Two Neglected Areas of Terrorism Research:
Careers after Terrorism and How Terrorists Innovate

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Is it possible there are aspects of terrorism or terrorist violence that have not been investigated or remain under-investigated? At first glance the answer would have to be probably not. Few subjects in recent history have attracted as much attention by journalists, scholars, public officials, and members of the general public in various countries. Demonstrating this claim is not all that difficult. The library at the university where I work contains almost five thousand books on the topic. When I log on to Google and search under the heading "terrorism", the result is approximately fifty million entries! Given this extraordinary outpouring of work, how could any uninvestigated area exist?

I think there are at least two subjects that should benefit from far more attention than they have received. The first concerns the long-term effects of involvement in terrorist violence on those who have retired, in one way or another, from active participation in terrorism. The second subject involves identifying how terrorists innovate, how they adapt (or not) to changing conditions. The first topic is largely academic of interest to social scientists and historians. The second should compel the attention of all those with an interest in understanding how terrorist organizations function.

I.   It is true that Dr. George Habash, founder and leader of the Popular Front for the Liberation of Palestine recently passed away in his late '70s. But by and large terrorism is an activity for the young. There are notable exceptions however. Dr. Habash and Dr. Ayman al-Zawahiri devoted most of their adult lives to terrorist activities. A relative handful of individuals have begun careers in terrorism later in life. Ulrike Meinhof, one of the founders of Germany's Red Army Fraction, was middle-aged at the beginning of her career in terrorism. In Italy, the multi-millionaire publisher Giangiacomo Feltrinelli founded his own terrorist band, the Partisan Action Group, while in his '40s.[1] Nor are these older terrorists invariably leaders. During the 1970s the Red Brigades organization in Turin had a record-keeper, known as "La Nonna", who was arrested by the anti-terrorism police at the age of 77. (Before she was taken into the police van, "La Nonna" gave a clenched fist salute to journalists and passersby.)

In terms of central tendency though, terrorist groups draw on youthful individuals. According to Marc Sageman's data, the average age of al-Qaeda's core membership was about 25, young adults in other words.[2] There is also some evidence derived from a number of studies suggesting that the longer a terrorist group persists, the younger its recruits become.[3] It also seems to be true that later generations of terrorist recruits are on average less ideologically or religiously sophisticated than members of the first or founding generation. The new and younger recruits are typically "looking for action" without a clear understanding of the long-term purposes behind the action.

Naturally a significant number of terrorists are killed or kill themselves in the course of their operations. But many, perhaps most, survive either by evading capture or by being released from prison or detention facilities after serving sentences for terrorism-related crimes. Since we are dealing with a population of largely young adults the question becomes how do they spend the balance of their working lives?

There is selective evidence based on the careers of various terrorist celebrities. In Northern Ireland, Gerry Adams now heads the Sinn Fein, a peaceful political party, after having been a long-time leader of the paramilitary Irish Republican Army (IRA). In Italy, Antonio Negri resumed his career teaching political philosophy at the University of Padua after serving a prison sentence for his involvement in terrorism during the country's 'years of lead' in the 1970s. Menachem Begin and Yitzhak Shamir both served as Israeli prime ministers despite having been leaders of the Irgun and the LEHI (Fighters for the Freedom of Israel) earlier in their careers. In apartheid South Africa, Joe Slovo served as the head of the "Spear of the Nation", the paramilitary wing of the African National Congress. Under his leadership, the "Spear" carried out a number of bombings and other terrorist attacks in the country's major cities. Slovo went on to serve as a cabinet minister in Nelson Mandela's first post-apartheid government. Yassir Arafat ended his public career as president of the Palestinian Authority. But of course he began it as head of Fatah, a Palestinian terrorist organization.

In the United States, Bernadine Dohrn, once on the FBI's Most Wanted list because of her involvement with the Weathermen now teaches law at Northwestern University. Her husband, also a Weathermen leader, teaches sociology at the University of Illinois' Chicago Circle campus. Mark Rudd, another central figure in the Weathermen, has taken to the lecture circuit. He currently makes public appearances along with the retired FBI agent who helped track him down during the terrorist phase of Rudd's career. Angela Davis, who was also listed on the Most Wanted list because of her terrorist involvements with the

Black Panthers, presently teaches political science at the University of California, Santa Cruz.

Based on these examples, readers might very well get the impression that leadership in terrorist groups early in adult life is a pathway to later success in public service and academic life. The question though, is how representative are these terrorist celebrities of the general population of former terrorists? The celebrities number in the dozens, while the general terrorist population must number in the thousands.

There is an evolving body of research work on withdrawal from terrorist organizations. Does withdrawal involve a process of de-radicalization, for example? How are former terrorists re-integrated into society, if they are?[4] So far as I am aware, however, there are no studies which evaluate the long-term effects of membership in terrorist organizations. Is there an enduring impact on the lives of individuals who were involved in terrorism as young adults?

The reasons for this apparent inattention by scholars are not hard to come by. Out of necessity, terrorism research has tended to focus on the here and now. If terrorism is a crucial problem, the inclination is strong to pursue immediate solutions, e.g. how can terrorists be encouraged to desist, rather than long-term consequences. Second, there is a methodological issue: how would researchers go about obtaining a reasonably representative sample of individuals who were involved in terrorist violence long after they had turned to other pursuits? Some terrorist organizations keep membership records, these days on hard drives, but others do not. If terrorists have served prison sentences or otherwise been identified by the authorities it should be possible to develop a sample of these individuals and seek to interview them. It is not inconceivable that former terrorists would be reluctant to subject themselves to the questions of interviewers out of a desire to put their pasts behind them. On the other hand, there is some evidence that terrorists, especially those in prison, are pleased by the attention and enjoy telling their stories to serious investigators.[5] The problems in developing systematic information about the impact of terrorist experiences on the later lives of those involved are serious but probably not insurmountable.

It would certainly be intriguing to know if terrorist activity as a young adult had any lasting impact on a person's later life and, if so, what these effects might be. Does the duration of the terrorist experience make a difference? Does the role in the organization make a difference, e.g. leaders versus followers, those who direct the violence compared to those who inflict it? Does the political goal of the terrorist organization make a difference, e.g. left versus right, nationalist, religious? At present I think the best we can do is infer answers

from evidence based on the experiences of individuals who had been involved in organizations which bear at least some resemblance to terrorist organizations such as criminal gangs and other semi-clandestine bands or, on the other hand, military units whose members were exposed to extreme danger in circumstances where the outcomes were uncertain.

II.   I am sure readers are well aware that a substantial literature has appeared concerning the threat of terrorist groups acquiring weapons of mass destruction (WMD). The dispersion of Sarin gas by Aum Shinrikyo in the Tokyo subway system in 1995 led various analysts to the conclusion that a threshold had been crossed and that more groups would employ WMD in the wake of this attack. Further, the prospect of nuclear-armed terrorists, with the likelihood of thousands of casualties, following the collapse of the Soviet Union ("loose nukes") and revelations about the entrepreneurship of the Pakistani engineer A. Q. Khan caused sufficient alarm to stimulate a new body of literature in itself.

Years have passed since the alarms were first sounded but there has been little by way of WMD or nuclear terrorism. Some have argued that the threat has been overblown.[6] This is not to say, of course, that terrorist violence has become less destructive. The al-Qaeda or al-Qaeda inspired attacks on the World Trade Center, the Pentagon, nightclubs on the island of Bali, public buildings in Casablanca, commuter trains in Madrid, U.N. headquarters in Baghdad, and the subway system in London left thousands dead. In none of these instances did the perpetrators use chemical, biological or radiological weapons. Rather they relied upon conventional devices used, at least in some cases, e.g. the 9/11 attacks, in new or unconventional ways. (Lest we forget, in 1995 Timothy McVeigh was able to destroy the Murrah Federal Building in Oklahoma City and kill close to 200 people by using a truck bomb made of material, ammonium nitrate and fuel oil that anyone could buy at a hardware store.)

Given terrorists' failure or reluctance to use WMD, at least to date, and their almost exclusive reliance on the bomb and the gun, some analysts, especially those writing before 9/11, have come to the conclusion that terrorist groups rarely engage in innovative behavior. The same reliance on the tried and true also applies to how terrorist groups organize themselves and the tactics they employ in seeking to achieve their goals. Unlike conventional military establishments which are constantly seeking new types of weapons and new ways of using them, terrorist bands appear relatively conservative.[7]

But consider the following. Within the last two decades terrorist organizations in the Middle East, Russia and South Asia have adopted the suicide bombing as one of their principal means of attack. In the '60s and '70s terrorist groups were

typically organized vertically, with strict command and control hierarchies. In more recent times the tendency has been in the direction of what Marc Sageman calls "leaderless jihad", small bands operating independently of one another. They may be inspired by or take cues from but do not necessarily receive direct orders from key figures in the movement. And of course the Internet has become a crucial way by which terrorists communicate with one another, make propaganda for attentive publics and attract new members.

Given its importance, at least to my thinking, the amount of attention paid to how and why terrorist groups innovate has been quite limited. Recent efforts to answer these questions have been based on theories of cognitive and social psychology. Martha Crenshaw and Adam Dolnik seek to identify types of terrorist innovations and the conditions or problems which lead to change behavior.[8] Both agree that innovation is more than simply the appearance of new or creative ideas by terrorists but requires their application by the relevant groups to their operations. And both Crenshaw and Dolnik certainly agree that some terrorist groups are able to innovate while others are not -- in approximately the same way that some business firms and political organizations are able to innovate while others do not.

Crenshaw suggests we distinguish among strategic, tactical and organizational forms of innovation. For his part, Dolnik focuses on tactical and technological innovations. Strategic innovation, Crenshaw writes, "… involves significant points of novelty in the historical development of campaigns of armed resistance."[9] Strategic innovations require the adoption of new goals and new ways of seeking to achieve these goals. Here Crenshaw refers to the wave of kidnappings, particularly foreign diplomats and business executives in Latin America during the 1960s. In her estimation this was a means by which the various "urban guerrilla" groups could internationalize their revolutionary struggles. The decision by the PFLP leadership to attack targets in Europe from 1968 forward would also represent a strategic innovation. Tactical innovations for both Crenshaw and Dolnik involve changes in targeting and method, the means by which terrorist operations are carried out. The 1985 seizure of the cruise ship Achille Lauro by the Palestine Liberation Front (PLF) might serve as an example. The development of suicide bombings in Lebanon during the 1980s would also serve as a major example.

Organizational innovation, according to Crenshaw, involves changes in group structure and institutions. She mentions the role played by the German Red Army Faction in the 1980s in the formation of an Anti-Imperialist Front with French and Italian revolutionary groups. We might also mention the recruitment of terrorists via the Internet pioneered by al-Qaeda following the 9/11 attacks.

For Dolnik, technological innovations need not be limited to the adoption of new types of weapons or even their novel and unexpected use. Technological innovations would therefore include the televised beheadings of terrorist captives by Islamist groups in Pakistan, Iraq and elsewhere to inspire dread or admiration by viewers depending upon their points of view. The deployment of motorized hang-gliders against targets inside Israel by Ahmed Jibril and his Popular Front for the Liberation of Palestine- General Command (PFLP-GC) during the 1970s would also represent a technological innovation. The attachment of barometric pressure devices to bombs planted on commercial airliners also by the PFLP-GC represents still another technological innovation.

What are the conditions which lead terrorist groups to innovate? Crenshaw suggests we pay particular attention to the failures experienced by these groups and the problems these failures pose. Innovation then becomes a form of problem-solving. For example, if security personnel at airports in London or Paris become wary of or detain certain individuals from the Middle East or Pakistan because of their appearance, the Islamist group then may recruit new European members and send them on suicide missions to blow up planes in mid-air. Crenshaw also considers changes in government tactics as a stimulus to terrorist innovation. This means terrorist groups may innovate based on changes governments have made in response to the groups' previous conduct. If, for example, Israeli authorities create barriers and checkpoints to block Palestinian suicide bombers from entering the country, Hamas, Islamic Jihad and other groups respond by firing rockets and other stand-off weapons at Israeli targets.

Dolnik identifies the conditions involved in terrorist innovation based on the work of the Rand Corporation analyst Brian Jackson.[10] Jackson and Dolnik mention eleven factors they believe relevant to terrorist innovation. They stress the role of ideology and strategy; the dynamics of the struggle; countermeasures; targeting logic; attachment to weaponry; group dynamics; relationship with other organizations; resources; openness to new ideas; durability; and nature of the technology.[11]

Based upon the case studies method (or "structured focused comparison"), Dolnik then proceeds to test the roles of these factors in the behavior of four terrorist groups: Aum Shinrikyo (AS), the PFLP-GC, the Riyadis-Salikhin Suicide Battalion (the Chechen group – RAS) and the Greek group Revolutionary Organization November 17.

His conclusions may be summarized as follows. Groups whose ideology, tactics and targeting logic stress the desirability of inflicting mass casualties and the

staging of spectacular events (e.g. the Beslan school seizure in Russia) are likely to be innovative. In terms of what Dolnik and Jackson label "dynamics of the struggle," terrorist groups that enjoy safe havens or some territorial security are more likely to be innovative than groups that must operate in urban environments and on a clandestine basis. As with Crenshaw's observation, they conclude government counter-measures provide strong incentives to innovate. Dolnik also reports that attachment to or fascination with particular weapons and techniques, e.g. beheadings, is associated with innovation. Resources make a difference. Terrorist groups that enjoy the support of state sponsors and the philanthropy of wealthy individuals (or social networks) are likely to be innovative. Durability does not seem to make much difference. Dolnik finds that long-lasting groups such as Greece's November 17 in fact are likely to be conservative in their modus operandi. Displays of innovation are likely to come early in a terrorist group's career.

In three of the four cases Dolnik examines, AS, PFLP-GC, and RAS, the role of the leader was crucial in effecting innovation. The "group dynamics" were such that highly authoritarian leaders – Shoka Asahara, Ahmed Jibril, Shamil Basayev – interested in innovation for perhaps megalomaniacal reasons were able to impose their will on the rest of the membership. Democratic, bottom to top decision-making, under the category of "openness to new ideas", was not crucial in determining a group's innovative behavior.

In commenting on the relationship with other terrorist organizations, Dolnik finds a mixed picture. In some instances, he reports, cooperation among terrorist groups leads to innovation in the form of technology and technique transfers. For example, Hezbollah learned innovative techniques from Iranian Revolutionary Guards in Lebanon's Bekaa Valley in 1984-85 which were later passed along to Hamas. But in other cases cooperation played no role in innovation. The same applies to competition among terrorist groups. Japan's Aum Shinrikyo was highly innovative certainly in terms of weapons development without facing much competition. On the other hand, competition among Palestinian groups led the otherwise secular Al Aqsa Martyrs Brigade to adopt the suicide bombing technique of the religiously inspired Hamas and Palestinian Islamic Jihad.

What should we make of Dolnik's work? I think the work itself presents us with a mixed picture. For analysts, Understanding Terrorist Innovation is exceptionally helpful because of its systematic examination of factors that apparently influence the innovative behavior of terrorist groups. But the case study method – while beneficial – in many instances has well-known limitations. In this instance, the problem is that Dolnik is dealing with too many variables for

too few cases. His conclusions provide us with an understanding of what prompts terrorist groups to innovate. Efforts to generalize based on four cases, however, obviously have their limitations.

I think it would make sense in subsequent research for analysts to build upon Crenshaw and Dolnik's observations. This research undertaking would require the use of a comprehensive list of all current or recent terrorist groups along with the identification of their various attributes e.g. aims, size, structure, lethality. Researchers could then classify terrorist groups based on their innovative performances – strategic, tactical, organizational, and technological. In this way, by using conventional statistical procedures, it should be possible to associate what terrorist group attributes promote what forms of innovation and which do not.

Aside from the benefits social science would receive from investigating how and why terrorist groups innovate, those involved in counter-terrorism may be helped as well. Innovative terrorist groups seem to be exceptionally dangerous. Their innovations are often emulated by other groups – even ones with other aims and in other parts of the world. Therefore, in seeking to impede the activities of terrorist groups in general or just those with a "global reach", organizations engaged in counter-terrorism might well focus their strongest efforts on disrupting the operations of the most innovative groups.

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NOTES:

[1] Robert Meade, *Red Brigades: The Story of Italian Terrorism* (New YORK: St. Martin's, 1990) pp. 48-50
Marc Sageman, *Understanding Terror Networks* (Philadelphia PA: University of Pennsylvania Press, 2004)
See, for example, Marc Sageman, *Leaderless Jihad* (Philadelphia, PA: University of Pennsylvania Press, 2008) pp. 47-70
[2] See, for example, John Horgan, "De-radicalization or Disengagement?" *Perspectives on Terrorism* 2:4 (2008)
[3] Lawrence Wright, for example, was able to interview dozens of current and former members of al-Qaeda in preparing his Pulitzer Prize winning volume *The Looming Tower* (New York: Alfred Knopf, 2006) pp. 439-445
[4] See, for example, John Mueller, Overblown (New York: The Free Press, 2006) pp. 13-48
For a discussion of this writing see Martha Crenshaw, "Innovation: Decision Points in the trajectory of terrorism," (a paper presented at a conference on Trajectories of Terrorist Violence in Europe held at the Center for European Studies, Harvard University, March 9-11, 2001)
[5] Crenshaw; Adam Dolnik, *Understanding Terrorist Innovation* (London: Routledge, 2007) p. 3
[6] Brian Jackson, "Technology Acquisition by Terrorist Groups" *Studies in Conflict & Terrorism* 24:3 (2001) pp. 183-213
[7] Dolnik, pp. 13-21.
[8] Crenshaw; Adam Dolnik, *Understanding Terrorist Innovation* (London: Routledge, 2007)
[9] p. 3
[10]Brian Jackson, "Technology Acquisition by Terrorist Groups" *Studies in Conflict & Terrorism* 24:3 (2001) pp. 183-213
[11] Dolnik, pp. 13-21