the history of many modern nation-states. But the nature of that relationship is still the subject of much debate.

Since the French Revolution, terrorism and guerrilla movements have become inextricably intertwined. Perhaps the most prominent proponents of individual and collective violence as a means of destroying governments and social institutions were the Russian anarchists, revolutionaries within Russia who sought an end to the Czarist state of the latter nineteenth century. "Force only yields to force," and terror would provide the mechanism of change, according to Russian radical theorist Alexander Serno-Solovevich. In the writings of two of the most prominent spokesmen for revolutionary anarchism, Mikhail Bakunin and Sergei Nechaev, one finds philosophies often echoed by modern terrorists. Bakunin, for example, advocated in his *National Catechism* (1866) the use of "selective, discriminate terror." Nechaev, in his work *Revolutionary Catechism* (1870), went further in advocating both the theory and practice of pervasive terror-violence. He asserted of the revolutionary:

> [D]ay and night he must have one single thought, one single purpose: merciless destruction. With this aim in view, tirelessly and in cold blood, he must always be prepared to kill with his own hands anyone who stands in the way of achieving his goals.11

This is a very large step in the evolution of a terrorist from the lone political assassin of earlier centuries. Even the religious fanatics of the Assassins' genre and the privateers of Elizabethan times were arguably less willing to kill anyone to achieve a political objective. But this difference may have existed more on paper than it did in practice. In spite of this written willingness to kill anyone who stood in the way, the Socialist Revolutionary Party resorted primarily to selective terror-violence and took special pains to avoid endangering innocent bystanders. For instance, the poet Ivan Kalialev, who assassinated the Grand Duke Sergius on the night of February 2, 1905, had passed up an opportunity earlier that evening to throw the bomb because the Grand Duchess as well as some of her nieces and nephews were riding in the Grand Duke's carriage.12

With the creation of the *Narodnaya Volya* (The Will of the People) in 1879, political assassination of a wide range of targets began to become a more common form of political protest, becoming part of an intense cycle of terror and counterterror. This revolutionary group believed terrorism should be used to give constant proof that it is possible to fight the government and to strengthen thereby the revolutionary spirit of the people and its faith in the success of the cause.

It is quite easy to note the blending of revolutionary and state terror-violence during this time. The assassinations of Czar Alexander II in 1881 and of First Minister Peter Stolypin in 1911 were incidents that produced periods of counterterrorism (in the form of state repression). Thus, the terrorist acts of assassination, inspired by brutal repression in the Czarist state,
provoked further state terrorism, which in turn inspired revolutionary movement to further acts of violence.

The formation of the Union of Russian Men to combat the growing revolutionary movement "by all means" was not only sanctioned by the Czar, but also granted special protection by him. This reactionary group engaged in a variety of terrorist activities, including, but not limited to, political murders, torture, and bombing. The Okrana (the Czarist secret police) also wreaked fierce counterterror against the militant revolutionaries in an unabated attack until World War I.

George Kennan, commenting on the rising tide of terrorism in Russia during the last half of the nineteenth century, explained the relationship of state and revolutionary terrorism in this way:

Wrong a man . . . deny him all redress, exile him if he complains, gag him if he cries out, strike him in the face if he struggles, and at the last he will stab and throw bombs.14

While some of the seeds of a more widespread and random terror-violence were sown in the revolutionary and anarchistic movements of the late nineteenth century, by the beginning of the twentieth century, terror-violence was still principally directed toward political assassination. Between 1881 and 1912, at least ten national leaders had lost their lives to assassins, as Table 2.2 indicates.

CONCLUSIONS

Is contemporary terrorism different? In what ways? One reason for briefly reviewing the historical patterns and roots of terrorism is to be able to discover what patterns remain accurate in the contemporary world. If terrorism today is just like terrorism of previous centuries, then we can use historical patterns to predict behavior and to construct responses based on successful attempts to combat this phenomenon in the past.

If terrorism today is different, however, then historical patterns will still be useful in designing responses, in understanding the dynamics of the phenomenon. We need to know whether twenty-first century terrorism is significantly different from its historical counterparts.

We have established that prior to the twentieth century, terrorism existed in many forms: political assassinations, lethal groups of religious and/or drug-crazed murderers and zealots, state-sponsored as well as nonstate pirates, and dedicated revolutionaries whose resort to violence was often tied to state repression. All of these forms of terrorism still exist in the modern world.

But there are important differences. Examination of these differences may help us to understand our contemporary terrorism.

Political Assassinations

Terrorist acts are no longer directed solely or even primarily at heads of state. Security precautions to guard such persons against attack have made it very difficult for a lone assassin to successfully murder such a person. The assassination of Yitzhak Rabin, prime minister of Israel in 1995, demonstrated that it is not impossible for such an attack to occur with success. However, in the latter part of the twentieth century, attacks have been made with greater frequency on individuals of less significance but easier access. This broadens the range of acceptable victims well beyond those justified under the early doctrine of tyrannicide.
Drugs, Religion, and Political Murders

This lethal combination still exists in the contemporary world, but the relationship among these elements has changed considerably. During the Middle Ages, the caliph rewarded his assassins with drugs for successfully completed murders of religious opponents. Today, drugs are used to finance religious zealots whose targets are not only those of another religion within their community, but also whole nations or groups of nations whose citizens are regarded by the zealots as legitimate targets for murder. This is a drastic broadening of the category of acceptable potential victims and the use of the "tool" of drugs. Osama bin Laden's call for Muslims to attack any Americans in the waging of a holy war dramatically illustrated this broadening of targets, particularly in the September 11 attacks. The use of drug trafficking to finance terrorism is emerging in many regions, including, but not limited to, Central and South America, the Middle East, and Southeast Asia.

Piracy

Although piracy of the sea waned somewhat in the early part of the twentieth-century (the incident involving the Achille Lauro reminded up that such piracy still occurs) air piracy has become fairly commonplace. Where sea pirates sought primarily material gains (with political gain a pleasant by-product for certain governments), modern air pirates tend to seek political gain first. So although the treatment of victims of piracy has remained essentially the same (pirates throughout the ages have tended to treat their victims as completely expendable), the purpose or goal of the act has changed. Piracy of the sea, which is occurring with increasing frequency today, still meets the criteria of having a political or social motive in terms of the political unrest or collapse of the states in whose waters it occurs and is still almost exclusively for material profit. Modern piracy of the air, while it meets the political criteria for terrorism quite clearly, is not increasing at the rate of the more historic maritime form, as Figure 2.1 indicates.

State-Sponsored Terrorism

Modern governments expanded the concept of "licensed" pirates. Terrorism became an institutionalized form of foreign policy for many nations in the twentieth century. Governments privately and sometimes publicly sponsored groups involved in terrorist activities. Moreover, in the latter half of the twentieth century, governments increasingly became involved in revolutionary movements, providing assistance for either the revolutionaries or the regime against which the revolution was fighting. State sponsorship and state support for terrorism differs significantly from the old forms of state terrorism in which the state had obvious and usually controlling interest in the terrorist acts being committed against its citizens. The role of states today has become more covert and therefore less easy to track and punish.

Technology Changes

Technology has widened the field of possible targets and tactics for terrorism. Modern methods of travel, for example, make it possible to carry out an assassination in the morning in Country Q and be halfway around the world from that nation within a matter of hours. Modern communication has made this a smaller world in that events, for instance, in Yemen are of immediate notice and interest in New York. Such communications also have served to expand the theater to which the terrorist plays. Thus, to catch the attention of the United States, the terrorist need not travel to New York City with a bomb—he needs only to plant a bomb in a boat in Yemen's harbor. The role of the Internet, in particular, needs examination, as it offers linkage, training options, weapons purchase, critically important information—an incredible and virtually
uncontrolled access to people, weapons, and information—making modern terrorism transnational in ways that terrorism in previous centuries could not manage. In this important sense, terrorism today is becoming truly a "new" phenomenon.

Terrorism today seems to be evolving into a violent form of netwar as well. The term netwar refers to

an emerging mode of conflict and crime at societal levels, involving measures short of traditional war, in which the protagonists use network forms of organization and related doctrines, strategies, and technologies attuned to the information age.15

Groups such as al-Qaeda and HAMAS appear to consist of loosely organized, semi-independent cells that often lack any central command hierarchy. These decentralized, flexible structures make counterterrorism efforts, such as the war on terrorism, very difficult to wage successfully, since it is difficult to determine who the "enemy" is and when it is truly defeated or captured.

**Weapons**

Modern technology has also rapidly expanded the arsenal available to groups and individuals committing terrorism. No longer does the would-be assassin need to rely on a small handgun to eliminate his or her victim. A letter bomb will do the job without endangering the perpetrator, as the Unibomber in the United States and the sender of the letters contaminated with anthrax demonstrated. Revolutionaries are no longer confined to simple rifles: surface-to-air missiles (SAMs) are quite accessible, as are a wide range of plastic explosives.

The events in Japan in 1995 and the United States in 2001 gave ample evidence of the potential for destruction through chemical and biological weapons when used in the very vulnerable mass transit or the mail system of modern nation-states. Perhaps, until recently, the consequences of using such weapons were too dramatic for most groups to contemplate. But modern technology has certainly put at the terrorist's disposal a vast array of lethal and largely indiscriminate weapons, of which the sarin toxin used in Japan and the anthrax sent through the mail in the United States represent only simple examples. With the arsenal, the selection of victims has become devastatingly indiscriminate. One can be a victim simply by riding a subway train or bus to work, or by opening the mail—basic and essential acts for millions of innocent people.

As historical precedents for terrorism grow, it becomes very hard to distinguish between legitimate and illegitimate violence. As nations born in violence such as Northern Ireland and Israel become states, it is often difficult to condemn as illegitimate the methods employed in the struggles for independence and survival of persons within those states.

**DISCUSSION**

**Modern Piracy and Government Responses**

of Africa. All of the crew were unharmed in the attack and were able to retake the ship, but the captain of the *Alabama*, Richard Phillips, agreed to be a hostage for the pirates in order to secure his crew's safety.

The *USS Bainbridge*, an American warship (named for a U.S. naval hero who was himself once a prisoner of Barbary pirates), was at the scene of the piracy within hours, but was not able to facilitate a quick rescue of the captain, who was held hostage on the small boat in which the pirates had fled. By the next day, the U.S. Navy called in the Federal Bureau of Investigation
hostage negotiators from Quantico, Virginia, to negotiate with the pirates for the captain's release.

During the third day of the event, April 10, Captain Phillips attempted to escape from his captors, but within a few moments of his entering the waters, the pirates fired their weapons at him in warning, and he was forced to return to the lifeboat in which he and his pirate captors were drifting. The Bainbridge was unable to help the captain in his escape attempt, but two days later, on April 12, the captain was rescued by U.S. Navy SEALs, who shot and killed three of his captors.

This modern incident of terrorism and counterforce raises some important questions for discussion:

1. Were the hijackers pirates, "common enemies of mankind," or just sailors using the means at their disposal to secure a living in a failing economic system?
2. Was Somalia at fault for not stopping the hijackers from operating off their coast?
3. Would the United States have been justified in taking the law into its own hands by going into the Somali port, which at that time operated as a "safe harbor" for many of the Somali pirates, and using force to stop the pirates' use of this port?

Cyberterror

In 2007, a movie depicted a "cyberterror" attack on the U.S. government. In this attack, computer hackers were used to gain access to government data banks and equipment. The resulting traffic accidents and fatalities, panic, and loss of electrical power over a large part of the eastern United States cost the government and its people millions of dollars and much effort to ensure survival and recovery. This scenario raises interesting questions regarding modern terrorism:

1. Is an attack on computer systems really "terrorism"? Does it meet the criteria for a "violent" act, even if no person is deliberately physically injured?
2. If the attack is not on a government computer system, but on a banking system or that of a medical facility, is it still terrorism, or could it just be a sophisticated form of theft, which is still a crime and does cause harm but is not generally listed as "terrorism" because the motive is usually not political?
3. Do we need to redefine the term violence to incorporate this new potential method of attack?

ANALYSIS CHALLENGE

Go to a website to check out the genocide reportedly occurring in the region of Dar-fur, Sudan. If you simply type the words "genocide in Darfur" in your search engine, you will find a list of many, including http://www.globalsecurity.org/military/world/ para/darfur.htm. On this particular website, you will find links to satellite images of the region's destruction as well as a brief history of the "ethnic cleansing" that has been happening. Genocide by a state is occurring today, as these websites indicate. What should be the international community's response?

SUGGESTED READINGS

NOTES

6. Ibid., 36.
Chapter 3
Ideology and Terrorism: Rights from Wrongs?

"I have always dreamed," he mouthed, fiercely, "of a band of men absolute in their resolve to discard all scruples in the choice of means, strong enough to give themselves frankly the name of destroyers, and free from the taint of resigned pessimism which rots the world. No pity for anything on earth, including themselves, and death enlisted for good and all in the service of humanity. . . ."

Joseph Conrad

Just as terrorism as an action is not "new" today, but has certainly changed in significant ways, the motivation for carrying out acts of terror, while fundamentally similar in many ways to that which existed in the past, has also changed. Men and women still claim that their "right" to commit acts of extreme violence derives from the "wrongs" done to them by an unjust system. What has changed about the "causes" for which acts of terrorism are committed are the perceived initial injustices, the "justified response."

Some have continued to spark terrorism for centuries, while others are clearly phenomena of the last two centuries. In this chapter we examine not only the fundamental "causes" for which terrorism has been, and continues to be, committed, but also the more recent provocations to terrorist violence.

Can one injustice truly justify the commission of another injustice? There are, of course, no easy answers to such loaded questions. Understanding the "cause" for which an act of terrorism is committed does not in any sense "justify" the commission of that act, but it can enable us to both understand and thereby more accurately predict such acts as they continue to occur.

Most individuals or groups who claim that an act is justified mean that it is "the right thing to do." So we must study the reasons or justifications given for the terrorist acts in order to understand the driving force behind them. Because we have already reviewed the transformation of terrorism over the centuries, we confine our study of the reasons for terrorism to the terrorism that has existed in the twentieth century.

This will not limit the usefulness of our observations, since the basic reasons for terrorism have not, in many ways, changed as rapidly as have the tactics of terror. The forces of oppression that have caused men to rebel have not changed over the centuries; what has changed is the willingness of the oppressed to use previously unthinkable means to achieve their objectives.

THE RATIONALIZATION OF VIOLENCE

The terrorist revolution is the only just form of revolution.

Nikolai Morozov (1880)

The reasons for the willingness to use extraordinary means are important; they are, in many ways, the "justification" for modern terrorism. It has always been possible to murder innocent persons. Why is it no longer an unthinkable option for revolutionary groups?

This is the crucial question. States throughout history have used terrorism on their citizens, on the citizens of other nations, and as an instrument of war. Biblical and historical accounts abound of conquering armies who slaughtered innocent men, women, and children; armies who took slaves and captives, perpetrating all manner of atrocities.
But those rebelling against such tyrannous brutality have, for the most part, eschewed a comparable brutality. Indeed, the lodestar of revolutionary theory has been its vehement condemnation of the brutality of the existing regime.

Why, then, during the twentieth century did revolutionary groups become more willing to perpetrate equally brutal acts against similarly innocent persons? Oppression is not new, nor is the presence of a few desperate people willing to risk all to oppose a system they abhor. What is new is the willingness of these "desperate people" to use tactics that, until very recently, were the sole provenance of the "oppressive" state.

This is the phenomenon of modern terrorism: that revolutionaries rebelling against state oppression are now willing to use weapons of terror against an innocent citizenry. In the past, revolutionaries and the theorists who espoused their causes defended their actions in terms of ridding the world of oppressive states whose leaders committed unthinkable acts upon the citizenry. By committing similar acts upon the citizenry, revolutionaries have fundamentally altered their philosophy. It is important to understand the substance of this changed philosophy, and the reasons for the change, in order to understand modern terrorism.

Just as in earlier empires the "divine right to rule" had been the criterion for justifying the abuse of citizens by tyrants, with the French Revolution the "will of the people" became a justification for terrorism by the people seeking to overthrow regimes. Yet when the efforts at revolution failed or produced results that did not satisfy the desire for "justice" by those seeking to change the system, the revolutionaries became intensely frustrated, and more willing to use terrorism to achieve change. As one scholar put it:

Modern non-state-sponsored terrorism, or terrorism from below, emerged during the last third of the nineteenth century because liberal, revolutionary changes failed to materialize. Frustration mounted as the revolutions of 1830 and 1848 failed to bring sweeping changes—Russia remained an autocracy controlled by the Czar, the French Republic was perverted into an empire, and Germany remained unchanged.1

Revolutionaries such as Nikolai Morozov came to view terrorism as the only chance for successful revolution in czarist Russia. Anarchism, which advocated that "individual freedom should be absolute, and that all government and law is evil," became increasingly involved in nonselective violence, as the possibility of forcing change within the structure of the existing state became less feasible.

Indeed, anarchism, as a theory, is less strict in its adherence to the injury of only "guilty" persons than were most revolutionaries of the nineteenth-century. Louis August Blanqui asserted that the transformation of society could only come about from a small, well-organized group of "terrorists" acting as the vanguard of the revolutionary process.2 With the imperial abdication in France in 1870, and the establishment of the Paris Commune in March 1871 (composed as it was of a Blanquist majority), "a red terror once again came into being, accentuated by class division and violence."3

The anarcho-syndicalist credo expressed by American revolutionary propagandist Emma Goldman offers another insight into the transition of revolutionary theory. Goldman advocated "direct action against the authority of the law, direct action against the invasive meddlesome authority of our moral code."4 This rejection of a moral code as "invasive" and "meddlesome" and belonging to those in authority is certainly a shift in philosophy. Revolutionaries of previous centuries had claimed that such a code "justified" their actions against a clearly immoral state.

Franz Fanon, the theoretical architect of the Algerian independence movement, offered some changes to traditional revolutionary theory. He argued for the use of "the technique of terrorism" that, he asserted, consisted of individual and collective attempts by means of bombs or by the derailing of trains to disrupt the existing system.
Both of these theorists express a philosophy radically different from that espoused by the early Russian revolutionaries or advocates of tyrannicide. The legitimate victim of violence need no longer be exclusively either the soldier or the government official. Rather, with increasing frequency, he or she is an innocent civilian third party, whose injury or death is intended to hurt or frighten the entire body politic.

In the United States, anarchist philosophy began to engender radical demands for indiscriminate violence. Anarchist publications in the 1880s were candid in their enthusiasm for the widespread use of explosives. One letter that appeared in one extremist paper, Alarm, enthused:

> Dynamite! Of all the good stuff, this is the stuff. . . . Place this in the immediate vicinity of a lot of rich loafers who live by the sweat of other people's brows, and light the fuse. A most cheerful and gratifying result will follow.\(^5\)

Anarchist violence did indeed claim innocent lives, often through the use of dynamite, during the following decades. Although strains of both nonviolent socialism and violent anarchism mixed in the labor movement, tainting much of labor's legitimate attempts to organize, acts of random violence were unabashedly carried out by anarchist extremists within the movement.

On October 1, 1910, the Los Angeles Times building was destroyed by dynamite. Two young ironworkers eventually confessed to this crime, in which twenty innocent people died and another seventeen were injured. On September 16, 1920, an explosion on New York City's Wall Street claimed an even larger number of innocent lives. Forty people were killed in this blast, and another 300 were injured. A hitherto unknown group, calling itself the American Anarchist Fighters, claimed credit for this devastating attack on victims who were ordinary working people.

**REBELLION AND THE RIGHT OF SELF-DETERMINATION**

The evolution of revolutionary violence into terrorism is significant. It has long been a stumbling block in the creation of effective international law concerning terrorism. Revolutions have occurred throughout history without recourse to terror-violence; an effort must be made to understand why such revolutions do not continue to occur without the use of terrorist tactics.

Although rebellion cannot be separated from violence, certain types of violence have not been acceptable. Violence directed deliberately against innocent parties is destructive not only of law and of legal systems, but also of civilized society, according to one expert on international law.\(^6\)

As the United Nations (U.N.) Secretariat, in its study of the nature and causes of terrorism, concluded: "The legitimacy of a cause does not in itself legitimize the use of certain forms of violence, especially against the innocent." Paragraph 10 of the Secretariat's study notes that this limit on the legitimate use of violence "has long been recognized, even in the customary laws of war."\(^7\) Both the General Assembly and the Security Council of the United Nations have passed resolutions stating that "criminal acts intended or calculated to provoke a state of terror in the general public, a group of persons or particular persons for political purposes are in any circumstances unjustifiable, whatever the considerations of a political, philosophical, ideological, racial, ethnic, religious, or other nature that may be invoked to justify them."\(^8\)

Two points here are worth noting. One is that the community of nations regards the limits on the legitimate use of violence as long standing—not the product of twentieth-century governments seeking to prevent rebellions.

The second point is that the community of nations, not just in the Secretariat's report but in many documents and discussions, has agreed that there are in fact limits to the legitimate use of violence, regardless of the justice of the cause. Moreover, these limits are acknowledged to
exist even in times of war. Indeed, it is from the laws of war that we obtain our clearest understanding of precisely what these limits on the use of violence are.

Therefore, a condemnation of terrorism is not a denunciation of revolutionaries or guerrillas. It does not in any sense preclude the right to revolution, which is a recognized and protected right under international law.

As one scholar pointed out, those who attack "political and military leaders . . . will not be called terrorists at all" in international law. Another knowledgeable expert remarked that "today's revolutionaries want to be guerrillas, not terrorists," as there is no stigma attached to the status of rebels. Most resolutions passed by the U.N. General Assembly on terrorism contain a reaffirmation of "the inalienable right of self-determination and independence of all peoples." Kofi Annan, former Secretary-General of the United Nations, expressed the international community's feelings concisely when he stated that: "Terrorism strikes at the very heart of everything the United Nations stands for. It presents a global threat to democracy, the rule of law, human rights and stability."

No pejorative status is attached to rebels and revolutionaries, but even armies engaged in warfare must by law recognize certain limits on the use of violence. The right to revolution and self-determination cannot be predicated upon the wrongful deaths of innocent persons, nor is it prevented in any meaningful way from other nonprohibited activity by the condemnation of terrorist tactics.

To cite a venerable legal maxim, *jus ex injuria non oritur*, meaning "rights do not arise from wrongs." Revolutions have occurred throughout history without depending on the use of terrorism for success. There seems no legitimate reason why they cannot continue to occur successfully in spite of a ban on terrorist tactics. The position of governments committed to this concept was stated by former U.S. Secretary of State William Rogers when he spoke at the 1972 opening of the U.N. General Assembly:

> Terrorist acts are totally unacceptable attacks against the very fabric of international order. They must be universally condemned, whether we consider the cause a terrorist invoked noble or ignoble, legitimate or illegitimate.

Not all nations, governments, or individuals agree with this assessment. Even the nations that subscribe to this assessment are not unfailingly willing to adhere to it. For instance, during World War II, Nazism was regarded as "an ultimate threat to everything decent... an ideology and a practice of domination so murderous, so degrading even to those who might survive it, that the consequences of its final victory were literally beyond calculation, immeasurably awful."

But nonstrategic, random terror bombing by those same nations that authored and defended the current laws against terrorism resulted in the deaths of thousands of German civilians. These persons were apparently sacrificed for "psychological" purposes (i.e., to create fear and chaos in an audience). Such "sacrifices" and indiscriminate destruction of civilians today would be roundly condemned by those same nations if they were performed by a revolutionary or guerrilla force or by a rogue state carrying out terror-violence against its own citizens.

So the distinction between acceptable and unacceptable use of force is not always clear and is influenced by the nations responsible for making the rules. But the *mores* prohibiting certain forms of violence are not of recent vintage: they have been evolving over many centuries.

One of the ingredients in the formulation of the rules that govern civilized society today that is new is the **right of self-determination.** The U.N. Charter, written in 1945, states that *people have a right to determine for themselves the form of state under which they choose to live.* Since that time, nations and legal scholars have been trying to work out just which people have this right and how extensive a justification this right confers on individuals engaged in wars of self-determination.
The answers to these and related questions are not readily attainable. As one scholar noted:

[According to United Nations practice, a "people" is any group with a shared identity, identified by that international organization most often in the context of an organization wishing to liberate the "people" from a regime not sharing that identity. Thus, the Puerto Ricans are a people but the Kurds are not; the Namibians are a people and possess their own state but the population of East Timor (or what remains of it) is without identity and without hope.]

East Timor is now a state (making the observation by Robert Friedlander in the 1980s no longer completely accurate), but the lack of clarity as to who are a "people" by law remains. Nor is it clear just how fundamental this right to self-determination is. Is it more fundamental than the right to life? If not, then the pursuit of self-determination cannot intentionally jeopardize any person's right to life. Does the right to self-determination supercede the right of a state to protect itself and to provide for its citizens a safe and stable system of government?

No one seeking to exercise their right to self-determination do so today in a vacuum. Their actions in the course of their struggle necessarily have an effect, often a negative one, on other persons within their community. As in any armed struggle, there must remain limits within which their right to pursue self-determination must operate, to limit the adverse effects of such a course of action on the rights of others.

The problem that this newly articulated right to self-determination has created in terms of the limitation of armed warfare is important. This right is readily conferred upon, or claimed by, many groups who do not enjoy, and probably can never gain, majority support among the indigenous population of their state. This means that many groups of disaffected persons who have no hope of ever waging a successful guerrilla war against an established state may claim this right. The argument has been made that these groups cannot reasonably be held to conventional rules of warfare, for to hold them to those rules is to condemn them to inevitable failure.

Faced with the overwhelming odds in favor of the well-established and well-armed state, many of the peoples seeking to exercise their right to self-determination are increasingly willing to use less conventional methods of waging war. Lacking large popular support from the indigenous population and facing a state whose trained army and weaponry make conventional resistance a mockery, such groups are willing to use the illegal tactic of terrorism to achieve their right.

The difficulties facing such groups seeking self-determination are very real, but the problems that they create are also formidable. What happens, for example, if two "peoples" claim that their right to self-determination gives them the right to occupy and control the same piece of land? Who decides which group's right should prevail?

This is not a hypothetical situation. The rival claims of the Palestinians and the Israelis to the same land have provoked decades of bloodshed and bitter fighting. People in this struggle claim a historical right to the land.

**TERRORISM IN THE NAME OF GOD**

Just as terrorism for political goals has deep historic roots, so does terrorism carried out for religious reasons. Cases such as that of the Palestinians and the Israelis offer examples of the complex web of religious and political goals of those carrying out terrorist acts. Under the leadership of Hassan I Sabah, Muslim extremists seeking to purify their communities carried out terrorism in medieval times, justifying their actions by their desire to hasten the arrival of the Imam, "the heir to the Prophet, the Chosen of God, and the sole rightful leader of mankind, who would establish a new and just society."
An extreme Jewish Zealot sect, the Sicarii, carried out similar assassinations, targeting mainly Jewish "moderates" who accommodated the Romans in the first century C.E. Their immediate goal was to end Roman influence, but they ultimately sought to initiate the coming of the Messiah by forcing an apocalyptic conflict between Rome and Jerusalem, in a belief that by initiating such a confrontation, they could force God’s dire intervention for the people of Israel.

The role of religion as a guiding force in the commission of acts of terrorism will be explored further in succeeding chapters. It is important here to note four points:

Terrorism in the name of religion is not a modern phenomenon. For centuries, religious zealots have been willing to take the lives of innocent people to bring about radical religious goals. While the extent of the damage to people and property that occurred with the events of September 11, 2001, may have set new records in deaths and destruction carried out and/or called for by a religious zealot, it is not unique.

Contrary to their claims, the zealots who carry out the acts of terror "in the name" of their religious beliefs do not reflect the beliefs of the vast majority of those who share the basic faith. Zealotry denotes extremism, and religious zealots are extremists. Thus, the religions of Judaism, Islam, and Christianity (which generated crusades and extremes of violence as well) are not fundamentally violent, but can be cited by extremists to justify violent acts. It is essential to understand the basic faith in order to interpret and identify the exaggerations of those misusing it to justify their extreme actions.

Religious zealots act for two audiences: the state, which they seek to change; and their divine leader (God, Allah, Jehovah, or by whatever name their leader is known). The sought political change is real, but it is often tangled inextricably with religious goals. For the zealot, if actions do not achieve the desired reaction from the divine audience, more action is clearly necessary, making political resolution of conflicts difficult.

The entangling of religious and political goals often makes resolution of conflicts difficult, if not impossible, to achieve. While groups carrying out acts of terror may share some of the same goals, they may not agree on the primacy of the goals, making it unclear to those seeking to diffuse the conflict what they could offer that would satisfy the demands for change. For instance, while the Palestinian Liberation Organization (PLO) sought political solutions in its conflict with Israel (the creation of a Palestinian state), HAMAS (Harakat al-Muqawama al-Islamiyyah, another Palestinian faction) seeks the establishment of an Islamic state to rule the area. Differing goals continue to make a solution to this problem almost impossible to achieve.

Religion certainly complicates the process of conflict resolution, making the goals sought hard to determine, and failure impossible to accept (as the Sicarrii demonstrated at Masada). The actions of religious zealots are intended to improve human existence both politically and religiously, with the religious changes sought paramount.

The attacks by al-Qaeda on September 11, 2001, are described by leaders of the group, including Osama bin Laden, as acts of jihad against globalization and the spread of Western influence. The radicalized Islam advocated by bin Laden, while not acceptable to most Muslims, does indicate an element that needs to be explored here: the impact of globalization as interpreted by religious extremists.

Globalization is an umbrella term that refers to increasing global connectivity, integration, and interdependence in the economic, social, technological, cultural, political, and ecological fields. As cultures, societies, and economic and political systems become increasingly connected with modern technology that makes transportation, communication, and trade so much easier than ever before, religious fundamentalism finds itself challenged with a need to accept changes that may not be compatible with traditional belief systems. As long as societies allow fundamental religious sects to maintain separate lifestyles as dictated by their religious beliefs, there are few problems. But as globalization makes the possibility of "separateness" and
seclusion more difficult to maintain, the more fundamentalist elements of the faith community may become more radicalized as they seek to maintain the "purity" of their faith community.

Another element of globalization has also begun to trigger terrorist attacks. As people become more aware of the vast differences in lifestyles, resources, and wealth that exist in our global society, it becomes increasingly easy to resent, and even to hate, those who have wealth but do not share it. This is not a sudden transformation for most individuals, but a gradual radicalization as globalization allows the realization of the levels of "unfairness" that currently exist. It is usually a slow process, but as the speed of globalization increases, so may this process.

To understand the transition now evolving in the perspectives of many today, let us examine the process briefly. It can be broken down into four phases or steps of understanding: a view of the world in context, in comparison, in attribution, and in reaction.

Most people experience a feeling of frustration at wanting something they do not have, or in needing something they cannot get. For example, if you are hungry, and you need food, a natural reaction would be that it is not right that you do not have food, for you have done nothing wrong to deserve a punishment of hunger. Your anger is relatively undirected because you have nothing with which to compare yourself, and there is no one to fault for your lack of food. This is the first and least destructive stage in the process of radicalization by globalization.

The second stage can begin when you have something or someone with which to compare your state of hunger. When you start to realize that others like you are not hungry, but have sufficient food, you begin to think that, it is not fair. You should not have to be hungry while others have all the food they need. There is no justice in such a situation. As the world becomes more globalized, the differences in poverty and plenty and hunger and gluttony become increasingly apparent. Your anger is becoming more focused, but it is more likely against your leaders, who have failed to achieve justice for you as have the leaders of other cultures.

The third stage in this process arises from this need to attribute fault for your lack of food. Savvy leaders will direct your attention to the fact that those with abundance are not sharing and have in fact established trade barriers that make it impossible for them to get a fair share of the resources to you. Your anger can then be focused on those who have abundant resources while you do without basic essentials. If you watch those you love to die for lack of food, it is understandably easy to be angry with those whom the media (to which you have increasing access) describe as suffering from obesity. As global networks make these comparisons possible, it is simple to transfer your anger about your situation to those pictured in the media as having too much.

But even this level of anger will seldom result in an act of terrorism. It may result in murder, or armed attacks aimed at obtaining the things needed. The targets of your anger, though, are very specific, and still, in your view, people. You are, perhaps, bitterly angry and want those with too much to have to share with you and to be aware of your needs. But your faith teaches you to still regard them as human beings: misguided; perhaps unaware and even uncaring; but still people who can be reached and made aware and who might, when made aware, help you.

The fourth stage involves a transition from a general anger with those in the world who could be helping to protect and support those in need, to a reaction of impersonal commitment to destroy an evil. In this stage, you see those who are not preventing the starvation; who are causing their technology to invade your life; and who are impinging on your culture, as not just uncaring but as wicked and monstrous. Killing such an enemy is therefore not a problem, but an obligation. Table 3.1 offers a simple view of this four-step process.

This last stage has historically required the emergence of a leader or leadership cadre to focus the anger and define the enemy as not human but monstrous. Religious zealots have found this transition simple, and as the forces of globalization combine today with increasing radicalization of religious groups, it is unsurprising that acts of terrorism also have risen in number and scope, to become global problems.
CAUSES OF THE LEFT, RIGHT, AND CENTER

In addition to having belief systems that help the individual to justify terrorist actions, there are a wide variety of causes for which men and women have committed terrorism. Let us briefly consider a few of the motives for modern terrorism.

Religious Fanaticism

Bin Laden's al-Qaeda network has given the world a dramatic example of the destructive power of individuals committed to waging holy war on religious principles, disciples of religious fanaticism. The holy war called for by bin Laden from Islamic fundamentalists caused the death of thousands of innocent people in the attacks on the World Trade Center and the Pentagon in 2001 and continues to feed the flames of conflict within Afghanistan, Iraq, and the rest of the world.

In their religious fervor, religious fanatics of all faiths have been unrepentantly responsible for the loss of thousands of lives. Planes are sabotaged, temples stormed, and unrelenting guerrilla warfare waged, all in the name of "religion." Such a war pits Shi'a Muslims against Sunni Muslims, Catholics against Protestants, Hindus against Muslims across all forms of political and physical boundaries.

Modern "crusaders," often taking the form of suicide bombers in the Middle East today, offer some of the most chilling evidence of the impact of religion on terrorism. Martyrdom is a compelling lure, and self-sacrifice is valued above many other virtues. In the name of a supreme being, rivers of blood have flowed and will no doubt continue to flow, for fanatics of any sort are seldom satisfied by any gain.

Anarchism

Few groups that still operate today hold strictly to this cause. The last three decades of the twentieth century witnessed the growth and demise of the Weather Underground and the Symbionese Liberation Army in the United States. The Japanese Red Army (JRA) has espoused anarchistic beliefs, as did the Red Army Faction (RAF) in Germany. Such groups tended to be small and short-lived, perhaps because their goals are somewhat nebulous, and thus they find it difficult to draw others into their ranks. Anarchism's more extreme form, nihilism, in which the destruction of all structure and form of society is sought, still exists as an ideology among certain terrorist groups.

Neo-Nazism/Neofascism

In recent years, a number of groups have sprung up throughout Western Europe and the United States embracing neo-Nazism/neofascism. In the United States, for example, the Aryan Nations and several related groups including the Christian Identity Movement (CIM) and the Christian Patriots have been involved in armed conflict with the authorities and have been responsible for several bombings in which innocent people were killed. Indeed, many of these groups have been involved in the arming and training of paramilitary troops in almost every state in the United States. The devastating bomb blast in Oklahoma City in 1995, after which a shocked nation watched the bodies of small children being carried lifeless or dying from the rubble, was carried out by a person who had been a member of a paramilitary group in Michigan and whose mother had involved him at an early age in the CIM.
Separatism

Perhaps the best-known group embracing separatism is the Euskadi Ta Askatasuna (ETA), the Basque separatists who seek independence or at least autonomy from Spain, and have used bombs and machine guns to try to force the Spanish government to accede to their demands for independence. The violent group of French-Canadian separatists, the Quebec Liberation Front (FLQ), was essentially inactive by the 1990s, but was responsible for several acts of terrorism during the 1960s and 1970s. The Abu Sayyaf Group in the Philippines has carried out numerous kidnappings for ransom in an effort to gain separation for the Muslim portion of the country from the government in Manila.

Nationalism

It is difficult to separate nationalism from separatism as a motivator of terrorism. Groups whose motivation is nationalism are those who seek for their portion of society, which is sometimes but not always a minority, to gain control of the system of government and the allocation of resources within that nation-state. Such groups do not seek independence or separation from the nation. With this in mind, the Irish Republican Army (IRA), whose terrorist acts in Northern Ireland are the source of infamous legend, could conceivably have been classed in this category prior to the peace process of the 1990s. The Tupamaros in Uruguay and the Shining Path (Sendero Luminoso) in Peru could also be placed within this category.

Issue-Oriented Terror

During the latter part of the twentieth century, various forms of issue orientation emerged, where issues aroused such violent sentiments that adherents to one side or another resorted to terrorist violence to enforce their beliefs. Abortion is one such issue: its opponents have actually bombed abortion clinics. Oddly enough, during the last decade of the twentieth century environmental and animal protection activists became increasingly militant in their insistence that protection of the environment, animals, or both is critically important and worth fighting for. Placing spikes in trees and in paths through the woods and burning down animal testing centers have become common actions by such groups. Just as doctors have been killed by individuals violently opposed to abortion to “save the fetuses that those doctors may have been willing to abort,” the Earth Liberation Front (ELF), a militant environmental group in the United States, rationalized that if it was necessary to kill people to save the trees, then they would be justified in killing people! This group, now listed by the Federal Bureau of Investigation (FBI) as a terrorist group, has been responsible for much property damage in its efforts to stop building projects that its members deem destructive to the environment.

The issue of nuclear power and nuclear weapons has also provoked violence. Several modern novelists and screenwriters have created all-too-realistic scenarios concerning the possibility of antinuclear activists detonating a nuclear weapon to illustrate their contention that such weapons must be banned. Thus far, such an incident exists only in fiction, but the growing intensity of the debate on this issue makes such an incident uncomfortably close to reality.

As Table 3.2 indicates, the causes for which terrorism is committed today encompass a wide spectrum. Many of these reasons for terrorism do not fit comfortably into the lineup but may be associated with a cause, depending upon the type of group or state perpetrating it. Visualizing this line of causes is useful, but it helps to remember that the causes of the extreme left and the extreme right too often meet on the fringe of a circle rather than being separated to the ends of a straight line because groups at both ends of this spectrum may desire the same thing: an absolute end to the authority structure that currently exists.
Ideological Mercenaries

The legendary Illich Ramirez Sanchez, known to the world as Carlos the Jackal, and more recently Sabri al-Banna (Abu Nidal) have given rise to a fear of the proliferation of "terrorists-for-hire," or ideological mercenaries. Although it is beyond debate that such persons do exist and cause considerable violence, little evidence suggests the development of a mercenary army of terrorists. Indeed, the arrest of Carlos from his abode in the Sudan and his removal for trial in France indicates that the twenty-first century may have less tolerance politically for such individuals. Instead, the rise of individuals like Osama bin Laden suggests that terrorists who can themselves hire or fund terrorist activities constitute a greater threat.

Pathological Terrorists

Some persons kill and terrorize for the sheer joy of terrorizing, not for any "cause" or belief. Charles Manson was perhaps an example; those who commit so-called serial murders are of the same cast. Pathological terrorists have no cause; they are sick and twisted individuals, whom Frederick Hacker, in his book Crusaders, Criminals, Crazies: Terror and Terrorism in Our Time, has called "crazies." Perhaps the youths responsible for the massacres in schools during the 1990s were enjoying terrorizing and were thus pathological but not necessarily terrorists, because they lacked a definable political motive.

Counterterror Terrorists

Perhaps the most frightening development toward the end of the twentieth century is the proliferation of so-called counterterror terrorists, the death squads that mete out summary justice to those judged by their leaders to be terrorists. Several authoritarian states, threatened by political change, have resorted to these semiofficial troops, inspiring a spiral of terror-violence. Several countries in Central and South America have fallen prey to the lure of counterterror tactics to control terrorism. Even Israel, itself prey to countless terrorist suicide bombings, has resorted to the use of helicopter gunship attacks on civilian communities in its attempts to kill suspected leaders of militant groups.

CONCLUSIONS

Terrorism is different today, with many different forms and causes. The argument continues to be made that the justice of the cause, the nobility of the motive, in some way makes the terrorist act less heinous. To understand the cause for which one fights and the belief system in which one operates, it is said, makes it less likely that one will wholeheartedly condemn the actions taken.

But does the woman whose legs are blown off in an explosion in the supermarket understand that the bomb was placed by persons who bore her no personal grudge but were merely seeking independence or separatism for a disenfranchised minority? Will the family of a child killed in an airline explosion accept the explanation that the group responsible for the explosion had not enough weapons to fight a legitimate battle with an authoritarian government? Can those who lost loved ones in the World Trade Center attacks accept their losses more easily by understanding the desperation of those who saw their faith threatened by the presence of the United States in the Middle East?

No cause, however just or noble, can make such actions acceptable. Understanding cannot diminish the horror of the atrocity committed against the innocent. If the right of self-
determination must be secured by the wrongs of the murder and maiming of innocents, it is not worth the price in the eyes of the rest of the world.

DISCUSSION

If a group is exercising its right to self-determination, does this give it the right to commit a wrong against other persons? To what extent is one justified in committing a wrong in order to secure a right? Is there ever a time in which, as some have argued, the needs of the many—for example, to secure the right of self-determination or freedom—can be said to outweigh the needs of the few—the victims of the violence? Consider and discuss the following incidents, keeping in mind several questions: Were these acts of terrorism? For what cause were they committed? Were they in any sense justified?

1. **Assassination of Franz Ferdinand.** Shot to death by a man who felt that the rights of the minority of which he was a part were being cruelly ignored in the carving up of Europe. Ferdinand's death precipitated the events leading up to World War I. His death was in some ways the catalyst to that calamity.

2. **Assassination of Anwar Sadat.** Shot by men who felt that he had betrayed the Arabs by his willingness to establish a peaceful relationship with Israel, Sadat's death slowed considerably the peace process in the Middle East. His successor, Hosni Mubarak, was understandably reluctant to take similar unpopular steps.

3. **Bombing of the U.S. Marine barracks in Lebanon.** Carried out by militants who regarded the U.S. military presence in Lebanon as an invasive influence in their civil war, this attack resulted in over 200 deaths and the diminishing of the U.S. presence in that war-torn country. Syrian and Israeli influence and presence remains strong in Lebanon's territory, however.

4. **Bombing of Hiroshima.** Carried out by U.S. bombers carrying atomic weapons, this attack was designed to bring a quick halt to the devastating war in the Pacific. It did indeed achieve this, at the cost of countless thousands of Japanese civilians dead or maimed and many more who bore disease and deformity for generations.

ANALYSIS CHALLENGE

Go to the United Nations website, and read about the Question of Palestine (http://www.un.org/Depts/dpi/palestine/). How can the "right to self-determination" be resolved in this case without further loss of life? Can you see the roots of a "cycle of violence" here?

SUGGESTED READINGS


NOTES


4. Emma Goldman, Anarchism and Other Essays (New York: Dover, 1969), 66. This is a republication of the original 1917 edition. Of particular note to the student of terrorism are Goldman's essays on the meaning of anarchism and the "psychology of political violence."


11. United Nations General Assembly Resolution 44/29, "Measures to prevent international terrorism which endangers or takes innocent human lives or jeopardizes fundamental freedoms and study of the underlying causes of those forms of terrorism and acts of violence which lie in misery, frustration, grievance, and despair and which cause some people to sacrifice human lives, including their own, in an attempt to effect radical changes" (December 4, 1989).


13. For the full text of his remarks, see State Department Bulletin no. 67 (1972), 425-429.


Chapter 14
The New Terrorist Threat: Weapons of Mass Destruction

HISTORICAL USE OF WEAPONS OF MASS DESTRUCTION

Modern WMDs have one new component—nuclear weapons—but the other two major types of WMDs, biological and chemical, have been part of the arsenal of warriors for much longer. The oldest of these, biological weapons, warfare agents that include living microorganisms and toxins produced by microorganisms, plants, or animals, have the longest history to explore. Chemical weapons, often composed of binary compounds of chemicals that separately would not be lethal, are not necessarily a completely different category of weapon, since agents like strychnine and ricin (which will be discussed later) are called biotoxins. We will begin with the oldest of these weapons—the biological ones—and progress through chemical to nuclear, taking a quick look at each type.

A Brief History of Biological Weapons

During the 1990s, there was a widespread belief that biological and chemical weapons were the greatest danger facing humanity. Biological weapons treaties, including the one signed by the United States and the Soviet Union twenty years earlier, declared that nations would no longer produce such weapons and would destroy their current stocks of these weapons. But the use of such weapons had already been part of the history of conflict throughout the world.

The plague of the fourteenth century, reported to have killed about a third of the population of Europe, was supposedly spread by the Tartars in their siege of the fortress of Caffa in the Crimea. According to legendary accounts, the Tartars used catapults to hurl plague-infected corpses into the city, becoming one of the first armies in history to engage in germ warfare. Other plagues were alleged to be either the result of or to be enhanced by the deliberate use of infected skins, corpses, or both by military groups. This includes the account in Chapter 9 discussing terrorism in the United States of the use of blankets infected with smallpox as "peace offerings" to Native Americans in Pennsylvania in the 1760s.

During World War I, Germany was accused of trying to spread cholera bacilli in Italy, the plague in St. Petersburg, and anthrax in Mesopotamia and Romania. In 1915, German agents in the United States were believed to have injected horses, mules, and cattle with anthrax on their way to Europe during World War I. The germs were produced in Silver Springs, Maryland, a Washington, DC, suburb, at a small German laboratory headed by Dr. Anton Dilger, who produced a liter of anthrax and glanders. The original seed cultures had reportedly been supplied by Berlin.¹

In the mid-1950s, Japan created a special biologic-d warfare force called unit 731, led by General Ishi in Manchuria, and many biological agents were produced in the laboratories of this unit. During the Japanese invasion of China in 1937, fleas were infected with many of these agents, including plague, smallpox, typhus, and gas gangrene. Evidence has emerged that these fleas were put in wheat and dropped from Japanese planes over Chinese towns toward the end of the war, resulting in hundreds of deaths.

The United Kingdom and the United States also developed germ warfare/ capabilities during World War II. The United Kingdom’s experiments with anthrax at Gruinard Island off the coast of Scotland resulted in contamination of the island, which remained contaminated until the late 1990s. The U.S. biological warfare program, initiated in 1942, continued after the end of the war, headquartered in Fort Detrick, Maryland, during the 1950s and 1960s.

Germ warfare installations also suffered from problems due to accidents. One of the most famous of these occurred in Sverdlovsk, in the Ural Mountains of the Soviet Union in April 1979. Intelligence assessments, later confirmed by Russian files found after the collapse of the USSR,
indicated that a large airborne release of anthrax spores used for bacteriological warfare resulted in fatalities. Similar, if smaller, accidents have reportedly occurred at facilities around the world, making the production of such weapons more visibly hazardous.

A Brief History of Chemical Weapons

There are today a wide range of potential chemical weapons. Unfortunately, many chemicals used regularly for nonlethal purposes can be easily obtained and used—in combination with other chemicals—as chemical weapons. Chemical agents can be divided into many categories, but at least a cursory look at some of the major types of chemical agents will make a discussion of this type of weapon more easily understood.

Biotoxins, mentioned earlier, are one type of chemical agent. This category includes agents such as ricin, abrin, and strychnine. Another type of agent used by the military in many contexts in the twentieth century are the blister agents, including sulfur mustard, also known as mustard gas.

Chemical weapons are a much more recent addition to the arsenal of nations and warriors. For the most part, this type of weapon was not used in conflict until the twentieth century, existing only in the form of plans never carried out in the decades at the end of the nineteenth century. The idea of using poison gas against an enemy has been reported in connection with several groups, including the Fenians, who allegedly planned to spray it in the House of Commons in London in the 1870s. Similar plans for the use of poison gas were made but never implemented during the Boer War and the Japanese War with the Russians in 1905.

It was not until World War I that a chemical weapon—chlorine gas—was used on a large scale with shocking success by the Germans at the battle of Ypres in 1915. The gas killed 5,000 Allied troops and injured many more. Five months later, in Loos, Belgium, the Allies used poison gas against German troops, again with dreadful success. The military on both sides continued to use gases as weapons with varying levels of success. Although chlorine gas continued to be used in gas artillery shelling in a number of battles, including but not limited to the battles of Fey-en-Haye, Verdun, and the Somme, an equally effective mixture of chlorine and phosgene (mustard gas) was also used.

About twenty-five poison gases were used in World War I. The exact casualty count from this type of weapon is unclear; estimates vary between 500,000 and 1.2 million troops and civilians from both sides. History indicates that the Russians may have suffered the worst losses from this weapon when it was used against them in conflict east of Warsaw in 1915. They reportedly lost about 25,000 soldiers in the first such attack, with countless casualties among civilians in towns near the front line.

Gas attacks, though clearly technologically possible, do not appear to have occurred in World War II. Even the Germans, who had clear technical superiority in the range of available chemical weaponry, decided for a variety of reasons not to use these weapons. Believing, apparently, that Allied forces had also developed tabun and sarin, toxic gases that were produced in Germany by 1944, Hitler decided not to use these newest lethal weapons.

Another reported use of chemical weapons occurred when Iraq used them during its war with Iran, both against Iranians and later against members of Iraq's own citizenry. Here are a few of the accounts of the use of these agents in this eight-year conflict:

1983. Mustard gas was used at Haj Umrah.
1984. Nerve gases again used, at Al-Basra, when Iraqi troops were in retreat.
1985 and 1986. Thousands of Iranian soldiers reportedly killed by gas attacks at Um Rashrash, Hawizeh Marsh, and other locations.
1986 and 1987. Poison gases used against the Kurds at Panjwin and Halabah. Reports indicate that Saddam Hussein used tabun in these attacks. News reports depicted men, women,
and children lying in agonized death sprawls on the streets after planes passed over the villages spraying the toxins.

**A Brief History of Nuclear Weapons**

The history of the actual use of nuclear weapons is quite brief. This recently developed WMD has only been used on the occasion of the bombing attacks by the United States on the Japanese cities of Hiroshima and Nagasaki in 1945, bringing about an end to the war in the Pacific during World War II. Although atomic, and later nuclear, weapons were only in the hands of a few nations for several decades, this situation has rapidly changed in recent years.

To date, there are at least eight states with openly declared national nuclear weapons capabilities: the United States, the United Kingdom, France, Russia, the People's Republic of China, India, Pakistan, and North Korea. However, many more states have secretly developed, and have arguably tested, nuclear weapons, including such states as Israel, Iran, South Africa, Iraq, and a few others. Moreover, several states that emerged from the former Soviet Union, in addition to Russia, have nuclear weapons still within their arsenals, although most have agreed to turn these over to Russia for the purpose of bilateral United States-Russian disarmament, as initiated in the Strategic Arms Reduction Talks, documents, and discussions of the 1980s and 1990s.

Proliferation of nuclear weapons has occurred and is no doubt still occurring. This trend makes it unlikely that the history of the use of nuclear weapons will terminate with the two attacks in 1945.

**TYPES OF WEAPONS OF MASS DESTRUCTION AVAILABLE**

Clearly, WMDs have been used by groups of warriors and nation-states for many years. The possibility that terrorists today would use such weapons cannot be assessed, because there is no history of previous use by others involved in intense struggles. Moreover, such weapons have not been used exclusively, or even primarily, by nondemocratic states or individuals. Instead, a variety of states, many of them democratic, have been the major forces employing these weapons. Remember that the only use of atomic weapons, nuclear weapons, or both was by the United States against predominantly civilian targets (of military significance but civilian populations).

The next step is to examine the types of WMDs available to terrorists today and the relative capacity of each to create mass destruction. Although many of these weapons have been untested on human populations, estimates can be made as to their lethality based on laboratory tests. Such tests cannot be definitive, but information provided about these weapons in such tests offer some indication of the toxicity of the substances.

**Biological Agents**

There are four categories of living microorganisms: bacteria, viruses, rickettsiae, and fungi. Bacteria are small free-living organisms; they can be grown on solid or liquid media and produce diseases that often respond to specific treatment with antibiotics. A familiar example of bacteria used recently in a terrorist attack is anthrax, an acute infectious disease caused by the spore-forming bacterium *Bacillus anthracis*. Although anthrax most often occurs in hoofed mammals, it can also infect humans, as the anthrax attack in the mail system of the United States in the fall of 2001 proved.

Viruses are organisms that require living cells in which to replicate. This type of organism does not respond to antibiotics but is sometimes responsive to viral compounds, few of which
are available. Again, the most familiar example of viruses as a weapon of terror is smallpox, an infection caused by the Variola virus.

The latter two groups are less familiar to the general public. Rickettsiae are microorganisms that have characteristics of both bacteria and viruses. Like bacteria, rickettsiae have metabolic enzymes and cell membranes, utilize oxygen, and are susceptible to broad spectrum of antibiotics. Like viruses, rickettsiae grow only within living cells. Q-Fever, a zoonotic disease caused by the rickettsia Coxiella burnetii, is a form of rickettsiae. Fungi, primitive plants that do not utilize photosynthesis, are capable of anaerobic growth and draw nutrition from decaying vegetable matter, are a little more familiar, but not in terms of a biological weapon. A diverse group of more than forty compounds produced by the fungus Trichothecene mycotoxins has been generated in recent years because these compounds can inhibit protein synthesis, impair DNA synthesis, alter cell and membrane structure and function, and inhibit mitochondrial respiration. T-2, as these are called, used as a biological warfare agent aimed at causing acute exposure via inhalation, could result in the onset of illness within hours of exposure and death within twelve hours.

Biotoxins, poisonous substances produced naturally by microorganisms, plants, or animals that may be produced or altered by chemical means, will be discussed later in the context of chemical weapons. This category would include agents such as ricin, abrin, and strychnine.

As one news analyst noted,

While the list of the most likely weapons in a bioterror attack is short, it includes agents that, if acquired and effectively disseminated, could cause a significant public health risk. The challenge would be to recognize the danger early to limit the number of casualties.2

A quick look at five biological agents currently available illustrates the breadth of the threat of attack from such weapons. A more in-depth case study of one of these—anthrax—will offer further clues as to the danger that such agents pose.

Botulinum toxin (Clostridium botulinum) is the single most poisonous substance known. While it is usually food borne, it could be developed as an aerosol weapon. Within twenty-four to thirty-six hours of infection with this biological agent, symptoms generally include blurred vision as well as difficulty swallowing and speaking. This agent, a nerve toxin, paralyzes muscles, thus leading to respiratory failure and death. The Aum Shin-rikyo cult in Japan was accused of trying to spray botulinum toxin from airplanes over Tokyo, fortunately without success, at least three times in the 1990s.

Plague (Yersinia pestis) is an incredibly virulent, but not always lethal, biological agent. If 110 pounds of this agent were released over a city of 5 million people, about 150,000 of them would contract the disease but most would survive if treated early in the infection period. Within one to six days after exposure to the plague bacteria, victims would begin to show symptoms of severe respiratory and gastrointestinal distress. Treatment with antibiotics would be effective as long as they were administered within the early stages of infection.

Tularemia is a potentially lethal infectious organism developed by the United States as a possible weapon in the 1950s and 1960s. As a weapon, it could be sprayed in an aerosol cloud. Within three to five days of infection, victims would suffer fever, chills, headaches, and weakness. Subsequent inflammation and hemorrhaging of the airways—can be fatal, and no vaccine is currently available.

Smallpox is an infectious agent that several nations have tried for decades to effectively weaponize but which was eradicated in 1980. However, some strains of this disease are officially maintained in two nations: the United States and Russia. The former Soviet Union reportedly stockpiled large amounts of this virus for use as weapons, and several other nations, such as Iraq and North Korea, may have covert stashes of smallpox today. The smallpox virus is highly contagious and would quickly spread, because vaccinations for this disease stopped more than twenty-five years ago. An aerosol release of smallpox infecting only fifty people could
easily unleash an epidemic that would kill about 30 percent of those infected with the painful, disfiguring disease.

Anthrax is an acute infectious disease caused by the spore-forming bacterium Bacillus anthracis. It most commonly occurs in mammals such as cattle, sheep, goats, camels, and antelopes but can also occur in humans exposed to infected animals or tissue from infected animals. Anthrax is unusual in that its spores are hardy: they are resistant to sunlight, heat, and disinfectant and can remain active in soil and water for years. Anthrax spores tend to clump together in humid conditions, making it somewhat difficult to spray as an aerosol. Anthrax, unlike smallpox, is not contagious—that is, it is highly unlikely that it could be transmitted from direct person-to-person contact.

Since this particular bacterium was used in 2001 as a biological agent, a closer look at anthrax as a biological weapon would be useful at this point.

Bioterrorism Defense

A few disturbing trends in the new biosecurity landscape are worth noting here, as they impact both the potential for future bioterror attacks and our ability to cope with or prevent such attacks. Christopher Chyba and Alex Greninger suggest that these trends came together in the 1990s and confront us today with new challenges.

The first trend suggested by these researchers is that of emerging infectious diseases. This is not to imply that there have not been many catastrophic pandemics. But during the 1970s and 1980s, research indicated that a new disease was emerging at the rate of about one every year. Moreover, the dramatic outbreaks of diseases such as Ebola and the emergence of many versions of known diseases that are increasingly drug resistant, such as tuberculosis, lend new importance to this threat.

The increased occurrence of mass-casualty terrorism is the second trend in modern biosecurity. While there are historical records of such attacks, the destruction by bomb of the passenger plane over Lockerbie, Scotland, in the late 1980s, the first attempt to destroy a World Trade Tower in 1993, the sarin gas attack on the Tokyo subways by the Aum Shinrikyo cult in 1993, and the 1995 Oklahoma City bombing lend credence to the claim of this as a trend. The events of September 11, 2001, certainly strengthen this conclusion.

The third disturbing trend suggested by Chyba and Greninger is the increasing evidence of gross violations of the 1972 Biological and Toxic Weapons Convention (BWC). The end of the cold war brought to light the extent to which the former Soviet Union had built a biological weapons program in spite of being a signatory of the convention. As the researchers noted, in July 2001, the administration of George W. Bush declared the BWC to be "inherently unverifiable," but withdrew from negotiations to create a compliance protocol for the convention.4 Iraq's purported development of such weapons was a stated element in the U.S. decision, under Bush's leadership, to invade the country to verify the existence of, and then to end, bioweapon development programs.

The anthrax mail attacks in 2001 reminded us of our vulnerability to bioterror attack. Four lessons learned from that attack may help to shape our response to such attacks in the future. The first is that the volume of the agent may not be the critical point, as the amount may be small but may produce a large effect. While only a few deaths occurred from this attack, it cost the federal government, states, and businesses billions of dollars as anxiety caused use of the mail service to decline and thousands to bring mail—or sick family members—to be tested at a limited number of biolabs.

The use of the mail as an agent for disseminating a biological agent, suggested in fiction for years, was surprisingly effective, offering another lesson in modern vulnerability to terrorism. Diagnosis of the anthrax infection was complicated by the skepticism of many about the
likelihood of such an agent being used in such a manner. Perhaps the challenge is to be willing to accept the potential for unexpected but possible attacks like this, as Leonard Cole suggests.\textsuperscript{5}

The need for cross-training and exploration of "unlikely" potentials is also, according to Cole, another lesson that could be derived from the anthrax attacks, as those charged with the task of local counterterror response—such as law enforcement or emergency response personnel—may not have the training necessary to deal with WMD terrorism. Such training is being encouraged and sponsored by the DHS, by grants, and by the establishment of Centers of Excellence tasked with generating programs for such training.

This need to extend training and awareness is related to the fourth lesson learned from the anthrax attacks, as those attacks affected people not only in cities but also in remote communities. If anyone, anywhere, can be the target of such attacks, then training and resourcing for such attacks must be much more widespread than previously planned. While the DHS is certainly moving resources and directing efforts in the direction of improving local preparedness, there is clearly much that still must be done.

As Cable News Network (CNN) revealed in a study conducted after the anthrax attacks in 2001, neither local emergency management nor public health centers were prepared to cope effectively with this crisis. A quick look at the situation in Las Vegas, Nevada, as the anthrax crisis evolved in 2001 offers useful insights. The medical system of that city collapsed due to a number of factors. The population in the greater Las Vegas region had exploded, so that when the crisis occurred, there was an insufficient number of hospital beds for the population: Las Vegas needed about 200 beds per 100,000 people (according to CDC statistics), but was about 600 beds short. With only eleven hospitals, Nevada ranked fiftieth of the fifty states in the United States in nurse-to-patient ratio. When the crisis occurred, as hundreds of people rushed to emergency rooms for treatment and admission, the overcrowded and under-staffed emergency rooms had to close to new patients about 40 percent of the time. Had there truly been a large-scale anthrax attack, hundreds, perhaps thousands, might have died for lack of access to adequate care. CNN's study of hospitals in twenty-five cities evaluated in this context found that most were severely lacking in this critical hospital bed/patient care area.

The CDC in Atlanta noted problems in the health care systems's ability to respond to a biological crisis involving a contagious disease. In the event of a need for mass vaccinations for smallpox, for example, local emergency managers would need to open hundreds of vaccination centers and train large numbers of vaccinators (it usually takes about two hours of training to qualify a vaccinator because they are insured by the federal government due to liability issues). For every 1 million people receiving the vaccination, about two will probably die. All of those vaccinated must remain in the vaccination site unexposed to others for up to twenty-one days. The vaccinator recruitment and training, the establishment of vaccination centers capable of housing those vaccinated for up to twenty-one days, the payment for the workers needed at these centers to care for those vaccinated—the responsibility of planning for and paying for such a comprehensive medical response program would be huge, and it is unclear on whom this burden would fall.

David Franz, director of the National Agricultural Biosecurity Center at Kansas State University, states the problem of security from bioterrorism clearly when he says that "[a]lthough we have some understanding of threat, vulnerability and impact of a biological attack, risk is impossible to quantify."\textsuperscript{6} This makes knowing how to allocate vital resources in preparation for an unknown bioterror attack very difficult. We can take an "all-hazards" approach, like the Federal Emergency Management Agency (FEMA) does in its preparation for natural disasters, but in this case use the same medical preparedness training for a bioterror attack as we would for any emerging infectious disease, adding the fact that the disease is being intentionally spread with an intent to harm. We may not spread the preparation efforts far enough to cover all possible targets—and we may prepare for the wrong type of disease, as a contagious agent must be treated differently from an agent that must be ingested. But we must prepare ourselves,
as trends indicate that such attacks will occur with increasing frequency and perhaps increasing lethality as well.

**Chemical Weapons**

Although there are potentially thousands of biological agents that terrorists could use, there are, in all probability, even more poisonous chemical agents available. Chemical agents come in a variety of forms, most often as a liquid rather than a gas, usually dispersed as droplets. Biotoxins are one type of chemical agent, which include agents such as ricin, abrin, and strychnine. Chlorine and phosgene are **choking agents** that were used during World War I and cause pulmonary edema. Mustard gas, lewisite, and others that cause chemical burns and destroy lung tissue are called **blistering agents**. **Blood agents** include other types of chemicals, such as hydrogen cyanide and cyanogen chloride, that attack the respiratory system and usually rapidly result in coma followed by death. The **neuromuscular system** is attacked by the **nerve gases** examples of which include sarin (used in the Tokyo subway incident), tabun (found in Iraq after the Gulf War), soman, and VX. These agents block the enzyme cholinesterase, which causes paralysis of the neuromuscular system, resulting in death.

Most of the substances used to create chemical weapons have a legitimate use. Some, like eserin (a nerve gas), have been used for medicinal purposes. Others are used as cleaning agents, insecticides, herbicides, and rodenticides. This makes many of them commercially available in some form. As the United States learned in the bombing at Oklahoma City, truckloads of fertilizer can be easily obtained and can be a very lethal weapon in the hands of a terrorist.

Chemical weapons are prolific in number, relatively easy to acquire and stockpile, and not too expensive. However, they are difficult to manufacture in sufficient quantities for a large-scale attack. More likely, they would be used successfully in isolated attacks of a relatively small nature. Chemical weapons are also difficult to disperse effectively. The attack by the Aum Shinrikyo on the Tokyo subway system in Japan illustrates both the strengths, in terms of the psychologically disruptive effects, and the weaknesses, in light of the relative non-lethality of the attack and the problems in dissemination, inherent in the use of chemical weapons by terrorists today.

At least three possible types of chemical terrorism are identified by Jonathan Tucker, a senior fellow at the Center for Nonproliferation Studies in Washington, DC:

1. the release of a military-grade chemical warfare agent against a civilian target (intending to inflict mass civilian casualties);
2. the sabotage of a chemical manufacturing plant or storage facility (including a rail tank car) containing toxic materials, intending to release toxic gases or vapors; and
3. the contamination of public water or food supplies with toxic agents.7

A database compiled by the Monterey Institute’s Center for Nonproliferation Studies indicated that only a relatively small number of chemical terrorism attacks have been recorded in the past four decades. While this is reassuring and may, as Tucker suggests, be because few terrorist organizations are motivated to inflict indiscriminate casualties, it would be unwise to be complacent about this threat. Osama bin Laden has declared that it is his "religious duty" to acquire chemical and other non-conventional weapons to use against the United States. Clearly, lack of motivation may not be true for all contemporary terrorist groups.8

Chemical weapons can be made from ordinary products. Thiodiglycol, an immediate precursor to mustard gas, is used to make the ink in ball point pens. All that is needed to produce mustard gas is a simple acid, which is easy to obtain. While the production of such an agent requires some skills in chemistry, "how-to" manuals such as the Anarchist Cookbook and
even jihad manuals with instructions in this process are available on the Internet, making the production challenge less of an obstacle.

Fortunately, acquisition of military-grade CW agents, such as sarin and VX, is not simple, nor is the process of “weaponizing” a toxic chemical. To be “weaponized,” a toxic chemical must be stabilized to extend its shelf-life, and a delivery system must be developed that will spread the toxin through a target population. The delivery system would need to be mechanical, pneumatic, or explosive, with the most effective being an aerosol generator producing tiny droplets of the substance to float in the air and be inhaled by the victims. This is a complex and difficult delivery system to perfect, as the Aum in Japan discovered. They were able to obtain and produce a substantial quantity of sarin, but the delivery of the agent failed to effectively reach most of the target audience.

The potential for a chemical terror attack taking the form of sabotage of chemical industry plants is much greater. Detonation of a conventional explosive in a plant containing a hazardous chemical could be extremely disruptive and destructive. The 1984 accident (allegedly carried out by a disgruntled employee) at a Union Carbide plant in Bhopal, India, that caused more than 2,500 deaths is a dramatic example.

Examining one toxic chemical, ricin, may help to make clearer the dangers that exist today from the potential of chemical terrorism.

Radiological Weapons

While radioactivity was discovered more than a century ago, the effects of lower levels of radiation on human cells have only begun to be understood in recent years. Although only uranium and a few other elements can be turned into explosive weapons, there are many elements that emit radiation, some of which are used today in legitimate biological and medical work.

Since radioactive materials are plentiful—waste from nuclear power plants includes highly radioactive cesium, tritium, and strontium, for instance—the possibility of “dirty bombs” using such materials increases rapidly.10 Dirty bombs do not require the theft of large amounts of carefully guarded plutonium, nor does their construction require great technical skills or a well-equipped laboratory. These weapons can be made with nonfissionable radioactive materials, such as cesium 137, cobalt 60, and strontium, and are exploded by conventional means. Even though such a bomb would not cause the vast number of fatalities generated by a nuclear blast, it spreads nuclear contaminant over water supplies, crops, and other essential parts of a system. These bombs could be used in shopping malls or train stations to disrupt as well as to destroy.

A "dirty bomb" could cause extraordinary costs, not all of them financial. Fear of radiation poisoning from the particles dispersed in the atmosphere, scattered like dust on the surfaces of furniture and buildings, would drive many to leave their homes and business until they could be reassured that decontamination was complete. The decontamination would be extremely expensive and could take months or years to complete, depending on the size of the blast and the weather conditions. Public confidence in the safety of decontaminated areas would be difficult to achieve.

As one expert described it, "If a casket of spent fuel from a nuclear power plant was exploded in downtown Manhattan, more than 2,000 people might die quickly and thousands more would suffer from radiation poisoning."11

The immediate health effects from exposure to the low radiation levels expected from a dirty bomb are expected to be minimal and would be determined by several factors, including the amount of radiation absorbed by the body, the type of radiation (gamma, alpha, or beta), the distance from the ration to the individual, whether the exposure resulted in radiation being absorbed through the skin or inhaled or ingested, and the length of time of exposure. However,
panic would be rampant; hospitals might be overwhelmed; and local first-responders would be challenged to subdue the panic, diagnose the ill, and stem the flood of demands for treatment before supplies are exhausted. A small device in heavily populated areas could cause catastrophic damage, generating public panic.

Attacks on nuclear power facilities are also a form of nuclear terrorism possible. This has happened many times, in many countries, but without evidence that such attacks have yet generated a major accident with catastrophic loss of lives. Nevertheless, in the wake of the attacks on September 11, 2001, nuclear facilities were recognized as vulnerable to the same type of attack—one using a large, well-fueled plane as a "bomb" flown into the facility.

**Nuclear Weapons**

Several types of nuclear weapons may be feasible for use by terrorists in the twenty-first century, although none have yet been used in an attack. A small plutonium device, requiring at least 2.5 kilograms of plutonium, is constructed with a core made of a sphere of compacted plutonium oxide crystals in the center of a large cube of Semtex (or one of the other new, powerful explosives). The bomb, when complete, would weigh about a ton and would require at least a van or a truck to get it to the target.

A home-produced or stolen nuclear device of moderate size, about 10-15 kilotons, detonated in a major city would destroy several square miles of territory and could cause up to 100,000 casualties. The bomb would have to be transported and strategically placed for maximum effect. The technical skills required, the facility necessary, and access to a large quantity of plutonium are impediments to the use of such a weapon by a group engaged in terrorism.

As one expert noted, however, if terrorists obtained 60 kilograms of highly enriched uranium (HEU), "they could make a nuclear explosive similar to the 'Little Boy' atomic bomb that leveled Hiroshima, Japan at the end of World War II. Large quantities of HEU are stored in nuclear research facilities worldwide, many of which are in Russia, where the security for such facilities is often minimal.

An important point needs to be recognized here with respect to the motivation of terrorists to make—and use—a nuclear bomb. While a state seeking to create—and deploy—such a weapon would not want to have only one, which might or might not seriously incapacitate an enemy, a terrorist (or terrorist group) will seldom be seeking to destroy an enemy with one blow, one bomb. Thus, the bomb need not be the best made, or foolproof—it need only work to some extent, to make the political point of the terrorists. Moreover, a state, on its own, would surely be expected to hesitate to use such a weapon unless it could survive the reprisal for the act. If a terrorist group were openly responsible for a bomb, it would have a much greater capacity to evade reprisal and thus a greater likelihood to use such a weapon, given the chance.

Bin Laden made clear his desire for nuclear weapons for use against the United States and its allies, calling the acquisition of WMDs a religious duty, and referring to the need to inflict a "Hiroshima" on the United States. Material found in al-Qaeda camps in Afghanistan proved that the group had downloaded information on nuclear weapons, including crude bomb designs, and tried to recruit nuclear weapon scientists to work with them. Clearly, this group at least is strongly motivated to acquire and to use nuclear weapons in terrorist attacks today.

The black market for weapons has had, since the demise of the Soviet Union, incidents in which small, backpack nuclear devices, and even devices as small as landmines, were for sale. Although obviously no records exist of such sales, the leaders of the international community have expressed their concern about the possibility of a group engaged in terrorism or a "rogue state" acquiring such fully manufactured devices. This possibility has been the subject of discussion at numerous U.N. meetings and resulted in resolutions condemning such sales and
pledging not to facilitate them, but little documented success in the control of such weapons exists.

Terrorists and groups appear more willing to experiment with the use of biological or chemical weapons than nuclear weapons today. If terrorists want biological weapons, they can make potent agents from such substances as isopropyl alcohol (easily available at drug stores and supermarkets), from pesticides and herbicides (available at most home and farm supply stores), and from a host of other equally accessible products.

Most experts also agree that it does not take great skills in chemistry to manufacture many different chemical agents. Some are more difficult than others, of course; but a wide range is possible for someone with perhaps a few graduate courses in chemistry.

ACCESS TO AND USE OF WEAPONS OF MASS DESTRUCTION Chemical Agents

As weapons of terrorists, chemical agents are relatively easily accessible and potentially very lethal, but they are limited in usefulness to date by the difficulty in dissemination, unless the desired effect is primarily psychological rather than physical in nature. Most chemical weapons have been available since World War I, and the processes for manufacturing most usual war gases have been published in open literature. Several nations possess chemical weapons, making it possible for them to supply a group with this type of weapon. Yet only the Aum Shinrikyo cult in Japan has attempted to procure and use a chemical weapon in a large-scale terrorist attack.

The reason for this lack of use may be simply practical rather than political, moral, or monetary. Most toxic gases are very difficult to handle, control, and deploy effectively. Even toxic industrial gases such as chlorine and hydrogen cyanide, which are easy to procure, are very volatile. These types of agents could only be used in an attack on a target population in an enclosed area with limited exits (so that those targeted could not escape, and/or to keep the gases from escaping into the atmosphere outside). As one researcher noted, if a terrorist wanted to use a nerve agent by introducing it into the air-handling system in a building (whose inhabitants are the target population), the device must be of a size and shape that is easily carried by one person; be leakproof; and have an activation process that will result in the agent being dispersed in a way that will not endanger the terrorist operating the device (unless the terrorist is a crusader, willing to die in the attack), yet be strong enough to reach the population in a sufficiently high concentration to cause a high casualty rate.14

Nevertheless, trainees at terrorist camps in Afghanistan learned how to use chemical weapons, according to testimony in U.S. courts in July 2001. Ahmed Ressam told the court that his training for chemical attacks included testing the effect of cyanide and sulfuric acid on a dog. "We wanted to know what is the effect of the gas," Ressam told the court.15

Biological Agents

In the early 1990s, perception of the possibility of biological attacks was radically altered by two dramatic events. The first was the discovery of enormous quantities of such weapons in Iraq after the Gulf War, particularly as there was reason to believe that only a portion of them had been found. Moreover, there was also a growing realization that Iraq and other countries were continuing preparations for BC (biological/chemical) warfare. While suspicions existed before the Gulf War, particularly because Iraq had used chemical weapons against both the Iranians and the Kurds in attacks that had resulted in thousands of deaths, the realization of the buildup of BC had been underestimated.

At the Al Muthanna laboratories in Iraq, 2,850 tons of mustard gas were found to have been produced, along with 790 tons of sarin and 290 tons of tabun. Iraq was found to have fifty warheads with chemical agents in place at the beginning of the Gulf War. In terms of biological
weapons, Iraq had also produced anthrax, botulinum toxin, and other biological agents since 1988, with the result that when inspectors began investigating in 1991, they found that 6,500 liters of anthrax and 10,000 liters of botulinum had been weaponized.

Libya also engaged in intense production of biological agents. With help from biological firms in Germany, Switzerland, and several other countries, Libya constructed large underground laboratories at Tarhuna and Rabta. Specialists suggest that such facilities could be transformed in less than one day from weapons factories to peaceful pharmaceutical labs. This makes tracking the production of biological agents difficult, and given Libya's long-term relationships with many groups engaging in terrorist acts, made the access of terrorists to such weapons feasible, until the recent movement of Libya to distance itself from the creation of WMDs.

The second source of world shock on the issue of biological agents came with the breakup of the Soviet Union. Although Russia promised to destroy its BC weapons, it soon became obvious that the country was failing to adhere to its promise and was instead preventing access by foreign inspectors after 1993. Records of the amounts of such weapons in existence, and even of the location of facilities manufacturing or storing them, were lost, destroyed, or hidden, with the result that few are certain of precisely how many BC weapons were produced and who currently possess them.

This type of weapon has been linked to several earlier terrorist groups and activities. It was reported in the late 1970s that the RAF in Germany was training Palestinians in the use of bacteriological warfare. A raid by police in Paris uncovered a laboratory with a culture of botulism. The RAF threatened to poison the water supplies of about twenty German cities unless their demand for special legal defense for three of their imprisoned comrades was met. Microbiologists were believed to have been enlisted by groups in Italy and Lebanon in efforts to generate biological weapons for terrorist use. In the United States, 751 people in the small town of The Dalles, Oregon, were poisoned by salmonella planted in two restaurants by followers of self-proclaimed prophet and spiritual leader Bhagwan Shree Rajneesh.

A special issue of the *Journal of the American Medical Association* published the first systematic survey of biological agents in 1997. This survey included brucellosis, the plague, tularemia, Q-fever, smallpox, viral encephalitis, VHF, anthracis, and botulinum. The latter three were described as the greatest potential danger given their toxicity and contagion rate, and because both were found in large quantities in Iraq, where they had already been weaponized.

Although vaccines could be used to neutralize many of the existing agents, and antibiotics could be used to both treat and prevent most, the weaponizing of these agents presents a problem. Through this process, the agent is changed in ways that could make the majority of the safeguards and remedies ineffective.

It is believed that thirty to forty countries have the capacity to manufacture biological weapons, because many have a pharmaceutical industry to aid in this production. The greatest concentration of existing weapons is believed to be in the Middle East, including not only Iraq and Iran, but also Syria, Libya, and the Sudan. The U.S. bombing of the pharmaceutical factory in the Sudan in 1998 when this laboratory was linked by intelligence information with Osama bin Laden illustrates the rising concern over the possible use of this type of agent by terrorists.

Biological agents have been called "the poor man's nuclear bomb." They are difficult to trace, cheap to manufacture, and potentially incredibly lethal. Botulinum, the most deadly toxin available—100,000 times more poisonous than the sarin gas used in the Tokyo subway attack—is theoretically capable, in a quantity as small as one gram, of killing all the inhabitants of a city the size of Stockholm, Sweden. An aerosol distribution is the ideal method of delivery for such an agent. It has been estimated that botulinum, in optimal weather conditions, could kill all living beings in a 100-square kilometer area. Fortunately, ideal weather conditions seldom last, but many would certainly die from such an attack.
Nuclear Devices

Hundreds of pages of photocopied, handwritten, and printed documents, written in a mixture of Arabic, Urdu, Persian, Mandarin, Russian, and English, were recovered from a number of al-Qaeda houses in the Afghan capital of Kabul a day after its fall to the Northern Alliance forces in November 2001. These pages confirmed, among other things, that al-Qaeda cells were examining materials to make a low-grade, dirty nuclear device. The pages also indicated that al-Qaeda's understanding of bomb-related electronic circuitry at least matched that of the Provisional IRA's experts.

According to John Large, a British nuclear consultant, while the organization would not have been able to make a large-scale missile or nuclear device from the documents found, "it was obviously prepared to consider the use of such weapons, so that if it could not manufacture such for itself then, given the opportunity, it would acquire such for use." Included in the documents acquired by *The Times* relating to nuclear physics was a chart depicting a portion of the periodic table of elements dealing solely with radioactive materials. This portion, according to Large, contained all of the elements needed if one were constructing a dirty bomb. Access to nuclear materials is problematic depending on which type of material is sought. The most carefully guarded elements, weapons-grade uranium and plutonium, are perhaps the least accessible. However, numerous attempts have been made to smuggle nuclear materials out of the former Soviet Union, and there are unconfirmed rumors that some nations and perhaps even a group like al-Qaeda, may have obtained a nuclear warhead. Thus far, police and customs officials in Europe have seized only low-quality nuclear waste that could, in sufficient quantity, be used to build a dirty bomb that would spread nuclear contamination.

The easiest means by which a terrorist group might make a nuclear bomb would be to find a government willing to allow access to its laboratories or its arsenals, but few, if any, governments are willing to take such a risk today. After the Gulf War, U.N. inspectors found that Iraq had come within months of building an atomic bomb, but the effort apparently took about a decade and cost nearly $10 billion. There is no evidence that any government today has helped terrorist groups to acquire nuclear weapons at such prohibitive costs. The potential cost of being linked to the bomb if the terrorists deploy it successfully has also apparently deterred access to this type of weapons through state conduits.

But the number of potential suppliers of nuclear weapons technology continues to expand. Countries such as North Korea, once dependent on external help from other nations in crafting a nuclear weapons program, enjoy a vigorous missile- and technology-export business with a number of Middle Eastern countries, including Iran, Pakistan, and Syria. Moreover, all technologies become less expensive with the passage of time and proliferate as more people begin to use them. Although there is no immediate threat of nuclear bombs in the hands of terrorists, the next plane flown into a symbolic target such as the World Trade Center may have something more lethal aboard than aviation fuel.

Study of the potential for access to nuclear weapons capabilities would not be complete without examining the impact of Pakistan's nuclear expert: Abdul Qadeer Khan. Khan, widely viewed as the father of Pakistan's nuclear weapons, has, with the help of associates, bought and sold key nuclear weapons capabilities for more than two decades, in spite of the efforts of the world's best intelligence agencies and nonproliferation organizations. Khan's network sold the equipment and expertise necessary to produce nuclear weapons to states such as Iran, Libya, and North Korea, countries that have in turn marketed materials and expertise to groups engaged in terrorism.

Created in the 1970s to supply Pakistan's gas-centrifuge program, Khan's network slowly expanded its network of sales in gas centrifuges, which were used to produce weapons-grade uranium for Pakistan's nuclear weapons. Khan exported gas centrifuges and production capabilities to other, mostly Muslim, countries, driven by a desire for profit, but also by his pan-
Islamism and by his hostility to Western efforts to control the supply of nuclear technology. While Egypt reportedly refused Khan's offers of assistance in the development of nuclear technology, the response of Syria is less clear, as is whether the offer was also made to Saudi Arabia, birthplace of Osama bin Laden and of many of the perpetrators of the September 11 attacks. There is considerable suspicion that, due to his travels in Afghanistan between 1997 and 2003, Khan may also have offered nuclear assistance to al-Qaeda.

The Khan network certainly exploited loopholes in the nuclear nonproliferation network, expanding the number of nations with nuclear technology and significantly expanding the potential for groups engaged in terrorism for access to both the technology for nuclear weapons production and the waste products of that production. Iran, Libya, and North Korea, at least, were provided with nuclear technology that seriously enhanced their nuclear weapons potential. Since each of these states has been linked to various terrorist support networks, the potential for nuclear terrorism has been seriously impacted by the Khan nuclear smuggling network.17

Radiological Devices

To date, there have been no attacks involving the detonation of radioactive devices, or "dirty bombs," although two such devices were reportedly discovered, undetonated, in Russia and attributed by authorities to a Chechen resistance group. Radiological accidents, including the one that occurred the late 1980s in Brazil, causing more than 150 injuries and five deaths, offer insights into the pattern of contamination and the potential for illness and deaths from such radioactive agents.

RISK ASSESSMENT: COMPARATIVE EFFECTIVENESS OF WMD

Risk assessment for biological, chemical, radiological, and nuclear weapons could be based on the distinctive qualities of each of these weapons, as these qualities impact their effectiveness and likelihood of use. Table 14.1 is part of an assessment developed by Leonard Cole, based on studies produced by the U.S. Congress' Office of Technology Assessment, and supported by other literature comparing WMDs.19 Table 14.1 offers insights into the relative effectiveness of these four types of weapons, comparing how difficult they are to produce and to acquire; their cost of production; the difficulty of their delivery or dispersal; and the "worst-case" scenario of consequences in their use. The weapons are compared on a scale of 1 to 5 in each category, with 1 denoting "lowest or least" and 5 representing "highest or most."

This type of assessment is based on generalizations since all biological agents differ, some significantly, in terms of their accessibility, the symptoms they produce, and their probable method of delivery. The numbers presented for biological weapons are somewhat subjective, as they must represent a range of agents. The conclusions of much of this assessment are not surprising. Nuclear agents are more complex to produce than chemical agents; nuclear bombs are most likely, in general, to be the most effective and the most destructive, but probably also the most difficult to acquire and the most expensive.

The comparisons make a strong case, however, for the need to expend considerable efforts to prepare for, and, if possible, prevent, terrorist attacks utilizing WMDs. Although there have been, to date, few attacks with any such weapons on a scale to produce mass casualties, the potential for catastrophic injury is clear. With biological and radiological weapons, the costs and complexity factors are not great, but the potential for "worst-case" scenarios (with catastrophic damage and mass casualties) is very high. WMDs in the hands of terrorists must be assumed to be possible and to carry the potential for unthinkable consequences.
CONCLUSIONS

There is growing concern that the use of WMDs may become more common in the near future. The legal, political, and financial restraints that have discouraged states from the use of these types of weapons appear less likely to be sufficient to limit the willingness of a group to use such weapons if it could acquire them. Because access to such weapons is clearly growing and groups are already training in the use of the more easily accessed materials, the likelihood of a threat by terrorists deploying a WMD seems credible.

Documents obtained from some of the al-Qaeda houses in Afghanistan not only described the organization's efforts to obtain nuclear capabilities but also outlined this group's plans for chemical weapons. These plans were drawn with large-scale production in mind, with each recipe containing a step-by-step guide explaining how to produce batches that would kill thousands of people. Some of the pages contained photocopies explaining how a device or chemical agent could best be put to devastating effect.

The use of WMDs by terrorists, not just al-Qaeda, is clearly not a remote possibility but an actively sought goal today. Smallpox, which is estimated to have killed 120 million people in the twentieth century alone, offers an incredibly lethal weapon in weaponized form or in the hands of a suicide carrier, a terrorist willing to be infected with the disease in order to carry it into the target audience to spread it among this group. If smallpox had not been eradicated, according to the World Health Organization, "the past 20 years would have witnessed some 350 million new victims—roughly the combined populations of the United States and Mexico—and an estimated 40 million deaths—a figure equal to the entire population of Spain or South Africa." The biological threat is small in at least two respects: most biological agents are hard to produce and hard to make into weapons. The preparedness of governments to deal with even this small threat, however, was demonstrated in the fall of 2001 by the anthrax attacks in the United States and elsewhere.

In spite of the fact that ordinary airplanes were used as WMDs in the September 11, 2001, attacks, the difficulty in generating and appropriately dispersing biological, chemical, and nuclear weapons remains high. But that attack has changed, to some extent, the world's perception of modern terrorists. The suicidal zealotry, the malevolence, and the determination of the individuals who flew the airliners into buildings; their willingness to prepare for the attacks for years; and their clear desire to cause mass casualties have confirmed the possibility that such terrorists would willingly use chemical, biological, or nuclear weapons.

DISCUSSION

The prospect of terrorists armed with, and willing to employ, WMDs generates a mood of fear, even without an actual attack. As Russell Howard, editor and author of numerous books and articles on terrorism points out, "The best we may be able to achieve is to understand that we live in danger, without living in fear." Building an awareness of the types of weapons that could be utilized, of the risk that such weapons pose, and of the documented attempts by terrorist groups to acquire and to use these weapons may help us cope with the "war on terrorism" more effectively, without fear but with clarity of understanding that makes us better able to respond to and, ultimately, to prevent such attacks.

Knowing that there have already been numerous documented efforts to achieve and use such weapons can help to build our security and response provisions. Study carefully the following list of cases in which the acquisition of WMDs, their use, or both has been linked to a current terrorist organization. We can learn from these examples in terms of: ability of groups to acquire materials to create WMDs, potential for construction of WMDs, motivation and willingness of groups to use WMDs to generate mass casualties, capacity for utilization of WMDs to maximum effect thus far, by groups today.
a. Jemaah al-Islamiya (JI), a group based in Indonesia that was responsible for the bombings in Bali in 2003 that killed more than 200, produced a manual that explains how to carry out chemical attacks with chemical hydrogen cyanide. According to the manual, "30ml of the agent can kill 60 million people, God willing." Rohan Gunaratna, an expert who has long studied this al-Qaeda-linked group, stated that JI had plans to use the chemical agents against Western targets in May 2006. Australian newspapers carried headlines stating that JI planned a "Holocaust gas attack in building" using this chemical agent, as Gunaratna suggested. While the attack did not occur as planned, the intent revealed here is disturbing.

b. Al-Qaeda's views on the acquisition and use of WMDs is well known. As operational leader and ideologue of al-Qaeda Abu Musab al-Suri stated in an open letter to the U.S. Department of State, if he were consulted about the use of WMDs against the United States, I would advise the use of planes in flights from outside the U.S. that would carry WMD[s]. Hitting the United States with WMD[s] was and is still very complicated. Yet, it is possible, with Allah's help, and more important than being possible—it is vital.2)

c. The first fatwa on the use of WMDs was pronounced on May 21, 2003, by Saudi religious leader Shaykh Naser bin Hamad al-Fahd, who said that if "the Muslims could defeat the infidels only by using these kinds of weapons, it is allowed to use them even if they kill them all, and destroy their crops and cattle." Al-Fayd went on to say that since the United States had killed about 10 million Muslims, the Muslim world was allowed to retaliate and kill as many Americans. Another al-Qaeda leader also used this analogy, suggesting that al-Qaeda was allowed to kill at least 4 million Americans, including 2 million children.

d. Several aborted attempts by Islamic militants, many with links to al-Qaeda, to use biological or chemical weapons in terrorist attacks offer disturbing insights. An attempt to release cyanide in the London subway in 2002 and a plot in 2003 to use ricin were disrupted by British authorities. Former FBI agents reported that a 2003 plot to use hydrogen cyanide gas in New York City subway trains was aborted by al-Qaeda leadership for unknown reasons.

Bruce Hoffman, one of the world's preeminent terrorist experts, expresses the dilemma posed to us today by the prospect of WMDs in the hands of terrorists:

The issue here may not be as much ruthless terrorist use of some WMD, as calculated terrorist use of some unconventional weapon to achieve far-reaching psychological effects in a particular target audience. We may therefore be missing the point and sidestepping the real threat posed by terrorists in this regard. It will likely not be the destruction of an entire city—as portrayed by writers of fictional thrillers and government officials alike—but the far more deliberate and delicately planned use of a chemical, biological, or radiological agent for more discrete purposes.25

ANALYSIS CHALLENGE

The swine flu pandemic declared by the CDC in 2009 was not an attack on the international community by a group using a weaponized form of a biological agent. Yet it caused severe economic and social disruption in many countries, hundreds of deaths within months of its beginning, and thousands of illnesses across the world. If this had been a weaponized flu virus attack, what would the catastrophic effects have been? Could the international community survive such an attack, given the number of casualties and the disruption such an attack would generate? Why has such an attack not occurred yet? Are we lucky, or are the effects of such an attack so uncontrollable as to be unattractive to most groups today?

Visit the CDC website at http://www.cdc.gov/hlnlflu/ to understand more about these questions, and base your analysis on their research.
SUGGESTED READINGS


NOTES

4. Ibid., 199.
8. Ibid., 216.
11. Ibid., 91.
18. Two metal scavengers broke into an abandoned radiotherapy clinic and stole a capsule containing powdered caesium-137. They opened the capsule at the home of one of the thieves, contaminating the home, the family, and a number of others before the radiation sickness was detected at a hospital and steps to limit contamination were taken. Retrieved on June 15, 2009, from the International Atomic Energy Association's website, "Radiological Accident in Goiania" (1988) at http://www-pub.iaea.org/MTCD/publications/PDF/Pub815_web.pdf.


Chapter 15
Future Trends

The greatest threat posed by terrorists now lies in the atmosphere of alarm they create, which corrodes democracy and breeds repression ... If the government appears incompetent, public alarm will increase and so will the clamor for draconian measures.

Brian Jenkins

IDENTIFYING TRENDS IN TERRORISM

In a world engaged in a "war on terrorism," understanding the changes in the nature of terrorism and the responses to terrorist acts is vital. Terrorism continues to increase in diversity in terms of geographic, demographics, and method: terrorist acts now occur in almost every nation, involve a widening range of ethnic communities, and employ an expanded arsenal of weapons. The redefinition of terrorism at the local, national, and international level has made data collection and tracking of trends in this phenomenon difficult, contributing to disagreements over "who" the war is engaged against and what rules apply in this increasingly violent conflict. Unlike earlier U.S.-led "wars" on drugs or poverty, the war on terror is a violent conflict, making the establishment of a definition of the act of terrorism critically important. Let us first examine a few of the significant changes in terrorism highlighted in this text.

Suicide bombing has become a much more common tactic of terrorists from many groups. From 2005 to 2007 in Iraq, suicide vehicle-borne improvised explosive device (SVBIED) attacks outnumbered person-borne improvised explosive device (PBIED) attacks by approximately three to one.

Terrorism is increasingly carried out by women. In Iraq, the number of female suicide bombers increased from five in 2007 to thirty-three in 2008. From the Liberation Tigers of Tamil Eelam, in Sri Lanka, the first group in the past century to advocate and practice suicide bombing, grew the Women's Liberation Front in 1985, which continues to train its members in suicide terror today.

Terrorism today is almost completely transnational. In the past, terrorism was planned and carried out within one state; today, acts are much more likely to have international planning, performance elements, and victims. Globalization and increased capabilities in mass transit and communication make this linkage formidable.

Terrorist groups today are increasingly better financed and more loosely structured. The Baader-Meinhof gang in Germany, the Red Brigades of Italy, and the Quebec Liberation Front (FLQ) of Canada were generally underfunded, certainly compared to the funding enjoyed by groups such as al-Qaeda today. The cell structure of terrorists today is much more difficult to infiltrate than those of earlier decades. The all-channel network structures of terrorist cells make bribes, sting operations, and the capture of one member to gain entry to a group much less effective than similar counterterror actions against the earlier chain networks.

Twenty-first-century terrorists are, as a whole, much better trained and equipped than those of earlier decades. As Chapter 7 indicated, terrorists today have not only organized camps but also training manuals and a growing arsenal of weapons, including weapons of mass destruction (WMD). The bombs and other explosives are still popular today, as the growing use of IEDs makes clear. However, according to evidence collected for a French court, training camps in chemical and biological weapons operated in the Pankisi Gorge in the Caucasus state of Georgia, where individuals with ties to al-Qaeda completed their training before returning to their home countries (mainly in Europe). The use of such weapons by groups such as Aum Shin-rikyo and the efforts to create WMDs by many other groups make the threat of WMDs today much greater.
Terrorists today are much more adept at using the Internet and other forms of modern mass communication, reaching worldwide audiences and targeting many different types of audiences effectively with their messages. The Internet "showcases" terrorists' work very effectively, as hostage videos from Iraq have demonstrated. Terrorists are no longer dependent on getting local newspapers to carry their messages. These new skills also highlight the increasing vulnerability of computer networks to cyber attacks, making the critical infrastructure of many developed nations at risk for cyberterror.

Terrorists today can sponsor states, rather than being dependent upon a state for sponsorship. Whereas terrorist groups of the late twentieth century had state sponsors such as Libya and Cuba, modern terrorists have resources that make such sponsorship unnecessary. This means that the limits on state actions and the vulnerability of state actors to reprisal or punishment for open sponsorship no longer can be assumed to limit the actions of terrorist groups. Failed or failing states can give terrorist groups a safe haven without ties or responsibility for adherence to international law, as the increasing piracy around the coast of Somalia makes clear.

These attributes of the terrorism emerging in this new millennium do not offer a complete, or even a final, picture of terrorism today. Law enforcement and security agencies, in order to cope effectively with modern terrorism, not only had to be aware of these changes but also had to develop methods of counterterror to cope effectively with the new threats. But counterterror policy-makers had to not only "catch up" on the learning curve—a graph of progress in the mastery of a skill against the time required for such mastery—they had to learn faster than the terrorists. The first step in this organized counterterror effort was the war on terror declared in 2001.

A WAR ON TERROR

The late Hannah Arendt, in her controversial book on the trial of Gestapo Lieutenant Colonel Adolf Eichmann, coined the phrase "the banality of evil." She used this phrase to describe the way in which a "terrifyingly normal" person was able to help turn the murder of a people into an ordinary bureaucratic routine. Eichmann became the quintessential government bureaucrat—highly efficient and mindlessly, remorselessly obedient to orders.

The individuals who carried out the September 11, 2001, attacks were "banal," but in a different manner. Many of the men who hijacked and flew the planes into the targets had come to the United States much earlier to complete the planning and training. They were so "banal," so ordinary, that none of their neighbors or coworkers noticed them. Yet they were planning to carry out one of the most dramatic and lethal terrorist attacks in modern history.

The suggestion by Brian Jenkins, consultant and author on terrorism, that until the events of 2001 terrorism had achieved a similar level of bureaucratic banality in that its perpetrators carry out heinous crimes with increasing efficiency, while a worldwide audience becomes increasingly "un-shockable" when viewing those acts, seemed an accurate assessment of contemporary terrorism. Statistics appeared to have replaced headlines in , referring to the escalation of terrorism. Terrorism had become so much the-norm that it was commonplace, not unthinkable.

The events of September 11, 2001, were unthinkable, however. The magnitude of the attack; the cost in lives, property, and economic stability; and the multinational network that worked to carry this out, after years of planning, staggered the United States and much of the world. For the first time, rapid international action was taken to focus attention on the problem of terrorism, in the form of U.N. resolutions, treaties moving toward ratification as well as signatures, and the declaration of a war on terrorism, a statement of action by a coalition of nations led by the state that was a victim of the September 11 attacks. Yet, the problem remains unresolved.
The spending and personnel involved in terrorism itself and in the fight against it have increased exponentially in the twenty-first century. After the events of September 2001, the United States annually designated a dramatically increasing portion of its budget to the external and internal efforts to combat terrorism. In establishing a new Department of Homeland Security (DHS), the United States parallels the United Nations, which has created an office to monitor the agreements and efforts nations are now making to control the funding and arming of terrorists. Terrorism has become a bureaucratic reality in a completely new and extremely expensive fashion.

Although we had come to accept the existence of terrorism in our daily lives, the events of September 2001 made such a tolerant attitude less prevalent. Instead, a "war on terrorism" was declared and is being fought, first in Afghanistan, home of the Taliban and refuge of Osama bin Laden and his al-Qaeda network, and later, as a factor in the U.S.-led war in Iraq, in part to remove a regime that had sponsored terror for decades. States such as Libya and Syria that had been refuges for, and even supporters of, groups carrying out terrorist acts were quick to condemn the September 11 attacks and offered to work to end the threat of future attacks.

Efforts are under way to eliminate terrorism now, not only in terms of a successful war on terrorism, but, perhaps more importantly, in terms of working to ensure that such virulent anger does not fester in other places. The developed world today is more conscious that desperate poverty and hunger can provide the breeding ground for terrorism, and that, to win a "war on terrorism," it must first win a nonlethal war for the hearts and minds of the audience of terrorists, as discussed in Chapter 8.

THE COUNTERTERRORISM LEARNING CURVE

We have summarized the changes in terrorism in our new century; now, we must briefly review some of the counter-measures instituted to handle the growing threat. To see this as a "learning curve," let us examine a few of the trends in terrorism indentified with the actions of those engaged in counterterror efforts.

Globalization, and Understanding the "Why" of Terror Attacks

In attempts to come to grips with ensuring that such terrorist attacks would not recur, nations not only tried to improve their security measures and to track down and destroy the networks of individuals responsible for the September 11 attacks, but they also began to try to understand why people might feel such hatred toward another country. Understanding the causes of the anger became as important, in many respects, as the ability to punish the perpetrators.

Two important factors that may trigger terrorist violence have emerged: the impact of the widening gap between the rich and the poor nations of the world, highlighted by the trend toward globalization; and the lack of understanding between the West and the Middle East, even in terms of religious understanding.

Just as terrorism has become globalized, networking groups and nations in struggles across national boundaries, economic globalization—the networking of national economies on a global scale, puts businesses large and small in competition for markets across the world. Globalization is recognized as part of the reasons for the anger directed at countries such as the United States, a vocal advocate for global free trade. It has left at least 20 percent of the world's population destitute, as small businesses and family farms, lacking the technology and resources to compete effectively with international corporations, are crowded out of a global market as nations lower their protective tariffs to participate more fully in global trade. More than 800 million people in the world today are chronically undernourished, a condition with devastating consequences to health and community welfare. The poverty and hunger in many
developing countries provide fertile soil for those who want to blame the West for these conditions.

Understanding that the economic divide is huge and getting wider did not, of course, lead to a sudden decision on the part of nations to create some kind of egalitarian communal society. But awareness of the problems created by this divide is growing; with this awareness, solutions of a more realistic and permanent nature are being sought, primarily through the United Nations but also through other secular and religious organizations. The commitment to stay and help to rebuild Afghanistan after the war, offering the people hope instead of poverty and despair, suggests that this awareness may produce positive results.

The West discovered, in the search for the answers to the why questions of the attacks, that most of its people did not understand Islam, nor did most in the Islamic world understand Western culture or religion. The open and concerted effort not to make a "war on Islam" in its war on terrorism led the West to host many forums, create many websites, and seek out many scholars to better understand Islam, its tenets, and its misuse as a tool by Islamic radicals. This effort to build cultural bridges of understanding is too new for its effectiveness to be evaluated, but it offers hope for a lowering of tensions that can make progress toward peace possible.

Using the Internet

The virtues of the Internet—including but not limited to the ease of access, lack of regulation, large potential audiences, and the rapid flow of information—have begun to be used with increasing skill by groups committed to using terrorism to achieve their goals. Almost all active groups that have engaged in terrorism today have established a presence on the Internet, with hundreds of websites now serving terrorists and their support network. The dynamic quality of the Internet enables groups engaging in terrorism to establish their website, modify their profile, disappear and reappear with startling speed, and evade efforts by law enforcement to infiltrate or suppress.

This networking of cells of groups challenged states with access to new technologies to seek ways to mathematically search the Internet for clues of groups forming and plans being made. For example, research suggests that individuals who are willing to carry out violent acts as part of a group exhibit distinct patterns in their use of e-mail or online forums such as chat rooms. As an operations researcher noted, while most people amass a wide variety of contacts on the Internet over time, those planning criminal activity tend to keep in touch with only a very small group of people—a pattern discernible on a search of the Web, with the proper mathematical model, as it is a very predictable type of behavior.

These developments suggest that the Internet is a rapidly expanding tool for networking by individuals and groups engaged in terrorism, but that it is also being examined by technological groups seeking to track the growth. The vulnerability of critical infrastructure to terrorism is very real, and nations with advanced technology resources are encouraging research and development in this field as being essential to the security of the companies and communities that depend on this technology for their lifestyle—and their existence. The Pentagon is creating a new military command for cyberspace as it prepares to wage both an offensive and a defensive war, if necessary, against terrorist attacks in cyberspace.

DEALING WITH WEAPONS OF MASS DESTRUCTION

Terrorism could grow much worse, with access to biological and chemical agents as well as nuclear materials and the technical skills to effectively construct and utilize such weapons becoming more widespread. The ability of governments to deal with the threat of WMDs is unclear, and events to date suggest that it is also unpromising.
U.S. federal officials found out in June 2001 how complicated and destructive a bioterrorist attack could be. In *a war game played at Andrews Air Force base outside Washington, DC, an exercise code-named Dark Winter began with a report of a single case of smallpox in Oklahoma City*. When the exercise was terminated, after thirteen "days" of simulated time, the epidemic had spread to twenty-five states and fifteen other countries, killing over 24 million people. As the exercise unfolded, the government quickly ran out of vaccines, forcing officials to make life-and-death decisions about who should be protected—health workers, soldiers, only citizens of Oklahoma, or citizens of all neighboring states—and whether the military would be needed to quarantine the patients. After the exercise, officials were convinced that the United States was unprepared to deal with bioterrorism.

In the wake of this learning experience and spurred by the events of September 11 and the subsequent anthrax attack, the U.S. DHS planned a third TOPOFF (Top Officials) exercise to "improve the nation's ability to prevent, respond to, and recover from terrorist attacks." TOPOFF 3 involved a series of exercises of increasing complexity that simulated a terrorist WMD campaign. In the third exercise, the simulated attacks occurred in the states of Connecticut and New Jersey and were intended to enable government officials to respond more efficiently, based on the lessons learned from the earlier scenarios.

The DHS has contracts for the development of a variety of technologies for defense against biological and chemical threats. These research teams will seek to develop many new systems, including Bioagent Autonomous Networked Detectors (to detect and treat biological agents in outdoor urban areas) and a Rapid Automated Biological Identification System (a "detect-and-protect" system for round-the-clock, distributed indoor monitoring of buildings and selected outdoor locations for bacteria, viruses, and toxins). Clearly, the DHS considers the potential for domestic use of biological and/or chemical weapons to be strong, since $48 million has already been committed to the first phase of these projects.4

The events of September 11, 2001, taught us that WMDs need not be biological, chemical, or nuclear. The airplanes flown into the World Trade Center towers were certainly WMDs but did not fall under the parameters of such weapons in most planning scenarios. Today, special efforts to secure airports and air transport against use as WMDs are being made as the world adjusts to this new type of "weapon."

As N. C. Livingstone noted more than a decade ago,

> As the nations of the globe learn to live with routine low-level violence, it can be expected that there will be a movement by terrorists toward more dramatic and increasingly destructive acts of terrorism designed to ensure that the public does not forget about them and their cause.5

The explosive growth of technology that has brought with it new vulnerabilities to highly industrialized societies will continue to provide incentives for increased destruction.

Japan was fortunate, in 1995, that the group carrying out the sarin attack had ample supply of the toxin but little experience in its effective use; consequently, the death count from this attack was low. Similar "luck" befell the United States in the 1993 bombing of the World Trade Center. Court accounts of the incident revealed that those organizing the attack had planned to place sodium cyanide in the vehicle as well as the explosive materials that they did use. The intent was to create sufficient heat to vaporize the sodium cyanide, creating a lethal cyanide gas that would have been sucked into the north tower, killing thousands. Although the physical destruction and the injuries caused by the bomb were dramatic, the death toll was very low compared to what was intended, had the materials been correctly utilized.

The United States was similarly fortunate in the anthrax attack it experienced in the fall of 2001. The anthrax sent through the mail was to be lethal, but only a few people died. The attack cost billions of dollars nationwide and created a feeling of paranoia among many U.S. citizens
similar to the "fear of flying" experienced after September 11, but the casualty count was small, given the potential for serious casualties in the system's lack of preparedness.

Within the United States, evidence of efforts by individuals and groups to secure and even to use chemical or biological agents continues to grow. A list of only a few such attempts will make clear the reality of the threat:

In 1991, sheriff's deputies in Alexandria, Minnesota, learned of a shadowy group of tax protestors called the Patriots Council. One informant reported discussions of blowing up a federal building. Another turned over a baby food jar containing ricin, one of the most deadly poisons known. In 1995, three of the plotters, whose plans included the assassination of IRS agents, were convicted under the Biological Weapons Anti-Terrorism Act.

In December 1995, Thomas Levy, an Arkansas man with survivalist connections, was arrested by the FBI for possession of a biological agent for unlawful purposes. He had 130 grams of ricin that, used with skill, was enough to kill thousands of people.

In May 1995, an Ohio member of the Aryan Nations allegedly ordered bubonic plague bacteria from a Rockville, Maryland, research supplier. He received the bacteria, but the supplier became suspicious over the man's persistent phone calls about delivery of the material and alerted officials. Larry Harris was subsequently arrested.

There is growing evidence of nuclear smuggling from the former Soviet Union, at first across Europe but later in southerly directions where border controls are less stringent. Although no individual or group has yet used or openly threatened to use such weapons, nuclear technology can no longer be dismissed as an "unthinkable" weapon in this new century.

So our world is, and will for the foreseeable future continue to be, afflicted with the "condition" of terrorism, which, in the view of most experts, will probably become worse rather than better. As the global public becomes inured to low-level violence, that violence has escalated in very undesirable ways that utilize the incredible innovations in modern technology.

**TRENDS IN TERRORIST INCIDENTS**

Some of the changes in terrorism discussed at the beginning of this chapter can be documented graphically in terms of incidents of terrorism; others cannot. A quick review of those that can be statistically verified is useful but will not make clear all that must be said about contemporary trends in terrorism.

**Volume and Lethality of Incidents**

The **volume of terrorist incidents**, the number occurring annually, has dramatically increased since the turn of the millennium, but the pattern of growth since the world began to track terrorist incidents globally has been erratic. After the 1972 attack on Olympic athletes in Munich and continuing through the mid-1980s, the number of terrorist incidents rose at an annual rate of between 12 and 15 percent. This rate of increase was not constant throughout that time frame. In the 1980s, there was a marked acceleration, which brought the average rate up. From 1983 to 1991, for instance, there was an increase, although certain types of incidents became less common (e.g., aerial skyjacking).

Unfortunately, terrorism has also increased in the lethality of attacks— that is, in the **number of people killed**. There is an increasing tendency toward large-scale indiscriminate terrorist attacks in mundane, everyday locations such as airplanes or railway stations. In 1993, 109 people were killed and 1,393 were wounded in terrorist incidents around the world, the highest casualty total in five years. But the attacks on the Madrid trains in 2004, the London subways and buses in 2005, and the Mumbai trains in 2006 provided dramatic evidence of the increased lethality of terrorist attacks in the twenty-first century. Of course, the attacks on the World Trade
Center and the Pentagon in 2001, with thousands of casualties, meant that the new millennium began with a new record in terms of the lethality of terrorist attacks as well.

Since a contemporary trend in terrorism is the "internationalization" of most groups, and since significantly different definitions of terrorism are being used by various agencies and organizations to track incidents of terrorism globally, it should not be surprising to discover that there is no consensus on the "pattern" of terrorist attacks based on incident data. One data source is a U.S.-based organization, Memorial Institute for the Prevention of Terrorism (MIPT), established after the Oklahoma City bombing in 1995. In spite of the 1993 World Trade Center bombing attempt in New York City, this center still classified most terrorist acts as international rather than domestic; using this criterion, the Oklahoma City bombing by Timothy McVeigh would not be statistically relevant as it was domestic rather than international.

In 1998, the United States altered the State Department database to include both domestic and international terrorist incidents, significantly increasing the number of incidents reported each year from this point forward. A similarly radical change occurred in 2006 when the United States sought to separate the events occurring in Iraq and Afghanistan from other data records of terrorist events, in part because of the problem discussed earlier in differentiating between insurgency and terrorist attacks in those areas. The new database, funded by the DHS and based at the START Center established at the University of Maryland, is called the Global Terrorism Database and tracks a wide range of incident types, including those with "doubt" as to such items as the perpetrators, targets, and political motives.

Generating charts of terrorist incidents from these diverse databases will, of course, yield confusing and potentially conflicting results. All statistical measures have potential flaws, and terrorism, with its multiple definitions and increasingly complex nature, too often generates confusing and contradictory data patterns.

Keeping in mind the potential for error in such analysis, we still review a few of the trends statistically, rather than depend on just case studies and examples to establish the points. Figure 15.1, using data collected for the U.S. Department of State for use in its annual terrorism reports, suggests that the number of terrorist incidents has grown dramatically in recent years. The dramatic increase in the number of incidents is startling until one considers that the definition of terrorist acts was broadened to include those termed "domestic" prior to the revisions made in 1998. Until that point, incidents carried out within one country were defined as domestic, even if the group planning and carrying out the operation had international ties. Thus, most of the incidents occurring inside of Israel and the Occupied Territories carried out by HAMAS or Hezbollah were not included in the data pool, as they were "domestic" by this definition. The change in definition clearly provided a large number of new incidents for inclusion, but the definition was not retroactive in the data pool.

Figure 15.2 adds clarity to this abrupt upswing in the number of terrorist incidents, linking it to the increase in injuries in these incidents over time. These two trends also draw attention to the challenge that the ongoing conflict in Iraq has made to the efforts to define "terrorist incidents" when they are mingled with a "war" and an "insurgency," often in difficult-to-distinguish forms. Even separating the data from Iraq and Afghanistan, as the U.S. Department of State attempted to do in 2005 and 2006, does not alleviate the confusion or mitigate the graphic illustration of a dramatic upsurge of terrorism activity. When terrorist incidents rise from a relatively modest 184 in 1997 to a startling 1,286 in 1998, the impact of the redefinition is clear. But when, as in Iraq, the conflict becomes both more intense and more difficult to separate (terrorist acts and acts of insurgency are not always clearly distinguished, either on the ground or in the data), the change is equally dramatic.

From 2003, when the U.S.-led invasion of Iraq began, through 2004 as data were with difficulty accumulated and assessed, the increase in terrorist incidents was sharp; but in 2005 and 2006, as the blurred line between acts of terrorism and insurgency (often carried out by people with common ties and similar motivation), the surge in documented terrorist acts is
astounding According to the Department of State's *Country Reports on Terrorism* published in August 2007, there were 11,153 acts of terrorism documented in 2005 and 14,338 in 2006. As Figure 15.2 makes clear, the number of casualties in terrorist incidents (lethality) is not declining over time, nor is there a decrease, as Figure 15.1 makes clear, in the number of incidents. But these are not the only trends in terrorism that must be of concern.

**Radicalization of Religion and Terrorism Today**

Another significant trend has been in the surge in radical religious terrorism *earned out by militant, conservative, and fundamentalist individuals and groups in the name of a faith*. If the 1960s can be described in terms of left-wing terrorism, with the 1970s carrying that trend to its logical conclusion by witnessing the involvement of liberation struggles in terrorism, the 1990s and the first few years of the twenty-first century witnessed a resurgence of right-wing terrorism. This was particularly true in Europe and the United States initially, but it is now becoming the norm in Southeast Asia, North Africa, and to a lesser extent Latin America. The activities of such organizations as the neo-Nazi youth groups against refugees from Eastern Europe in Germany provided grim reminders of the existence of right-wing groups increasingly willing to resort to violence. The attacks of September 11, 2001, by religious fanatics and subsequent attacks by al-Qaeda cells and related groups throughout the world, including the dramatic bombing of the trains in Madrid in 2004 and London in 2005, indicate the range and diversity of the threat of radical religious terror today.

Radicalization in religion is not a new phenomenon. But building an understanding of the process of radicalization and of the impact of radical fundamentalism with the emerging "crusader-type" terrorists may help us learn to deal with this phenomenon.

Psychologists assert that the "radicalization" toward religious-based terrorism is a dynamic process with identifiable phases, which include the process of becoming involved in a group engaged in acts of terror, being involved in the group activities, and, for some, disengaging from the group. "Involvement" means different things to different people, with a wide variety of roles from passive support to violent action included in the spectrum of involvement. All who belong to a particular religion or religious group are not involved to the same extent, nor do they see their involvement as requiring violent action. As history indicates, any religion can be "radicalized" by members who interpret its tenets differently, forming groups who seek to impose their will on the community by violence if necessary.

There is no single catalyst for "being involved" in a group. Often, the desire to belong to a group and to socialize may prompt an individual to become involved. The risk factors for initial involvement in this stage are generally identified as personal involvement with a victim who needs to be avenged, an expectation that involvement will improve a social or political situation, socialization with others already involved, and access to relevant groups.

In the second phase, described here as "increased involvement," individuals become more than peripherally involved; they begin taking part in activities and making decisions rather than just providing nominal support by simply "being there" for meetings. The factors encouraging increased involvement include *the process of the group (incorporation), confirmation by the group of inclusion, learning capabilities, ideological commitment, and sometimes prior commitment patterns of the individual*. Only a portion of any group truly "becomes involved" with the activities of that group, moving from simple membership to active participant. In the radicalization process, as a person becomes more intensely and personally involved in the activities of a radical religious group advocating violent actions, the potential for violent action by that person becomes greater.

The role or function of the individual who is increasingly involved in the group will be determined by a variety of factors as well. The will of the group leaders for a specific action, the desires of the individual to be actively involved, the "value" placed on the more active role by the
group, the external climate in which both the individual and the group exist, and the incidence occurrence that may make future activity more or less desirable or feasible—these factors will limit or expand the options for an individual's role to change within the group.

Understanding this dynamic of radicalization toward violent behavior helps us understand the actions of some of the young people in the Palestinian territories today who seem to become willing to be suicide bombers "overnight." Knowing this, the action is not so much defensible as perhaps preventable if the motivating causes are addressed before the active role is picked up by the next "crusader" willing to die and to take the lives of others for the cause.

Fortunately for mankind, most people who are even peripherally a part of a religious group focused on a need to carry out violent attacks will disengage rather than assume the active role of attacker. But religious fundamentalism advocating, encouraging, or simply tolerating terrorist violence presents serious challenges to the world, as "crusader terrorists" can be generated by any faith. The term fundamentalism, like the adjective "terrorism," is often selectively and inappropriately applied, leading to serious misunderstandings and a lack of coherence in policy.

For the purpose of the study of terrorism here, fundamentalism will be used to refer to an approach to a religious faith that seeks to maintain or return to basic tenets and that rejects the modern world as a threat to the faith. Thus, the basic differences between mainstream religious groups and fundamentalists would be that fundamentalists believe that their faith is threatened by the modern world; believe that they must draw a clear line therefore between "self" and "the world" to protect their faith; and believe that they are confronted on all sides, with "their backs against the wall" as they seek to protect the tenets of their faith.

Unsurprisingly, such an approach would lead to a view of the secular world as a foe rather than a friend and would view globalization as a force that is inherently damaging and that destroys cultures and religions as it expands across borders rather than linking people. Agents of socialization provided by fundamentalist groups, such as schools and churches, will therefore not teach support for the secular state, but may instead foster a sense of a struggle for "good" by the group against the "evil" of the state—unless the state is linked with or a part of the group's network. Thus, the concern on the part of Western countries regarding the role of the madrassas (schools run by the Muslim community of faith) in Saudi Arabia is valid. The madrassas indeed have, in some cases, fostered a radical fundamentalist view of the world, making a transition to participation in a terrorist group easier for young people. Similar concerns may emerge about Christian private elementary and secondary education schools, particularly with the growth of religious fundamentalism on the far-right in the United States, as exemplified by Timothy McVeigh and Eric Rudolph.

One last note on the impact of the increased role of religion in terrorist violence today: religious "crusaders," firm in their belief that they are doing the will of a supreme being and that the world will be better for their efforts, will be more willing than any state has ever been to use WMD j. Even during the cold war, as the two superpowers that were the United States and the Soviet Union built massive stockpiles of nuclear, chemical, and biological weapons, states refrained from the use of those weapons for a variety of reasons, at least two of which are important to note here. One reason for nonuse was the fear of retaliation and the consequent destruction of massive portions of mankind. Another reason, less clearly identified but certainly present in the memoirs of leaders of that time, was concern over the "tightness" of their actions—not the morality, but the sense of how history would view what they contemplated doing.

Neither of these constraints would hamper radical religious cults from using such weapons. As terrorist groups are less tied to state sponsors today and consist more and more of networked cells that transcend state boundaries, the potential for massive retaliation that restrained the superpowers during the cold war will not limit terrorist groups today. Nor will concern over the legitimacy of their actions, as their religious beliefs in many cases will enable them to believe that their actions are divinely inspired.
Deterrence as a Tool Against Suicide Bombing

In the wake of the cold war, when deterrence—a strategy of defense in which the threat of massive retaliation (as a form of punishment) is used to prevent an attack—was employed, apparently successfully, in deterring attacks with WMDs, the use of such a strategy against terrorism was attractive but difficult to construct. Since terrorism was seldom carried out by a state actor against another state (although state terrorism clearly occurred when carried out against the people of the state), it was difficult to use deterrence, with the threat of massive retaliation directed against the nonstate actors carrying out the terrorist attacks, since most such actors were not all in one place at one time. The U.S. attacks on the al-Qaeda bases in Afghanistan after the attacks in 2001 were, perhaps, a massive retaliation, intended to punish and to deter such future attacks.

Deterrence against individuals, or even small groups, is very difficult to direct, or to enforce. Deterrence in law enforcement works on individuals in systems in which the rule of law is regularly enforced, and the habit of obedience to such laws is customary. Drivers in the United States will obey, in general, speed limit laws not because there is always an officer of the law lurking near to issue a ticket, but because there is potentially such an officer near, and the habit of generally obeying the laws is a cultural norm. Deterrence by threat of punishment for breaking the rules can work if there is a belief that the rules are important and that punishment for breaking the rules is likely.

The problem, in terms of suicide bombing, is that individuals prepared to engage in acts of terrorism are already committed to "breaking the rules," since terrorism itself, as noted in earlier chapters, breaks the most fundamental rules of law. A person intending to be a suicide bomber, moreover, will not be deterred by threat of punishment—what punishment can he or she be threatened with, if the person is planning to die in a violent explosion? What "massive retaliation" would deter such an act, unless it were threatened against innocent people, such as the bomber's family—an option not acceptable to the laws of the civilized world today?

The "instinct for self-preservation" has, in Western cultures, been assumed to be a fundamental drive inherent in every individual. But a person who has decided to carry out a suicide bombing attack clearly is not driven by such an instinct. So threatening to "massively retaliate," with the probable loss of life, will not deter a suicide bomber from his or her plan of action. Traditional deterrence is clearly not a viable tool in countering this type of terrorist action.

Impact of Generational Differences within Terrorist Groups

Generational differences exist between young militants and older leaders in terrorists groups operating today. Today's terrorists seem less likely to be involved in pickets and demonstrations before resorting to violence. Instead, they seem more willing to throw a bomb first and then talk later (if at all) about their grievances.

This "do something now" mentality has caused some difficulties and even embarrassment for some of the older leaders of established movements. During the 1990s, the PLO witnessed a number of splits, frequently between older, more "institutionalized" members of the organization and younger members who wanted to take immediate violent action against the existing situation.

Hamas, a radical element seeking the establishment of an Islamic state, which is supported by Iran and active in the West Bank and Gaza, strongly rejected any such renunciation of terrorist tactics. The difficulties experienced by Yasser Arafat in governing Gaza during the last decade of the 1990s and the first years of the twenty-first century illustrate the deepening splits between the older leadership, who are willing to compromise in order to achieve a portion of that for which they fought, and the younger factions that are willing to continue the struggle with violence and are unwilling to settle for less than full success. The takeover by Hamas of political
leadership in Gaza in 2007, in which the group split violently with the more traditional leadership of the Palestinian National Authority (PA), makes clear the potential for long-standing groups to splinter into new factions less willing to compromise to reach a political solution.

The same conditions exist in Northern Ireland, where the old Irish Republican Army (IRA) was replaced more than a decade ago by the Provisional IRA (PIRA) as the efforts to find a diplomatic solution escalated. Since that time, as continued steps toward peace have been drafted and implemented, the PIRA has splintered, producing the Continuity IRA and the Real IRA, both of which have objected to the route to resolution of the conflict taken by the older leaders. The United Kingdom and Ireland now face not one but at least three different groups with a similar "cause" but widely differing plans for action.

**IED: Weapon of Choice**

Although the international community is concerned over the potential for the use of WMDs by terrorists in the future, terrorists today are making extensive use of a weapon, which, although small, is difficult to detect and can inflict serious casualties. Improvised explosive devices, or IEDs, are hidden killers that are easily made from readily available materials in regions of conflict such as Iraq. Hidden along roads in Iraq and detonated as a convoy or group of vehicles passes, these devices have been set off to explode sometimes simultaneously, creating a lethal "kill zone" for vehicles and pedestrians. Within communities in Iraq, IEDs have been sunk into manhole covers or buried beneath the road and covered with a pressure plate, packed in a vehicle and driven by a suicide bomber, or hidden in buildings and detonated after troops or targeted civilians are inside. Since the detonation of the first IED in Iraq in 2003, more than 81,000 IED attacks have occurred in that country. The death toll from these attacks is extraordinarily high, but many of these incidents do not meet the criteria for terrorist attacks as the majority of victims are military personnel. More than two-thirds of combat deaths in Iraq by 2007 were caused by IEDs.

U.S.-led forces in Iraq initially had no contingency plans for the security of thousands of ammunition caches, estimated to have held at least 650,000 tons of explosives. Since IEDs depend upon access to explosives, Iraq continues to be a ripe ground for use of this type of weapon. In spite of intense counter-IED measures by the U.S. Navy and Marine Corps in recent years, the problem is growing and is spreading to other countries. Insurgents coming into Iraq to fight the U.S.-led coalition are returning home after a time trained in the construction and use of these devices, secure in the knowledge that a vast supply of ammunition is "available" in Iraq. Use of IEDs by returning fighters in several neighboring countries has made this growth potential another serious concern.

In 2006, the U.S. Department of Defense established a Joint Improvised Explosive Device Defeat Organization (JIEDDO), tasked with devising methods to detect and defeat these devices. The number of U.S. and Iraqi casualties from the devices began to decline in 2008, but attacks and casualties in Afghanistan began to increase during that time.

**THE THREAT AND REALITY OF CYBERTERROR**

Terrorism today is engaged in a new form of netwar called cyberterror, an area of concern in terms of domestic security from terrorist attacks that has emerged in recent years. Cyberterrorism is a difficult term to define. Using the operational definition adopted in this text, cyberterrorism would include the calculated use of unlawful violence against digital property to intimidate or coerce governments or societies in the pursuit of goals that are political, religious, or ideological.

This definition draws several distinct lines to differentiate cyberterrorism from other types of cyber crime. Like all forms of terrorism, cyberterror must have a political, religious, or ideological
motive, not simply a desire to disrupt, destroy, or simply annoy. Thus, not all computer hackers who send worms into an e-mail system to destroy or disrupt other users are committing cyberterror, although their acts may well be cyber crimes under both state and national law. Actions intended to destroy innocent persons, when motivated by political objectives and designed to create a mood of fear in an audience, can readily be called terrorism, even if the attack is made in cyberspace. For example, an attack on a computer system that routes airlines or passenger trains would clearly fit the parameters for this text of “terrorism.” So cyberterror must involve destructive acts against innocent persons or against the systems vital to their survival and must be motivated by political goals.

But most of what is called cyberterror today is plagued by very fuzzy definitional boundaries. Would, for instance, a cyber attack on the stock market of a country be a form of cyberterror, even though it involves no immediate, tangible violence and though there might not be universal agreement on the essential nature of the stock market to the survival of those living in the system? What about an attempt to corrupt information within a system, such as that pertaining to blood types in a hospital? If the only result is additional costs in terms of time delay and effort, not lives lost or medical emergencies, is this still terrorism?

Technology in the last two decades has radically altered the patterns of organization and interaction of individuals, groups, and governments. As one scholar noted,

The headlong rush of the U.S. and other advanced nations into the information age involves new risks. The information systems central to national security, the conduct of government and commerce have significant weaknesses that can be attacked.

Thus far, attacks on such systems have achieved only limited impact, but the potential for such attacks and the clarity with which the definitional line can be drawn to separate ordinary cyber crime from cyberterror must be subjects for careful study. Efforts to generate categories for different types of cyber attacks would be useful.

A white paper produced at the Center for the Study of Terrorism and Irregular Warfare in Monterey, California, in 1999 offers useful tools for this study of cyberterror. The authors of this study suggest that there are three levels of cyberterror capability:

**Simple-Unstructured:** This level of capability has the ability to conduct basic hacks against individual systems with tools created by others. An individual or organization operating at this level possesses few target analysis, command and control, or learning capabilities. Hacker groups are psychologically and organizationally ill-suited to mount such offensives. They tend to feature loose affiliations without the centralized direction necessary for sophisticated attacks on infrastructure targets. Perhaps more importantly, it is against their own self-interest to cause mass disruption to the information infrastructure, as they have more reason to want the Internet to function.

**Advanced-Structured:** This level includes the capability to conduct relatively sophisticated attacks against multiple systems or digital networks. It may also have the capacity to modify or even create basic hacking tools. Thus, the individual or organization would possess fundamental target analysis, command and control, and learning capabilities. The technical skills associated with the advanced-structured level include mastery of at least one operating system and one network protocol, as well as programming for both stand-alone and networked computers.

**Complex-Coordinated:** Groups and individuals operating at this level have the capacity for coordinated attacks capable of causing mass disruption of integrated, heterogeneous defenses (including cryptography). They would also possess the ability to design and create sophisticated hacking tools and would be capable of target analysis, command and control, and organizational learning. At the complex level we add knowledge of industrial and control network protocols to the obvious expansion of the topics in the previous level. Closely tied to technical skill is analytic ability. The cyberterror organization must be able to perform a detailed target
analysis. Finally, the group must be able to plan and orchestrate the event to within very narrow tolerances.8

Groups operating at the simple-unstructured level will use the openly available tools to interfere with computers used by the government, hacking into systems to cause problems but not widespread disruption. Those at the complex-coordinated end of the spectrum could attempt to disrupt a basic service over a wide area or multiple services within perhaps a smaller geographic region.

A good indicator of a terrorist group's potential for cyberattack may well be the degree to which it is itself linked to the use of the Internet for communications, management, and intelligence gathering of its own. Cyberterror will not, in all probability, be a tool utilized by a large number of groups against the vulnerable cyber-services of the modern world. There are many reasons for this no doubt brief period of relative safety from devastating cyber attacks, some of which are related to the nature and goals of terrorist groups today. Let us consider how these two aspects will, for a time, limit the probability of high-end cyberterror attacks.

Nature of Groups as Limiting Factor

The nature of the group will probably limit the likelihood of its use of cyberterror. Groups that are "old" are less likely to be capable of the necessary cyber-proficiency than those that are "young," as cyber technology is a fairly recent phenomenon. Groups that are largely leaderless movements and those that use the Internet to connect cells scattered across large geographic areas will also be less likely to use devastating cyberterrorism, since such groups rely on the Internet for recruitment, planning, and even training operations.

The more "informatized" the group is (the more it uses the Internet in recruitment and training of members, propaganda distribution, even the transfer of resources), the less likely the group will be to attack the computerized system on which it depends. The nature of groups will be a limiting, but not a prohibitive, factor, at least for a time.

Goals of Groups as Limiting Factors

Groups that seek to disrupt or destroy on a large scale are the exception rather than the rule in most studies of terrorism today. Religiously motivated groups engaging in "crusades" across wide geographic boundaries are perhaps the most likely to be willing to engender mass destruction, as is evident in the recent activities of some of these groups. Single-issue groups, such as those engaged in the protection of animal rights, the environment, or both against the incursions of modern technologies, may be the most willing, in spite of the use of the Internet for recruitment and propaganda, to engage in complex, widely disruptive terrorism. Such groups would also be more likely to have as a goal disruption without destruction and would thus be willing to generate disruptive Internet attacks. Moreover, such groups and their targets are prevalent in societies rich in information technology, making such attacks easier to launch and offering a wide range of targets. As noted in a white paper, "These groups have, by far, the best match between desire, ideology and environment to support a near term advanced-structure attack threat."

Cyberterror is not just a "weapon of the future." In May 2007, Estonia, a country enormously dependent on the Internet for everything from parliamentary elections to banking, suffered a cyber attack. The attack was launched through software known as "bots," generating a giant network of bots banded together to simultaneously flood the country's computer networks. This "denial of service" attack generated serious concern among NATO allies, who were aware of the vulnerability of many modern systems to this "nonviolent" but extremely disruptive form of
assault. The waves of attacks continued for several days and seriously impacted the economy and government services of this state.

Nearly a decade before this attack, in 1997, a Presidential Commission on Critical Infrastructure Protection was created by U.S. President Bill Clinton to assess the threat to vital infrastructures of communication, electrical power systems, transportation and air traffic control, emergency services, and banks posed by cyber hacking and cyberterrorism. This commission continues to offer reports on the escalating scale of potential cyber attacks and on the efforts taken, as well as those needed, to improve security to such infrastructure.

Awareness of the potential for dramatic cyberterror attacks against U.S. targets appeared in the attacks detected in 1998 by the U.S. Department of Defense. An official interagency investigation was launched in response to several computer attacks. These attacks appeared to be originating from, among other places, the Middle East, and at least eleven of the attacks were launched on a number of navy, Marine Corps, and air force computers worldwide. The attacks appeared to be primarily focused on denial of service and exploited a well-known vulnerability in the Solaris operating system. Since the U.S. military was at that time preparing for possible combat operations in Iraq, the investigation engaged the FBI, the CIA, and the Department of Justice, as well as the military intelligence forces, in what was dubbed the "Solar Sunrise" attacks.

After a flurry of court orders, the culprits were found: two California teenagers and their eighteen-year-old Israeli mentor. Given the seriousness of the breach of security, the results were somewhat anticlimactic but served to illustrate the extent of cyber vulnerability of even the most secure of government infrastructures. Had the teenage hackers been terrorists, the results could have been incredibly destructive.

Cyberterror is a threat, but not yet necessarily an eminent threat. Three factors limit the credibility of the threat, and each is rapidly disappearing:

1. Public and private interest in erecting firewalls against cyber breaches of security is growing rapidly. There are barriers to entry into most cyber systems that are vital parts of U.S. infrastructure that are beyond the capability of most, with individual hackers presenting an annoyance, but not a threat of terrorism, to date.

2. Terrorists generally lack the funds essential to mount a large-scale, computer-driven cyber operation on most critical infrastructure. While the vulnerability of such infrastructure to physical and operational attacks is real, cyber attacks are less likely due to the resources essential for such an attack, at this point.

3. Most terrorist groups lack the human capital needed to mount cyberterror operations on a meaningful level. Most computer hackers are not part of groups with strong political agendas, and most members of such groups lack the formidable computer skills necessary to carry out such attacks, so far.

Thus, given the difficult technical paths that must be followed, and the fiscal and human capital essential for serious cyberterror events, cyberterror remains a threat, but not of imminent destruction—yet.

**CONCLUSIONS**

The world community is now required to deal with unprecedented problems arising from acts of international terrorism . . . which raise many issues of a humanitarian, moral, legal, and political character for which, at the present time, no commonly agreed rules or solutions exist.11
The world community must meet the challenge of terrorism. If it is indeed a condition for which there is no known cure, then we must at least seek to understand the phenomenon in order to better cope with its presence in our midst.

To recognize the existence of terrorism is not to recognize its right to exist or its inevitability. A doctor faced with an epidemic must first recognize the problem and then take steps to deal with it, at least in terms of containment and perhaps prevention. Similarly, students of world social, legal, political, and security issues today must study the phenomenon of terrorism in order to better cope with its presence in the world.

Just as that hypothetical doctor facing that epidemic has restraints on what he or she may do to handle the problem, so nations searching for ways to cope with modern terrorism must exercise restraint in their responses. Nations must weigh the cost, in terms of the loss of liberties and freedoms, against the gains in subduing terrorism, recognizing that to sacrifice too many liberties may well be to give terrorists the victory they seek: the destruction of democratic systems. The cost of winning some battles against terrorism may be too great.

But to concede that there are some ways in which a nation or a people may not combat terrorism is not to concede that terrorism cannot be fought. Regardless of the cause, terrorism is not an acceptable mode of behavior and cannot be permitted to prevail unchecked. The end does not, and can never, justify the means.

We cannot "stop" all opportunities for terrorism to occur. We can understand what causes it, how it works, and the individuals or groups who are willing to commit terrorism. Understanding and predicting can make us better able to cope without overresponding and without being blind to the reality of the threats that confront us.

**DISCUSSION**

Terrorism has contributed to changes in the mode of conflict both between and within nations. Conflicts today appear less coherent than in the past, at times exhibiting not two clear sides but several confusing and shifting alliances. Such conflicts are also less decisive, with no clear "winner" or "loser." As states use terrorism to engage in irregular warfare against other states, the stakes in the conflict become confused, the rules less clear, and the heroes hard to find.

Terrorism is not new, but it is changing. The ability to understand and to predict terrorist attacks is growing with the explosive waves of globalization fueled by the Internet and other forms of mass media, mass transportation, and new technologies—but so is the potential for destruction from both sides of the struggle. Those engaged in terrorism are increasingly able to cause more casualties and to destroy more buildings and infrastructure, while those seeking to protect such targets are tempted constantly to sacrifice liberties to provide security from attack. The balance in the struggle is constantly in flux, and each decision—by a group to use a weapon or by a government to impair essential freedoms—could bring about destruction on an unimaginable scale.

Policy is made by prioritizing the disposition of resources, and in the effort to "deal with" terrorism, this is vitally important. Take a careful look at the list below of potential measures suggested to alleviate this problem, in terms of awareness, prevention, mitigation, or response. These are the "all-hazard" phases particularly relevant to terrorism today, and they offer critical choices of action:

1. **Train and equip first-responders to terrorist events.** First-responders in the Tokyo subway sarin attack were not trained for this type of weapon and were themselves victims of the attack.

2. **Build bridges of cultural awareness.** Before the events of September 11, 2001, most U.S. citizens were unaware of where Afghanistan was on a map and had no real knowledge of or interest in the economic problems or the religious turmoil of that area. Since that time, Christian-
Muslim panel discussions and community information-sharing groups have helped to defuse the concept of a "clash of civilizations."

3. *Win the war of hearts and minds.* Much of the war on terrorism will be won not on a battlefield, but on the Internet or in the mass media, in the presentation of ideas and concerns in noninflammatory ways.

4. *Make terrorism a crime that can be taken to the International Criminal Court.* Without this option, there is no place to take those accused of terrorist acts except courts within a state, where justice may be problematic.

5. *Expand special forces to have sufficient manpower to handle terrorism, when necessary, in other countries.* There are not enough of these forces for this growing global war. Nor can they be used on U.S. soil, should terrorist events occur in the United States again on a scale warranting such action.

**ANALYSIS CHALLENGE**

Go to the Global Terrorism Database (GTD) website (http://www.start.umd.edu/gtd/) and initiate a search to determine a trend in terrorism that interests or concerns you. You can track data by region, perpetrator, weapon, and a variety other factors. The GTD will generate a graph for you to help you visualize this trend in terrorism today.

There are no "magic formulas" for resolving the problem of terrorism in the world today. But consider this final set of questions:

Has humankind formulated a weapon for its own destruction by fomenting the conditions from which terrorism arises? By putting WMDs in the hands of individuals willing to commit terrorist acts, are we creating the arrow that will destroy our world?

So in the Libyan fable it is told That once an eagle, stricken with a dart, Said when he saw the fashion of the shaft, "With our own feathers, not by others' hands Are we now smitten."

_Aeschylus, Wisdom of the Ages_

**SUGGESTED READINGS**


NOTES


13. These data are an accumulation of the data sets for each of the years from 1982 to 2006 inclusive, including the corrections made after 1998, and again in 2004, to respond to definitional changes and the conflict in Iraq.