Middle Eastern Terrorism and Netwar

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Middle Eastern terrorist groups such as Hamas, the bin Laden organization, and Egypt's Islamic Group have been most active in recent years. These differ markedly from the "classical" terrorist groups formed in the 1960s, not only in their ideology, but also in their organizational structures. The newer groups tend to be structured in more decentralized organizational designs, often resembling loose networks. Networked structures are made feasible and effective by the information revolution, and have important implications for predicting and countering terrorist acts. This paper argues that terrorist groups will engage in information-age conflict or netwar, using information technology as an enabling factor. In some cases, therefore, terrorists groups will have an interest in keeping the "Net" up, not down.

Terrorism seems to be evolving in the direction of violent netwar. Islamic fundamentalist organizations like Hamas and the bin Laden network consist of groups organized in loosely interconnected, semi-independent cells that have no single commanding hierarchy.¹ Hamas exemplifies the shift away from a hierarchically oriented movement based on a "great leader" (like the PLO and Yasser Arafat).²

The netwar concept is consistent with patterns and trends in the Middle East, where the newer and more active terrorist groups appear to be adopting decentralized, flexible network structures. The rise of networked arrangements in terrorist organizations is part of a wider move away from formally organized, state-sponsored groups to privately financed, loose networks of individuals and subgroups that may have strategic guidance but enjoy tactical independence. Related to these shifts is the fact that terrorist groups are taking advantage of information technology to coordinate the activities of dispersed members. Such technology may be employed by terrorists not only to wage information warfare, but also to support their own networked organizations.³

While a comprehensive empirical analysis of the relationship between (a) the structure of terrorist organizations and (b) group activity or strength is beyond the scope of this article,⁴ a cursory examination of such a relationship among

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Studies in Conflict & Terrorism, 22:247–256, 1999 Copyright © 1999 Taylor & Francis 1057-610X/99 \$12.00 + .00 Middle Eastern groups offers some evidence to support the claim that terrorists are preparing to wage netwar. The Middle East was selected for analysis mainly because terrorist groups based in this region have been active in targeting U.S. government facilities and interests, as in the bombings of the Khobar Towers, and most recently, the American embassies in Kenya and Tanzania.

Middle Eastern Terrorist Groups: Structure and Actions

Terrorist groups in the Middle East have diverse origins, ideologies, and organizational structures, but can be roughly categorized into traditional and newgeneration groups. Traditional groups date back to the late 1960s and early 1970s, and the majority of these were (and some still are) formally or informally linked to the PLO. Typically, they are also relatively bureaucratic and maintain a nationalist or Marxist agenda. In contrast, most new-generation groups arose in the 1980s and 1990s, have more fluid organizational forms, and rely on Islam as a basis for their radical ideology.

The traditional, more bureaucratic groups have survived to this day partly through support from states such as Syria, Libya, and Iran. The groups retain an ability to train and prepare for terrorist missions; however, their involvement in actual operations has been limited in recent years, partly because of successful counterterrorism campaigns by Israeli and Western agencies. In contrast, the newer and less hierarchical groups, such as Hamas, the Palestinian Islamic Jihad (PIJ), Hizbullah, Algeria's Armed Islamic Group (GIA), the Egyptian Islamic Group (IG), and Osama bin Laden's Arab Afghans, have become the most active organizations in and around the Middle East.

The traditional groups. Traditional terrorist groups in the Middle East include the Abu Nidal Organization (ANO), the Popular Front for the Liberation of Palestine (PFLP), and three PFLP-related splinters—the PFLP-General Command (PFLP-GC), the Palestine Liberation Front (PLF), and the Democratic Front for the Liberation of Palestine (DFLP).

The ANO was an integral part of the PLO until it became independent in 1974. It has a bureaucratic structure composed of various functional committees.⁵ The activism it displayed in the 1970s and 1980s has lessened considerably, owing to a lessening of support from state sponsors and to effective counterterrorist campaigns by Israeli and Western intelligence services.⁶ The very existence of the organization has recently been put into question, given uncertainty as to the whereabouts and fate of Abu Nidal, the leader of the group.⁷

The PFLP was founded in 1967 by George Habash as a PLO-affiliated organization. It has traditionally embraced a Marxist ideology, and remains an important PLO faction. However, in recent years it has suffered considerable losses from Israeli counterterrorist strikes.⁸ The PFLP-General Command split from the PFLP in 1968, and in turn experienced a schism in the mid-1970s. This splinter group, which called itself the PLF, is composed of three subgroups, and has not been involved in high-profile acts since the 1985 hijacking of the Italian cruise ship *Achille Lauro*.⁹ The PFLP was subjected to another split in 1969, which resulted in the Democratic Front for the Liberation of Palestine. The DFLP resembles a small army more than a terrorist group—its operatives are organized in battalions, backed by intelligence and special forces.¹⁰ DFLP strikes have become less frequent since the 1970s, and since the late 1980s it has limited its attacks to Israeli targets near borders.¹¹

What seems evident here is that this old generation of traditional, hierarchical, bureaucratic groups is on the wane. The reasons are varied, but the point remains—their way of waging terrorism is not likely to make a comeback, and is being superseded by a new way that is more attuned to the organizational, doctrinal, and technological imperatives of the information age.

The most active groups and their organization. The new generation of Middle Eastern groups has been active both in and outside the region in recent years. In Israel and the occupied territories, Hamas, and to a lesser extent the Palestinian Islamic Jihad, have shown their strength over the last four years with a series of suicide bombings that have killed more than one hundred people and injured several more.¹² Exploiting a strong presence in Lebanon, the Shi'ite Hizbullah organization has also staged a number of attacks against Israeli Defense Forces troops and Israeli cities in Galilee.¹³

The al-Gama'a al-Islamiya, or Islamic Group (IG), is the most active Islamic extremist group in Egypt. In November 1997 IG carried out an attack on Hatshepsut's Temple in Luxor, killing 58 tourists and 4 Egyptians. The Group has also claimed responsibility for the bombing of the Egyptian embassy in Islamabad, Pakistan, which left 16 dead and 60 injured.¹⁴ In Algeria, the Armed Islamic Group (GIA) has been behind the most violent, lethal attacks in Algeria's protracted civil war. Approximately 70,000 Algerians have lost their lives since the domestic terrorist campaign began in 1992.¹⁵

Recently, the loosely organized group of Arab Afghans—radical Islamic fighters from several North African and Middle Eastern countries who forged ties while resisting the Soviet occupation of Afghanistan¹⁶—has come to the fore as an active terrorist outfit. One of the leaders and founders of the Arab Afghan movement, Osama bin Laden, a Saudi entrepreneur who bases his activities in Afghanistan,¹⁷ is suspected of sending operatives to Yemen to bomb a hotel used by U.S. soldiers on their way to Somalia in 1992, plotting to assassinate President Clinton in the Philippines in 1994 and Egyptian President Hosni Mubarak in 1995, and of having a role in the Riyadh and Khobar blasts in Saudi Arabia that resulted in the deaths of 24 Americans in 1995 and 1996.¹⁸ U.S. officials have pointed to bin Laden as the mastermind behind the U.S. embassy bombings in Kenya and Tanzania, which claimed the lives of more than 260 people, including 12 Americans.¹⁹

To varying degrees, these groups share the principles of the networked organization—relatively flat hierarchies, decentralization and delegation of decision-making authority, and loose lateral ties among dispersed groups and individuals.²⁰ For instance, Hamas is loosely structured, with some elements working openly through mosques and social service institutions to recruit members, raise funds, organize activities, and distribute propaganda. Palestinian security

sources indicate that there are ten or more Hamas splinter groups and factions with no centralized operational leadership.²¹ The Palestinian Islamic Jihad is a series of loosely affiliated factions, rather than a cohesive group.²² The pro-Iranian Hizbullah acts as an umbrella organization of radical Shi'ite groups, and in many respects is a hybrid of hierarchical and network arrangements. Although the formal structure is highly bureaucratic, interactions among members are volatile and do not follow rigid lines of control.²³ According to the U.S. Department of State, Egypt's Islamic Group is a decentralized organization that operates without a single operational leader,²⁴ while the GIA is notorious for the lack of centralized authority.²⁵

Unlike traditional terrorist organizations, Arab Afghans are part of a complex network of relatively autonomous groups that are financed from private sources forming "a kind of international terrorists' Internet."²⁶ The most notorious element of the network is Osama bin Laden, who uses his wealth and organizational skills to support and direct a multinational alliance of Islamic extremists. At the heart of this alliance is his own inner core group, known as Al-Qaeda ("The Base"), which sometimes conducts missions on its own, but more often in conjunction with other groups or elements in the alliance. The goal of the alliance is opposition on a global scale to perceived threats to Islam, as indicated by bin Laden's 1996 declaration of a holy war against the United States and the West. In the document, bin Laden specifies that such a holy war will be fought by irregular, light, highly mobile forces using guerrilla tactics.²⁷

Even though bin Laden finances Arab Afghan activities and directs some operations, he apparently does not play a direct command and control role over all operatives. Rather, he is a key figure in the coordination and support of several dispersed activities.²⁸ For instance, bin Laden founded the "World Islamic Front for Jihad Against Jews and Crusaders."²⁹ And yet most of the groups that participate in this front (including Egypt's Islamic Group) remain independent, although the organizational barriers between them are fluid.³⁰

From a netwar perspective, an interesting feature of bin Laden's Arab Afghan movement is its ability to relocate operations swiftly from one geographic area to another in response to changing circumstances and needs. Arab Afghans have participated in operations conducted by Algeria's GIA and Egypt's IG. Reports in 1997 also indicated that Arab Afghans transferred training operations to Somalia, where they joined the Islamic Liberation Party (ILP).³¹ The same reports suggest that the Arab Afghan movement has considered sending fighters to Sinkiang Uighur province in western China, to wage a holy war against the Chinese regime.³² This group's ability to move and act quickly (and, to some extent, to swarm) once opportunities emerge hampers counterterrorist efforts to predict its actions and monitor its activities. The fact that Arab Afghan operatives were able to strike the U.S. embassies in Kenya and Tanzania substantiates the claim that members of this network have the mobility and speed to operate over considerable distances.

Although the organizational arrangements in these groups do not match all

the basic features of the network ideal,³³ they stand in contrast to more traditional groups. Another feature that distinguishes the newer generation of terrorist groups is their adoption of information technology.

Middle Eastern Terrorist Groups and the Use of Information Technology

Information technology (IT) is an enabling factor for networked groups. I posit that:

- The greater the degree of organizational networking in a terrorist group, the higher the likelihood that IT is used to support the network's decision making.
- Recent advances in IT facilitate networked terrorist organizations because information flows are becoming quicker, cheaper, more secure, and more versatile.

There is some evidence to support these hypotheses. For example, the most active groups—and therefore the most decentralized groups—appear to have embraced information technology to coordinate activities and disseminate propaganda and ideology.³⁴ This is consistent with the rise in the Middle East of what has been termed *techno-terrorism*, or the use by terrorists of satellite communications, e-mail, and the World Wide Web.³⁵

Arab Afghans, for instance, appear to have widely adopted information technology for organizational purposes. According to reporters who visited bin Laden's headquarters in a remote mountainous area of Afghanistan, the terrorist financier has computers, communications equipment, and a large number of disks for data storage.³⁶ Egyptian "Afghan" computer experts are said to have helped devise a communication network that relies on the World Wide Web, e-mail, and electronic bulletin boards so that the extremists can exchange information without running a major risk of being intercepted by counterterrorism officials.³⁷

Hamas is another major group that uses the Internet to share operational information. Hamas activists in the United States use chat rooms to plan operations and activities.³⁸ Operatives use e-mail to coordinate activities across Gaza, the West Bank, and Lebanon. Hamas has realized that information can be passed securely over the Internet because it is next to impossible for counterterrorism intelligence to monitor accurately the flow and content of Internet traffic. Israeli security officials have difficulty in tracing Hamas messages and decoding their content.³⁹

Likewise, during a recent counterterrorist operation, several GIA bases in Italy were uncovered, and each was found to include computers and diskettes with instructions for the construction of bombs.⁴⁰ It has been reported that the GIA uses floppy disks and computers to store and process instructions and other information for its members, who are dispersed in Algeria and Europe.⁴¹ Further-

more, the Internet is used as a propaganda tool by Hizbullah, which manages three World Wide Web sites—one for the central press office (at www.hizbollah.org), another to describe its attacks on Israeli targets (at www.moqawama.org), and the last for news and information (at www.almanar.com.lb).⁴²

The presence of Middle Eastern terrorist organizations on the Internet is also suspected in the case of the Islamic Gateway, a World Wide Web site that contains information on a number of Islamic activist organizations based in the United Kingdom. British Islamic activists use the World Wide Web to broadcast their news and attract funding; they are also turning to the Internet as an organizational and communication tool.⁴³ While the vast majority of Islamic activist groups represented in the Islamic Gateway are legitimate, one group—the Global Jihad Fund—makes no secret of its militant goals.⁴⁴ The appeal of the Islamic Gateway for militant groups may be enhanced by a representative's claim, in an Internet Newsnet article in August 1996, that the Gateway's Internet Service Provider (ISP) can give "CIA-proof" protection against electronic surveillance.⁴⁵

Conclusions

This review of patterns and trends in the Middle East substantiates the author's speculations that the new terrorism is evolving in the direction of netwar, along the following lines:⁴⁶

- An increasing number of terrorist groups are adopting networked forms of organization and relying on information technology to support such structures.
- Newer groups (those established in the 1980s and 1990s) are more networked than traditional groups.
- A positive correlation is emerging between the degree of activity of a group and the degree to which it adopts a networked structure.⁴⁷
- The likelihood that young recruits will be familiar with information technology implies that terrorist groups will be increasingly networked and more computer-friendly in the future than they are today.

This overview of Middle Eastern terrorist groups indicates that modern communications technologies, especially the Internet and associated technical assets, have facilitated the evolution of terrorist groups into multi-organizational networks that use IT for decision making and other functional *internal* purposes. This, in and of itself, has implications for counterterrorism efforts. Yet, the possibility that the technical assets and know-how gained by terrorists for organizational support can serve offensive purposes as well—an Internet connection can be used for both coordination and disruption or destruction—has garnered much more public attention. While that indeed poses a recognizable and frightening threat, the significance of the evolution of the groups themselves, as made possible by the Internet and illustrated above, must be neither overlooked nor underestimated.

Notes

1. Analogously, right wing militias and extremist groups in the United States also rely on a doctrine of "leaderless resistance" propounded by Aryan nationalist Louis Beam. See Beam, *The Seditionist*, 2:February 1992; and Kenneth Stern, *A Force upon the Plain: The American Militia Movement and the Politics of Hate* (New York: Simon and Schuster, 1996). Meanwhile, as part of a broader trend toward netwar, transnational criminal organizations (TCOs) have been shifting away from centralized "Dons" to more networked structures. See Phil Williams, "Transnational Criminal Organizations and International Security," *Survival* 36(1) (Spring 1994), pp. 96–113; and Phil Williams, "The Nature of Drug-Trafficking Networks," *Current History* (April 1998), pp. 154–159. As noted eearlier, social activist movements long ago began to evolve "segmented, polycephalous, integrated networks." For a discussion of a social netwar in which human rights and other peaceful activist groups supported an insurgent group in Mexico, see David Ronfeldt and Armando Martinez, "A Comment on the Zapatista 'Netwar'," in John Arquilla and David Ronfeldt (eds.), *In Athena's Camp: Preparing for Conflict in the Information Age* (RAND, MR-880-OSD/RC, 1997).

2. It is important to differentiate our notions of information-age networking from earlier ideas about terror as consisting of a network in which all nodes revolved around a Soviet core (Claire Sterling, *The Terror Network* [New York: Holt, Rinehart & Winston, 1981]). This view has generally been regarded as unsupported by available evidence (see Cindy C. Combs, *Terrorism in the Twenty-First Century* [New York: Prentice-Hall, 1997], pp. 99–119). However, there were a few early studies that did give credit to the possibility of the rise of terror networks that were bound more by loose ties to general strategic goals than by Soviet control (see especially Thomas L. Friedman, "Loose-Linked Network of Terror: Separate Acts, Ideological Bonds," *Terrorism* 8(1) [Winter 1985], pp. 36–49).

3. For good general background, see Michael Whine, "Islamist Organisations on the Internet," draft circulated on the Internet, April 1998 (www.ict.org.il/articles).

4. We assume that group activity is a proxy for group strength. Group activity can be measured more easily than group strength, and is expected to be significantly correlated with strength. The relationship may not be perfect, but it is deemed to be sufficiently strong for our purposes.

5. Office of the Coordinator for Counterterrorism, *Patterns of Global Terrorism*, 1996 (U.S. Department of State, Publication 10433, April 1997).

6. Loeb, Vernon, "Where the CIA Wages Its New World War," *Washington Post*, September 9, 1998; and John Murray and Richard H. Ward, eds., *Extremist Groups* (Chicago: Office of International Criminal Justice, University of Illinois, 1996).

7. Youssef M. Ibrahim, "Egyptians Hold Terrorist Chief, Official Asserts," New York Times, 26 August 1998.

8. See Note 6, Murray and Ward, 1996.

9. Patterns of Global Terrorism, 1996, and Note 6, Murray and Ward, 1996.

10. See Note 6, Murray and Ward, 1996.

11. Patterns of Global Terrorism, 1995, 1996, 1997.

12. For instance, in 1997 Hamas operatives set off three suicide bombs in crowded public places in Tel Aviv and Jerusalem. On March 21, a Hamas satchel bomb exploded at a Tel Aviv cafe, killing three persons and injuring 48; on July 30, two Hamas suicide bombers blew themselves up in a Jerusalem market, killing 16 persons and wounding 178; on September 4, three suicide bombers attacked a Jerusalem pedestrian mall, killing at least five

persons (in addition to the suicide bombers), and injuring at least 181. The Palestinian Islamic Jihad has claimed responsibility (along with Hamas) for a bomb that killed 20 and injured 75 others in March 1996, and in 1995 it carried out five bombings that killed 29 persons and wounded 107. See *Patterns of Global Terrorism, 1995, 1996, 1997*.

13. See "Hizbullah," Israeli Foreign Ministry, 11 April 1996. Available on the Internet at http://www.israel-mfa.gov.il.

14. See Patterns of Global Terrorism, 1995, 1996, 1997.

15. Patterns of Global Terrorism, 1997.

16. "Arab Afghans Said to Launch Worldwide Terrorist War," Paris al-Watan al-'Arabi, FBIS-TOT-96-010-L, 1 December 1995, pp. 22-24.

17. William Gertz, "Saudi Financier Tied to Attacks," *Washington Times*, 23 October 1996.

18. Tim Weiner, "U.S. Sees bin Laden as Ringleader of Terrorist Network," *New York Times*, 21 August 1998; M. J. Zuckerman, "Bin Laden Indicted for Bid to Kill Clinton," *USA Today*, 26 August 1998.

19. Pamela Constable, "bin Laden 'Is Our Guest, So We Must Protect Him'," Washington Post, 21 August 1998.

20. We distinguish between deliberate and factional decentralization. Factional decentralization—prevalent in older groups—occurs when subgroups separate themselves from the central leadership because of differences in tactics or approach. Deliberate or operational decentralization is what distinguishes netwar agents from others, since delegation of authority in this case occurs because of the distinct advantages this organizational arrangement brings, and not because of lack of consensus. We expect both influences on decentralization to continue, but newer groups will tend to decentralize authority even in the absence of political disagreements.

21. "Gaza Strip, West Bank: Dahlan on Relations with Israel, Terrorism," *Tel Aviv Yedi'ot Aharonot*, FBIS-TOT-97-022-L, 28 February 1997, p. 18.

22. The leader of the PIJ's most powerful faction, Fathi Shaqaqi, was assassinated in October 1995 in Malta, allegedly by the Israeli Mossad. Shaqaqi's killing followed the assassination of Hani Abed, another PIJ leader killed in 1994 in Gaza. Reports that the group has been considerably weakened as a result of Israeli counterleadership operations are balanced by the strength demonstrated by the PIJ in its recent terrorist activity. See "Islamic Group Vows Revenge for Slaying of Its Leader," *New York Times*, 30 October 1995, p. 9.

23. Magnus Ranstorp, "Hizbullah's Command Leadership: Its Structure, Decision-Making and Relationship with Iranian Clergy and Institutions," *Terrorism and Political Violence* 6(3) (Autumn 1994), p. 304.

24. Patterns of Global Terrorism, 1996.

25. "Algeria: Infighting Among Proliferating 'Wings' of Armed Groups," London al-Sharq al-Aswat, FBIS-TOT-97-021-L, 24 February 1997, p. 4.

26. David B. Ottaway, "US Considers Slugging It Out With International Terrorism," *Washington Post*, 17 October 1996, p. 25.

27. "Saudi Arabia: Bin-Laden Calls for 'Guerrilla Warfare' Against US Forces," *Beirut Al-Diyar*, FBIS-NES-96-180, 12 September 1996.

28. It is important to avoid equating the bin Laden network solely with bin Laden. He represents a key node in the Arab Afghan terror network, but there should be no illusions about the likely effect on the network of actions taken to neutralize him. The network conducts many operations without his involvement, leadership, or financing—and will continue to be able to do so should he be killed or captured.

29. "Militants Say There Will Be More Attacks Against U.S.," *European Stars and Stripes*, 20 August 1998.

30. For instance, there have been reports of a recent inflow of Arab Afghans into Egypt's Islamic Group to reinforce the latter's operations. See Murray and Ward, 1996, and "The CIA on Bin Laden," *Foreign Report*, No. 2510, 27 August 1998, pp. 2–3.

31. This move was also influenced by the Taliban's decision to curb Arab Afghan activities in the territory under its control as a result of U.S. pressure. See "Arab Afghans Reportedly Transfer Operations to Somalia," *Cairo al-Arabi*, FBIS-TOT-97-073, 10 March 1997, p. 1.

32. "Afghanistan, China: Report on Bin-Laden Possibly Moving to China," Paris al-Watan al-'Arabi, FBIS-NES-97-102, 23 May 1997, pp. 19–20.

33. While it is possible to discern a general trend toward an organizational structure that displays several features of a network, we expect to observe substantial differences (and many hierarchy/network hybrids) in how organizations make their specific design choices. Different network designs depend on contingent factors, such as personalities, organizational history, operational requirements, and other influences such as state sponsorship and ideology.

34. Assessing the strength of the relationship between organizational structure and use of information technology is difficult to establish. Alternative explanations may exist as to why newer groups would embrace information technology, such as age of the group (one could speculate that newer terrorist groups have on average younger members, who are more familiar with computers), or the amount of funding (a richer group could afford more electronic gadgetry). While it is empirically impossible to refute these points, much in organization theory supports our hypothesis that there is a direct relationship between a higher need for information technology and the use of network structures.

35. "Saudi Arabia: French Analysis of Islamic Threat," *Paris al-Watan al-'Arabi*, FBIS-NES-97-082, 11 April 1997, pp. 4–8.

36. "Afghanistan, Saudi Arabia: Editor's Journey to Meet Bin-Laden Described," *London al-Quds al-'Arabi*, FBIS-TOT-97-003-L, 27 November 1996, p. 4.

37. "Arab Afghans Said to Launch Worldwide Terrorist War," 1995.

38. "Israel: U.S. Hamas Activists Use Internet to Send Attack Threats," *Tel Aviv IDF Radio*, FBIS-TOT-97-001-L, 0500 GMT 13 October 1996.

39. "Israel: Hamas Using Internet to Relay Operational Messages," *Tel Aviv Ha'aretz*, FBIS-TOT-98-034, 3 February 1998, p. 1.

40. "Italy: Security Alters Following Algerian Extremists' Arrests," *Milan Il Giornale*, FBIS-TOT-97-002-L, 12 November 1996, p. 10.

41. "Italy, Vatican City: Daily Claims GIA 'Strategist' Based in Milan," *Milan Corriere della Sera*, FBIS-TOT-97-004-L, 5 December 1996, p. 9.

42. "Hizbullah TV Summary 18 February 1998," *Al-Manar Television World Wide Webcast*, FBIS-NES-98-050, 19 February 1998. Also see "Developments in Mideast Media: January–May 1998," Foreign Broadcast Information Service (FBIS), 11 May 1998.

43. "Islamists on Internet," FBIS Foreign Media Note-065EP96, 9 September 1996.

44. "Islamic Activism Online," FBIS Foreign Media Note-02JAN97, 3 January 1997.

45. The Muslim Parliament has recently added an Internet Relay Chat (IRC) link and a "Muslims only" List-Serve (automatic e-mail delivery service). See "Islamic Activism Online," FBIS Foreign Media Note-02JAN97, 3 January 1997.

46. Similar propositions may apply to varieties of netwar other than the new terrorism.

47. We make a qualification here. There appears to be a significant positive association between the degree to which a group is active and the degree to which a group is decentralized and networked. But we cannot be confident about the causality of this relationship or its direction (i.e., whether activity and strength affect networking, or viceversa). A host of confounding factors may affect both the way groups decide to organize and their relative success at operations. For instance, the age of a group may be an important predictor of a group's success—newer groups are likely to be more popular; popular groups are more likely to enlist new operatives; and groups that have a large number of operatives are likely to be more active, regardless of organizational structure. Another important caveat is related to the fact that it is difficult to rank groups precisely in terms of the degree to which they are networked, because no terrorist organization is thought to represent either a hierarchical or network ideal-type. While the conceptual division between newer-generation and traditional groups is appropriate for our scope here, an analytical "degree of networking" scale would have to be devised for more empirical research.