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What's New About the New Terrorism and How Dangerous Is It?

The 'new terrorism' is said to be more networked, ad hoc, lethal and dangerous than the old. This assessment of these claims concludes that terrorism currently differs little from its previous manifestations, except for the somewhat increased likelihood that a chemical, biological, nuclear or radiological weapon might be used by terrorists. This does not necessarily mean that terrorism is more dangerous than it was. The critical factor in assessing the threat posed by terrorism is whether it is used strategically.

Over the past decade, the belief has grown among some who study terrorism that it is changing, that it has become 'the new terrorism'.[1] This terrorism is reputedly distinguished from the old by a new structure, a new kind of personnel, and a new attitude toward violence. The new structure is a network, facilitated by information technology, the new personnel are amateurs, who often come together in ad hoc or transitory groupings, and the new attitude an increased willingness to cause mass casualties, perhaps by using chemical, biological, nuclear or radiological (CBNR) weapons. Taken together, network organization and amateur participation suggest that the 'new terrorists' no longer need state sponsorship as much as their predecessors did. The impression left by accounts of the new terrorism is that it is more dangerous or at least more difficult to counter than its predecessor.

Now that this view has been well developed and ably presented, it is time to assess it. Ultimately, we must ask whether what we see in terrorism today is really new and in what ways and if it poses more of a threat than the old terrorism. On balance, we will conclude that there is little that is new in the new terrorism and what is new is not necessarily more dangerous or difficult to counter than the old.

The New Terrorism

A good place to begin an analysis of the new terrorism is its networked structure. Terrorists are now able and willing to develop network forms of organization for the same reason that businesses are. The information revolution, by lowering the cost of communication, allows organizations to push functions outside a controlling hierarchical structure. Organizations can thus flatten out their pyramids of authority and control and approach a network form, a group of more or less autonomous, dispersed entities, linked by advanced communications and perhaps nothing more than a common purpose. Motivating or compelling the move from hierarchy to network are the advantages that an organization acquires as it transforms itself. It becomes more flexible, adaptive and resilient because each of its units senses and reacts on its own in loose coordination with the others. This multiplies the opportunities for the organization to learn, making it more flexible and adaptive. The organization becomes more resilient because if one or even several of its constituent entities are destroyed, the others carry on. A network, unlike a hierarchy, cannot be destroyed by decapitation.

In the case of terrorists, the loosely linked autonomous entities that make up a network might be individuals, such as Ramzi Yousef, who organized the World Trade Center bombing, or cells such as those involved in the leaderless resistance of the

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Christian Patriot movement in the United States. Leaderless resistance is 'a system of organization that is based upon the cell organization, but does not have any central control or direction. . . . [A]ll individuals and groups operate independently of each other, and never report to a central headquarters or single leader for direction or instruction, as would those who belong to a typical pyramid organization'.[2] The entities making up terrorist networks might also be large, more formal, even hierarchical organizations that work together without any common hierarchy or central commanding authority between them. Whatever the components of the network, what makes it a network is the absence of this central authority or control.[3] It is this feature that gives networks their flexibility, adaptiveness and resilience, allowing them advantages over organizations like the U.S. government, which appear more and more to be hierarchical industrial-age dinosaurs.

One manifestation of this networking is the proliferation of the amateur terrorist and the ad hoc terrorist group. Amateurs come together with the like-minded to conduct a terrorist attack and then disband. They do not receive training or other logistical support from state-sponsors but rely on networks of supporters, learning what they need to know from publications or the world-wide web or demobilized soldiers. Because they have only an informal organizational structure and no permanent existence, it is difficult to spot such groups and take steps to counteract them. As transitory groups operating as and supported by networks, they have no infrastructure, and do not benefit from a state sponsor's infrastructure, the sort of assets that conventional military power can place at risk.

One reason amateurs and ad hoc groups can operate as they do is an often unremarked upon aspect of the communication revolution. In addition to facilitating networks, the communication revolution also facilitates fundraising or, more generally, the mobilizing of resources—political and individual support, and knowledge, as well as money—that all terrorist organizations must do. The declining cost and increasing ease of communicating over great distances means that terrorist groups have greatly increased the potential pool of resources they can draw on. They can now more easily appeal to an ethnic or religious Diaspora or to political sympathizers around the world. They can also more easily get their message to a world-wide audience or to the people of the country or countries they deem most important in their struggle. Through the world-wide web, they have access to important sources of information.

An established government's disadvantages when confronting amateur networked terrorists are all the more sobering because of the apparent increased willingness of 'new terrorists' to inflict mass casualties. Analysts explain this trend by pointing to a number of factors, such as the diffusion of lethal technologies; the erosion of taboos against the use of weapons of mass destruction; the absence of restraint on amateur terrorists who, having no organization or sponsor to protect, see no reason to limit extreme violence that might generate a backlash; and the continuing need of terrorists to find new ways of attracting attention. In addition to these factors, analysts have tended to emphasize the importance of religion. Religiously motivated terrorists are thought more likely to conduct mass casualty attacks because, unlike politically motivated terrorists, they are not constrained by the fear that excessive violence will offend some constituency, since they care only about a small circle of the elect. Nor, for this reason, unlike politically motivated terrorists, is their intent to pressure or persuade their opponents. For religious

terrorists, the world is divided into 'us' and 'them', the saved and the damned, and the damned are to be destroyed. This is especially so if the religious impulse takes on a millennial character and the desire for a new order makes plausible the destruction of the old. This has led some to speculate that religiously motivated terrorists might even be willing to use weapons of mass destruction in their attacks, as might others whose purpose is not to intimidate or persuade but rather simply to destroy. Such urges, coupled with the increased availability of more potent weapons, suggests that terrorists arrayed in a network or as a network of networks have apparently become opponents whose ability to dance circles around governments is surpassed only by the increased lethality of their punch.

The new terrorists appear to be formidable enemies. But are the disadvantages governments labor under with regard to them quite as severe as this brief sketch suggests? For that matter, is the new terrorism new? To answer both of these questions, we may start where our sketch of the new terrorism started, with the question of network structure.

Is the New Terrorism New?

The striking thing about the networked structure of the new terrorism is that it differs little from the structure of the old terrorism. The Palestine Liberation Organization (PLO), for example, was itself an umbrella group, like Hizballah,[4] whose dominant faction, Fatah, did not have a monopoly of power and whose constituent parts have had different relations with each other, splintering and adhering and developing different policies and strategies. One analyst of the PLO has spoken of it as a 'network of relationships.'[5] Furthermore, the PLO was networked externally, by some reports, with up to 21 different organizations that the PLO had previously trained or supplied with weapons and other logistical support.[6] Marxist or left-wing revolutionary groups also became network-like as ideological differentiation lead to structural complexity. Many of these groups, such as the Red Army Faction (RAF), were, despite the hierarchical connotation of the word 'army', not very hierarchical at all. The RAF spawned second and third generations haphazardly and remained more a collection of terrorists sharing a common purpose than a hierarchical organization. And these collectivities, too, were parts of a larger network, getting support, for example, from Warsaw Pact members and training from Middle Eastern terrorist groups.[7] The role of Osama Bin Laden as a wealthy patron of loosely affiliated terrorists connected by a common purpose rather than a hierarchical or well-developed organizational structure has a precedent in the work of Giangiacomo Feltrinelli in the 1960s and early 1970s.[8]

We can find evidence of what is now called network structure even further back in the history of terrorist organizations. One existed in Iran in the 1940s, for example. In fact there is a very long tradition of these kinds of networks in the Middle East.[9] They are identical in structure and character to the networks associated with bin Laden. The similarity arises, presumably, from a common source in the informal networked character of Sunni Islam. In this light, the emergence in the Middle East of organizations less hierarchical than those that operated in the 1970s and 1980s is a return to a more traditional model as the distorting effect of an alien pattern of thought (Marxism-Leninism) dissipates.

Terrorists may be increasing their use of information technology[10] and modern communications may facilitate networks but networks as a structure for terrorist or violent non-state groups are not new. Indeed, in 1983, reflecting on 30 years study of 'extralegal violent organizations', and five years experience in the Polish underground during Word War II, one analyst concluded that these 'extralegal violent organizations' had possessed during this period a network structure, a structure similar to that considered new by analysts in the late 1990s.[11]

If the non-hierarchical, networked character of terrorism is not new, what about the claims that terrorism now relies more on amateurs and less on state support? All terrorists are amateurs when they begin. If their mistakes are not fatal, they may learn and survive long enough to become professionals. If we have seen amateurs and ad hoc groups among Islamist terrorists, it may be because the international Islamic movement (as opposed to nationalist movements like Hamas and Hizballah) is relatively young. As the principle of the survival of the proficient operates, we are likely to see the number of professionals increase. Similarly, we are likely to see, indeed, we are already seeing, fewer ad hoc groups. As the pressure brought to bear against these groups increases and they come to appreciate the costs of operating as terrorists, we are also likely to see state sponsorship or support become more important to them. In fact, this has already happened to bin Laden. He has found state support necessary, as have most terrorists. In short, the amateur and ad hoc character of the new terrorism is not so much new as another manifestation of the life cycle of terrorism.

Although the networked, ad hoc character of contemporary terrorism is not new, the terrorism we experience today, at least the international terrorism we experience, is probably more lethal than it was when it first emerged three decades ago and more likely to produce mass casualties. We can construct what we might call a lethality index for international terrorism (Table 1)[12] by dividing the number of casualties and fatalities in any given period by the total number of incidents in the same period.

Table 1. Terrorism Lethality Index

	FATALITIES INDEX	PER CENT CHANGE	FATALITIES & CASUALTIES INDEX	PER CENT CHANGE
Twelve-year increments				
1969-1980	.55		1.61	
1987-1999	.73	33	5.25	226
Five year increments				
1969-1973	.24		.99	
1976-1980	.72	200	1.84 (1.52)	86 (53)
1986-1990	.75	4	2.63	43
1995-1999	.98 (.75)	31 (0)	10.68 (3.70)	306 (41)

Source: U.S. Department of State, *Patterns of Global Terrorism*. Data refer to international terrorism only.

This table shows that international terrorism has literally become more lethal, whether measured over twelve year periods during the earliest and latest phases of

modern international terrorism or in selected five year increments over the last 31 years. The largest per centage increase in lethality occurred, however, in the late 1970s. Since then, lethality has rested at a higher plateau rather than surged ahead. Combining casualties with fatalities produces evidence that should be of greater concern because it indicates a tendency toward mass casualty attacks, especially over the last five years.

Indices such as these must be treated with caution. One particularly lethal year can strongly affect statistics for lethality and casualties but a particularly lethal year may not be a trend or even the beginning of a trend. Furthermore, the number of international terrorist attacks in a given period 'is strongly correlated to wars, major regional crises, and other divisive world events' and so may reflect not underlying trends in terrorism but 'fluctuations in inter-state tensions'.[13] Indeed, since calculations about lethality and tendencies toward mass casualties, such as those in Table 1, are based on data for international terrorism, the only aspect of terrorism for which data have been kept systematically, they do not allow us to make generalizations about terrorism at all. The lethality of contemporary international terrorism might appear in a different, more benign light, if we could compare it accurately, for example, with the lethality of anti-colonial terrorism in the immediate post-Word War II years or with other manifestations of terrorism prior to Word War II. Finally, this index is not the only way to measure the lethality of terrorism or a tendency toward mass casualties. With these limitations in mind, we may conclude only that the lethality index in Table 1 suggests that international terrorism has become more lethal and more likely to produce mass casualties.

It is worth looking more closely, however, at the rise in mass casualties over the last five years. If we remove from the statistics Aum Shinrikyo's sarin attack in the Tokyo Subway (1995, 12 killed; 5,500 casualties), the Tamil Tiger truck bombing of the Central Bank in Colombo (1996, 90 killed; 1400 casualties) and the truck bombing of the U.S. Embassy in Nairobi (1998, 291 killed; 5000 casualties) the tendency toward mass casualty attacks becomes less pronounced. With these three events removed from the calculations, the per centage increase in casualties in 1995-1999 (shown in parentheses in Table 1) becomes lower than the increase in 1976-1980, when fatalities also increased the most. The per centage increase in 1995-1999 is higher than in 1976- 1980 even if we remove from the statistics (shown in parentheses in Table 1) three of the international terrorist incidents that caused the most casualties between 1976 and 1980.[14] Again, without these three attacks, the casualty profile over the last decade or so appears to be a plateau rather than a forward surge. In other words, 0.17 per cent of international terrorist attacks in 1995-1999 caused 67 per cent of the casualties. The vast majority of such attacks continue to produce a few casualties. The claim that there is a tendency toward mass casualty attacks rests, then, on a very few cases compared to the total number of international terrorist attacks. Does this prove that there is a new trend toward mass casualties? At the moment, it is not possible to be certain. In 1999 and 2000, for example, no mass casualty attack occurred.

If the issue of whether there is a new trend toward mass casualty attacks remains at least somewhat open, then we may also wonder about the connection between religiously motivated terrorism and the willingness to kill indiscriminately and even use weapons of mass destruction, which features so prominently in discussions of the new terrorism. First, we must note that historical evidence does not necessarily support the notion that religious groups are more likely to use chemical or biological agents. For

example, one analysis of a database of contamination incidents from 1968-1987 found that only 0.5 per cent had a religious connection. A survey of bioterrorism and biocrimes since 1900 found that only 2 of 54 confirmed or probable or possible uses of bioagents, or 3.7 per cent, had a religious connection. (60 per cent of the events were criminal, 15 per cent terrorist, including the two with a religious connection, and 22 per cent were carried out by a state.) [15]

Religion may appear infrequently in these databases because an argument made about the old terrorism applies to the new variant, even when religion is involved. To the extent that terrorists with religious motivations also have political and social agendas—for example, the establishment of an Islamic state—they will labor under the same kinds of constraints that terrorists with political motivations labor under as they struggle to achieve their political goals. They will have to worry about the popular reaction to their violence. This does not mean that a religious group or a political group would never commit mass casualty attacks. It means only that such groups have reasons not to do so. Even if religiously inspired terrorists do not have political goals, politics will not leave them alone. Whether or not they had political objectives or thought about them, Islamic fundamentalists in Egypt and Algeria were undone in part by the political problems that arose from their extreme violence.[16] Their own supporters and sympathizers turned against them. Over time, even militant Islamist groups will learn a lesson about the use of extreme violence—there are good reasons to avoid it—or suffer a decline in life expectancy.

This logic of action and reaction applies even to the international Islamists who support jihad around the world and who have been responsible for several mass casualty attacks. Their violent rhetoric and practice has made them the principal terrorist target of the United States and other countries and increased the cooperation and resources brought to bear against them and those who provide them haven. These measures have been effective. Again, this does not mean that international Islamists will not use extreme violence, only that they pay a price for doing so and, therefore, have reasons to think about the utility of mass casualty attacks. This means that the new terrorists face the same constraint as the old.

Another way to approach the role of religion in the new terrorism is to look at recent examples of mass casualty attacks (an attack in which over 200 were injured). During the 1990s, such attacks have been committed by Hizballah (two); Hamas; the group associated with Ramzi Yousef; Aum Shinrikyo, the Japanese sect; the Tamil Tigers; Kach, a Jewish extremist group; and terrorists associated with Osama bin Laden (two, Khobar Towers and the U.S. Embassy in Nairobi.) Religiously motivated terrorists figure prominently but not exclusively in this list (seven of nine). (The Tamil Tigers are a traditional national liberation movement and the case of Ramzi Yousef apparently tells us more about his peculiar psychology than about religious motivation.)[17] In five of the seven cases where religious motivation was present (Kach, Hamas, Hizballah (two), and Khobar Towers) the methods used (bombing, shooting) and results obtained (around 200 casualties) were similar to attacks carried out in the past by groups that did not have a religious motivation. In the two remaining cases with a religious motivation (the U.S. Embassy bombing in Nairobi and Aum Shinrikyo's attack in the Tokyo subway), where truly mass casualties occurred, only one involved a true weapon of mass destruction (Aum Shinrikyo's attack).

What may we conclude from this brief review of these cases? First, mass casualty attacks, like another unusual form of terrorism, suicide attacks,[18] are not exclusively a religious phenomenon. Indeed, most terrorist groups with religious motivations today conduct their operations with methods and results (in numbers wounded) that do not differ from their secular predecessors. On the other hand, the Tamil Tigers, a non-religious terrorist organization, have conducted an attack that resulted in truly mass casualties. Finally, sects like Aum, unlike other religiously motivated groups, may be sufficiently divorced from this world and so intent on another that it makes sense to them to create casualties more massive than any we have seen, and thus to use weapons of mass destruction. This may be the only case in which religious motivation and such terrible weapons go together without any countervailing argument or motivation. Fortunately, in this case, precisely the psychology that makes the use of weapons of mass destruction plausible to such a group—alienation, paranoia, delusions, inflexible devotion to the rulings of a leader—may make it less capable of the engineering and planning necessary to use them.[19] More generally, this review of these cases of mass casualty attacks suggests that "it is not religion *per se*, but the type of religion that is most critical"[20] in assessing the connection between religious motivation and mass casualty attacks. Indeed, given the variety and complexity of religious motivation, the term 'religiously motivated terrorism' is not analytically useful.

More tightly framing the possible association of a religious impulse to mass casualty attacks and to violence with weapons of mass destruction should not be understood as a denial that a CBNR terrorist attack might occur. The other reasons cited by analysts to explain why such an attack might happen remain valid. In addition, since conventional war has become more lethal,[21] we might suspect that unconventional war will as well. It may be that 1998, the most lethal year for terrorism on record, is the beginning of a long-term trend that will see unconventional means of political violence follow the trail blazed by conventional means. Even if it is not, it remains true that the likelihood of CBNR weapon use has probably increased.

In sum, the one thing new about the new terrorism is the increased likelihood of the use of CBNR weapons. Terrorists have always been networked and, initially, amateurish. They may now be no more or only a little more lethal or prone to commit mass casualty attacks than they were 20 years ago. Indeed, if bin Laden's organization is different from most other terrorist organizations, it is not because it is amateurish and networked but because its personnel are more professional (or at least experienced—from conflict in Afghanistan and elsewhere) and better organized, not to mention better financed, than many of its predecessors.

How Dangerous is the New Terrorism?

Our review of the new terrorism generates an interesting question. If networks are such powerful tools, and terrorists have been networked for thirty years or more, why have governments not been more threatened by terrorists? There are a number of reasons, of course, from the superior resources of governments to the international cooperation that they have managed to achieve. Restricting ourselves to the effect of networks in the struggle between governments and terrorists, we can see that there are two reasons why terrorists have not posed a more serious threat to governments. First, a network can be understood 'as an *informal* community of individuals who share common

norms or values. . . . Understood in this fashion, networks are not an alternative to hierarchies but rather are typically overlaid on top of formal organizations, and are frequently critical to the latter's proper functioning.'[22] Thus, despite its hierarchical structure, the U.S. government, for example, can be seen as a network. Of Hizballah it has been said that 'the formal structure is highly bureaucratic [but] interactions among members are volatile and do not form rigid lines of control.'[23] The very same could be said of the structure of the federal government's Executive branch, not to mention relations between this branch and its legislative counterpart or those between the federal and state governments. In the Executive branch, no one is in charge except the President and he is too busy to exert his authority over more than a handful of issues. Thus, often autonomous agencies pursue their objectives without the benefit of 'rigid lines of control'.

True to its networked character, the U.S. government has shown a notable ability to adapt when dealing with terrorism. Until recently without any formal central direction, coordinated only by a committee of equals, united by shared norms and values, its constituent agencies have developed a series of new ways to combat terrorism, from international conventions against highjacking, to a hostage rescue capability, to economic sanctions, to military retaliation, and then renditions, as terrorism changed and old capabilities appeared to lose effectiveness.[24] Moreover, to counter terrorism, this network called the U.S. government has linked itself bilaterally and multilaterally in networks with other governments and international organizations through treaties and agreements. Again, in keeping with network characteristics, such arrangements have worked best when norms were shared.

The successes of the United States in its confrontation with terrorism thus validate the notion that it takes a network to fight a network.[25] But we should not think of such fights as struggles of invincible titans. Networks have weaknesses; this is the second reason that terrorists have not posed a greater threat. At least one of the theorists of leaderless resistance recognizes this. 'While it is true that much could be said against this kind of structure [leaderless resistance] as a method of resistance, it must be kept in mind that leaderless resistance is a child of necessity. The alternatives to it have been shown to be unworkable or impractical'[26] because of the successes of law enforcement and the U. S. Justice Department against the so-called Patriots.

Adopting a network structure is not, therefore, necessarily a sign that a movement or organization is at the cutting edge in the art of conflict. It may, rather, be a sign of distress. Nor should we think that adopting a network structure will necessarily provide relief. For, like most things, the virtues of a network are, from another perspective, its vices. As autonomous units, network members can sense and respond independently, which increases adaptability. At the same time, however, this autonomy diminishes control and coordination. Diminished control and coordination, in turn, can increase the difficulty of accomplishing complex tasks and the likelihood that an ill-judged action will undermine the entire network. For example, Patriot groups and militias with whom the bomber of the Federal building in Oklahoma City had had contact scrambled to dissociate themselves from him as police investigations of his contacts intensified in the aftermath of the bombing. Martha Crenshaw argues that the entire Front for the Liberation of Quebec (FLQ) suffered a serious setback in 1970 when one of its independent cells kidnapped and murdered Pierre Laporte, the Quebec Minister of Labor. Divisions within

the PLO network have caused similar problems for Yasir Arafat and the Palestinian cause.[27]

Perhaps even more important than control over tactical and strategic decisions for the success or failure of a terrorist organization is control over communications.[28] As it increases the autonomy of its members, a network structure leads to diminished control over the number and kinds of communications that take place in the network. This increases discovery and entry opportunities for those outside the network, including its enemies. This characteristic of network organization imposes a high cost on terrorist groups who adopt such a structure, since communicating is the greatest vulnerability of a clandestine organization. Being part of a network or building one, therefore, will be very risky for terrorists. Ramzi Yousef, the organizer of the attack on the World Trade Center and the very model of a new terrorist, was undone by a new component of his network who turned him in. Even the more hierarchically structured terrorist groups are likely to be networked with concentric circles of supporters and then sympathizers, with whom they must communicate. Good tradecraft and encryption can limit the risks of such communication but cannot completely remove them. For any organization with something to hide, an organizational form that diminishes control over communication increases risk. If terrorist networking is looser now than it was in the past, then terrorists are increasing their operational risks. The quick arrests following the embassy bombings in Africa in 1998 resulted from luck but also, apparently, from the fact that the loose, networked structure of bin Laden's organization allowed outsiders a number of different opportunities to gather information about it.[29]

Like the networked terrorism to which it is related, amateur or ad hoc terrorism provides advantages that from another perspective become disadvantages. Amateurs are hard to spot and hard to threaten because they have no permanent organization and infrastructure; but because they have no permanent organization and infrastructure, they have a limited ability to train, learn lessons, or develop counterintelligence and other skills. They are, therefore, easier to penetrate, once discovered, than professionals and liable to make shocking blunders, as the history of the group that bombed the World Trade Center indicates. It is true that if they are not assisted by a state, amateur terrorists will have more freedom to operate because they will not be constrained by that state's political agenda. It is also true, however, that lacking state support, amateurs are likely to lack the resources to exploit this freedom, even if they take advantage of the opportunities for resource mobilization supplied by modern means of communication. Usama bin Laden may be an exception in this regard. Ramzi Yousef, on the other hand, claimed that he was not able to use a chemical agent in his attack on the World Trade Center because he did not have enough money to buy the required amount of cyanide.[30] Given the weaknesses of amateurs, it may well be to our advantage if terrorists are now more amateurish than they were, although as we have noted, this unfortunately is probably not the case or will not be for long.

The first two characteristics of the supposedly new terrorism—a network structure and amateur participants—would not necessarily make terrorism more dangerous than it was, even if they were truly new characteristics of terrorism. What about mass casualty attacks or the possible use of CBNR? Do these make the new terrorism more dangerous? To answer this question we must consider what we mean by 'more dangerous'. If we mean by this term hurting more people, then by definition a tendency to more mass

casualty attacks would mean that terrorism had become more dangerous. But if we mean by 'more dangerous' that terrorism is more likely to achieve its goals, goals that are inimical to the interests of the countries and people it targets, then more mass casualty attacks are not necessarily more dangerous. Terrorists have scored several mass casualty attacks in the Middle East, but these have not gotten the terrorists closer to their objective. Neither have the mass casualty attacks in the United States gotten the perpetrators of these attacks closer to theirs.

The use of a CBNR weapon to produce mass casualties, on the other hand, might well be an exception to the claim that mass casualty attacks are not inherently more dangerous than other kinds of terrorist attacks. Because of the psychological effect that such an attack is likely to have, it might well do damage out of proportion to the number killed. One such attack might move terrorists closer to achieving their objectives than other kinds of mass casualty attacks. Even in this case, however, the danger posed by such an attack would depend on the political preparations for and the technical response to it.

The argument so far about the danger of mass casualty or CBNR attacks assumes that they occur in isolation. A string of such attacks occurring in a coordinated fashion in a relatively short period of time would certainly pose greater danger, by any definition, than one or two unrelated incidents occurring several years apart. But such a string of attacks, especially if intended to occur within one of the advanced industrial countries, would be possible probably only with a planning, security and logistical capability that would be beyond what the new terrorists would be capable of. In fact, such a string of attacks would very likely be impossible without state support.

What should we conclude finally about the threat posed by the supposedly new terrorism? It is possible that terrorists could get hold of a CBNR weapon and devastate a city. Without minimizing the damage this would do, especially the possible political damage, we must conclude that this is not the greatest threat posed by terrorism. The economies and societies of the industrial countries are wealthy enough and networked enough and their political life, or so we must hope, principled and resilient enough to survive such an attack. As far as terrorism is concerned, what has always posed the greatest threat is the shrewd and ruthless use of terrorism in the service of a strategically significant objective contrary to the interests of the target country or government, especially when this kind of terrorism has had the backing of an equally clever and ruthless state authority. From this perspective, the lethality of a group is not critical. Neither is it critical whether a particular group is networked or hierarchical or composed of amateurs or professionals. Networks and hierarchies have different strengths and weaknesses and are thus suited for different environments and tasks.[31] The critical issue is whether terrorists and their sponsors can adapt their structure and strategy, including their use of violence, to their environment and to the degree and kind of pressure that governments can bring to bear against them. Basque Fatherland and Liberty (ETA), for example, 'reorganized itself from a largely decentralized system' to a more centrally controlled one in 1974 'to survive government repression and heavy attrition of membership ranks'.[32] Those terrorists and supporters that are adaptable in this way, that have strategic sense, are shrewd and ruthless, toward themselves and their enemies, are likely to survive the longest, become more professional, and over the long-term more lethal. Above all, they will pose the greatest danger.

Notes

[1] Bruce Hoffman, *Inside Terrorism* (New York: Columbia University Press 1998); Ian O. Lesser, Bruce Hoffman, John Arquilla, David Ronfeldt, Michele Zanini, *Countering the New Terrorism* (Santa Monica: RAND, 1999); Walter Laqueur, *The New Terrorism, Fanaticism and the Arms of Mass Destruction* (New York: Oxford University Press 1999); Steven Simon and Daniel Benjamin, 'America and the New Terrorism', *Survival* 42(Spring, 2000) pp.59–75 and Olivier Roy, Bruce Hoffman, Reuven Paz, Steven Simon and Daniel Benjamin, 'America and the New Terrorism: An Exchange', *Survival* 42(Summer 2000) pp.156–172 . Christopher C. Harmon, *Terrorism Today* (London: Frank Cass 2000), provides an abundance of information useful in evaluating the newness of the new terrorism.
[2] Louis Beam, 'Leaderless Resistance', http://www.crusader.net/texts/bt/bt04.html, accessed March 16, 2001.
[3] On the differences between networks and other forms of organization, see Francis Fukuyama and Abram N. Shulsky, *The* '*Virtual Corporation*' *and Army Organization* (Santa Monica: RAND 1997) pp.4–24.
[4] John Arquilla, David Ronfeldt and Michele Zanini, 'Networks, Netwar, and Information-Age Terrorism', in Zalmay M. Khalilzad and Jon P. White (eds.) *The Changing Role of Information in Warfare* (Santa Monica: RAND 1999) p.95.
[5] Helena Cobban, *The Palestine Liberation Organisation, People, Power and Politics* (Cambridge: Cambridge University Press 1984) p.140.
[6] Hoffman, *Inside Terrorism* (note 1) pp.84, 113.
[7] Stefan Aust, *The Baader-Meinhof Group, The Inside Story of a Phenomenon* (London: The Bodley head 1987).
[8] Compare Claire Sterling, *The Terror Network, the Secret War of International Terrorism* (New York: Holt, Rinehart and Winston 1981) pp.25–48 and Tim Weiner, 'Man with a Mission Takes on The U.S. at Far Flung Sites', *New York Times*, 21 Aug. 1998, pp.A1 and 11. On Feltrinelli, see also, Marco Rimanelli, 'Foreign Comrades in Arms: Italian Terrorism and International Ties (1968–1991)', in Yonah Alexander and Dennis A. Pluchinsky (eds.) *European Terrorism, Today & Tomorrow* (Washington D.C.: Brassey's 1992), pp.160–163.
[9] Guilain Denoeux, *Urban Unrest in the Middle East, A Comparative Study of Informal Networks in Egypt, Iran and Lebanon* (Albany: State University of New York Press 1993) pp.149–192; for Iran in the 1940s, see pp.177–180.
[10] Michele Zanini and Sean Edwards, *The Informatization of Terrorist Groups* (Center for the Study of Terrorism and Irregular Warfare Monterey: California 2000).
[11] Compare J. K. Zawodny, 'Infrastructures of Terrorist Organizations', in Lawrence Zelic Freedman and Yonah Alexander (eds), *Perspectives on Terrorism* (Wilmington, Delaware: Scholarly Resources, Inc. 1983), 62–63 and Arquilla, Ronfeldt and Zanini, (note 2) pp.90–97. For the networked structure of the 'old' terrorism, see also, for example, D. Anable, 'Terrorism—Loose Net Links, Diverse Groups, No Central Plot', in John D. Elliott and Leslie K. Gibson (eds) *Contemporary Terrorism* (Gaithersburg, MD: Bureau of Operations and Research, International Association of Chiefs of Police 1978), cited in Zawodny (note 11) and Ronald D. Crelinsten, 'The Internal Dynamics of the FLQ During the October Crisis of 1970', in David C. Rapoport (ed.) *Inside Terrorist Organizations* (New York: Columbia University Press 1988) especially pp.59–61, 81–82.
[12] In 1989, The Department of State decided not to count violence committed against Palestinians by other Palestinians among incidents of international terrorism. It then retroactively adjusted its statistics for the years 1984–89 to remove such incidents. The figures in Table 1 are drawn from *Patterns of Global Terrorism, 1980* and thus include instances of inter-Palestinian violence. This way of counting terrorist incidents tends to lower the lethality index for these years, making terrorism in the 1980s and 1990s appear more lethal than the earlier period. The State Department defines international terrorism as 'terrorism involving the citizens or the territory of more than one country'.
[13] Richard A. Falkenrath, Robert D. Newman, and Bradley A. Thayer, *America's Achille's Heel, Nuclear, Biological and Chemical Terrorism and Covert Attack* (Cambridge: MIT Press 1998) p.180 fn. 24 and pp.179–202 for a good discussion of the increased lethality of terrorism.
[14] The terrorist incidents removed from the 1976–1980 figures are the Fatah raid on the Israeli coast 11 March 1978 (131 dead or wounded); ETA bombings in Spain 29 July 1979 (118 dead and wounded); and

the attack on the Grand Mosque at Mecca 20 November 1979 (850 dead and wounded). Information on these events is drawn from Edward F. Mickolus, *Transnational Terrorism, A Chronology of Events, 1968–1979* (London: Aldwych Press 1980) pp.863, 887–89 and *The Encyclopedia of Terrorism*, John Pimlott and Martha Crenshaw (eds) (Armonk: M. E. Sharpe Inc. 1997) pp.691–693.

[15] Jessica Stern, 'Will Terrorists Turn to Poison?', *Orbis* 37(Summer 1993) p.406; W. Seth Carus 'Bioterrorism and Biocrimes, The Illicit Use of Biological Agents Since 1900', Center for Counterproliferation Research, National Defense University (Washington, D.C., 1998; February 2001 Revision) pp.181–185.

[16] Fawaz A. Gerges, 'The Decline of Revolutionary Islam in Algeria and Egypt,' *Survival* 41 (Spring 1999), pp.113–125.

[17] See, for example, Simon Reeve, *The New Jackals, Ramzi Yousef, Osama bin Laden and the Future of Terrorism* (Boston: Northeastern University Press 1999) pp.125–130.

[18] Ehud Sprinzak, 'Rational Fanatics', *Foreign Policy* 120(Sep.-Oct. 2000) pp.166–73.

[19] Falkenrath, Newman and Thayer (note 9) p.24.

[20] David C. Rapoport, 'Terrorism and Weapons of the Apocalypse', *National Security Studies Quarterly* 3(Summer 1999) p.58.

[21] Joshua S. Goldstein, 'Kondratieff Waves as War Cycles,' *International Studies Quarterly* 29(December 1985) pp.425–431 provides some data.

[22] Fukuyama and Shulsky (note 3) pp.22–23.

[23] Arquilla, Ronfeldt and Zanini (note 1) p.62.

[24] This adaptiveness is traced and analyzed in David Tucker, *Skirmishes at the End of Empire, the United States and International Terrorism* (Westport: Praeger 1997) pp.1–50 and 109–131.

[25] Arquilla, Ronfeldt and Zanini (note 1) p.55.

[26] Beam, (footnote 2).

[27] Martha Crenshaw, 'How Terrorism Declines', *Terrorism and Political Violence* 3(Spring 1991) pp.83–84; Walter Laqueur, *The Age of Terrorism* (Boston: Little, Brown and Company 1987) pp.219–221.

[28] For a rigorous examination of this issue, see G. H. McCormick and G. Owen, 'Security and Coordination in a Clandestine Organization', *Mathematical and Computer Modelling* 31(2000) pp.175-192.

[29] Gregory L. Vistica and Daniel Klaidman, 'Tracking terror, inside the FBI and CIA's joint battle to roll up Osama bin Laden's international network', *Newsweek* 19 Oct. 1998 p. 46.

[30] Jonathan B. Tucker, 'Lessons from the Case Studies,' in Jonathan B. Tucker (ed.) *Toxic Terror, Assessing Terrorist Use of Chemical and Biological Weapons* (Cambridge: MIT Press 2000) p.252.

[31] Fukuyama and Shulsky (note 3) pp.18–24 provide a good discussion of this point. See also, Arquilla, Ronfeldt and Zanini (note 4) pp.84–86.

[32] Martha Crenshaw, 'An Organizational Approach to the Analysis of Political Terrorism,' *Orbis*, 29(Fall 1985) pp.467–468.