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Author: Michael Kenney

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Organizational Learning and Islamic Militancy

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Michael Kenney
School of Public Affairs, Capital College
The Pennsylvania State University

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Organizational Learning and Islamic Militancy

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Executive Summary

Like other forms of criminal deviance, terrorism requires basic knowledge, knowledge about whom or what to attack—and how to attack them. Terrorists with sufficient knowledge and practical experience are more likely to execute “successful” attacks than those lacking these critical attributes. But some terrorists are more informed—and experienced—than others. The skills and expertise of those who plan, coordinate, and execute terrorist attacks are variable, not constant.

These assumptions beg an important, yet understudied, question: how do terrorists actually acquire the information and expertise they need to carry out acts of political violence? The answer, this study shows, depends on the type of knowledge being acquired. Abstract technical knowledge, or *techne*, lends itself to codification in knowledge-based artifacts and can be readily taught through formal instruction. While *techne* is important to terrorists, it is not their only, or even their most important, source of knowledge. Terrorists also rely on experiential knowledge and cunning intelligence, in a word *mētis*, to develop the practical expertise that allows them to perform violent acts in local settings. *Mētis* helps account for the resilience of “Islamist terrorism” since the war on terror began seven years ago.

This study makes three contributions to the small, but growing, body of literature on terrorism and learning. First, the research focuses on two case studies, “Islamist” militancy in Spain and the United Kingdom, and Western Europe more generally, that have been largely ignored in existing studies on terrorism learning. Second, contrary to current research and media accounts, this study critically examines the role of the Internet in facilitating terrorism learning. While the Internet likely plays an important role in

disseminating terrorist *techne*, it is not allow terrorists to develop the experiential *mētis* they need to plan and execute attacks. Third, contrary to existing studies, which emphasize terrorists' ability to adapt their operations in response to counter-terrorism pressure, this report acknowledges this insight but also suggests that Islamic terrorists' ability to learn is limited. Mistakes and poor tradecraft are prevalent in terrorist operations, both in failed conspiracies that never make it beyond the talking stage and devastating attacks that claim hundreds of civilian lives. Poor tradecraft, the report makes clear, is not an excuse for underestimating the threat of Islamist militancy, but a corrective for placing this threat in its proper context, and an opportunity to understand a terrorist mindset that seems, at times, to almost condone carelessness.

This study is based largely, but not exclusively, on the Principal Investigator's field research in Spain and Britain. During the summer and fall of 2007, the PI visited numerous locations in both countries, including Madrid, Granada, and Ceuta (a Spanish enclave in northern Morocco) in Spain, and London and Birmingham in Britain. Guided by the ethnographic maxim of choosing respondents for their expertise rather than their representativeness, the PI constructed a diverse sample of respondents with expertise on Islamic militancy in Europe. This sample includes government officials, journalists, scholars, and Muslim community members. Moreover, unlike many existing counter-terrorism studies, the PI's respondent sample includes numerous Islamic social and political activists, including several individuals that have been identified as "terrorists" by the U.S. government. In Britain, the PI interviewed fifty-seven separate informants, including: twenty-one "Islamic activists," six active or former "Islamists," six active or former "militants," eighteen government officials, and six journalists, academics, and

think tank researchers. In Spain and Ceuta, he interviewed thirty-one informants, including eleven Islamic activists, eleven government officials, and ten academics, journalists, and think tank researchers. The PI's government respondents included American, British, and Spanish law enforcement and intelligence officials.

This report conceptualizes organizational learning as a three-stage process in which individuals acting on behalf of collectives gather, share, and apply information and experience to their activities, frequently in response to environmental feedback.

Following a brief introduction, literature review, and methodological discussion, the report analyzes the study's findings, drawing heavily on the PI's interviews with research informants, as well as court documents from terrorism cases in Spain, Britain, and the United States. To a lesser extent, the PI also draws on government documents, news reports, and academic studies.

Organizational Learning and Islamic Militancy contains significant findings for counter-terrorism research and policy. Unlike existing studies, this report suggests that the relevant distinction in knowledge learned by terrorists is not between tacit and explicit knowledge, but *mētis* and *techne*. Focusing on the latter sheds new insight into how terrorists acquire the experiential "know how" they need to perform their activities as opposed to abstract "know what" contained in technical bomb-making preparations. Drawing on interviews with bomb-making experts and government intelligence officials, the PI illustrates the critical difference between learning terrorism skills such as bomb-making and weapons firing by abstraction rather than by doing. Only the latter provides militants with the experiential, intuitive knowledge, in other words the *mētis*, they need to actually build bombs, fire weapons, survey potential targets, and perform other terrorism-

related activities. In making this case, the PI debunks current misconceptions regarding the Internet's perceived role as a source of terrorism knowledge.

Another major research finding of this study is that while some Islamic militants learn, they do not learn particularly well. Much terrorism learning involves fairly routine adaptations in communications practices and targeting tactics, what organization theorists call single-loop learning or adaptation. Less common among militants are consequential changes in beliefs and values that underlie collection action or even changes in organizational goals and strategies. Even when it comes to single-loop learning, Islamic militants face significant impediments. Many terrorist conspiracies are compartmented, which makes learning difficult by impeding the free flow of information between different parts of the enterprise. Other, non-compartmented conspiracies are hindered from learning because the same people that survey targets and build bombs also carry out the attacks. Still other operations, including relatively successful ones like the Madrid bombings in 2004, are characterized by such sloppy tradecraft that investigators piece together the conspiracy quickly, preventing additional attacks and limiting militants' ability to learn from experience.

Indeed, one of the most significant findings to emerge from this research regards the poor tradecraft and operational mistakes repeatedly committed by Islamic terrorists. Even the most "successful" operations in recent years—9/11, 3/11, and 7/7—contained basic errors in tradecraft and execution. The perpetrators that carried out these attacks were determined, adaptable (if only in a limited, tactical sense)—and surprisingly careless. The PI extracts insights from his informants that help account for terrorists' poor tradecraft: *mētis* in guerrilla warfare that does not translate well to urban terrorism,

the difficulty of acquiring mission-critical experience when the attack or counter-terrorism response kills the perpetrators, a hostile counter-terrorism environment that makes it hard to plan and coordinate attacks or develop adequate training facilities, and perpetrators' conviction that they don't need to be too careful when carrying out attacks because their fate has been predetermined by Allah. The PI concludes this report by discussing some of the policy implications of these findings, suggesting that the real threat from Islamic militancy comes less from hyper-sophisticated "super terrorists" than from steadfast militants whose own dedication to the cause may undermine the cunning intelligence and fluid adaptability they need to survive.

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Introduction

Terrorism is not rocket-science. Nor are those who engage in it criminal masterminds. The knowledge and expertise required to engage in acts of political violence against civilian non-combatants pales in comparison with many activities, including counter-terrorism and homeland security. Still, like other forms of criminal deviance, terrorism requires some basic knowledge, knowledge about whom or what to attack—and how to attack them. Building a bomb, for example, requires knowledge of chemicals that are combined to form explosive compounds, detonators that ignite the chemicals to create the explosion, and electrical devices or fuses that provide the initial trigger for detonation. Militants who wish to cause explosions, the most common weapon used in terrorist attacks, must acquire and apply information about making and detonating these devices to achieve their desired effect. Likewise, militants that wish to plan and carry out terrorist operations require knowledge of covert tradecraft, the knowledge and skills needed to perform clandestine activities in hostile environments without detection from law enforcers.¹ Depending on the tactical requirements and logistical constraints of a particular operation, terrorists also require knowledge of firearms, transportation, fund raising, and a host of related activities. Militants with sufficient knowledge and practical experience are more likely to execute effective attacks than those lacking these critical attributes. But some terrorists are more informed—and experienced—than others. The skills and expertise of those who plan, coordinate, and execute terrorist attacks are variable, not constant.

¹ Fred Burton, “Beware of ‘Kramer’: Tradecraft and the New Jihadists,” *Stratfor Weekly* (January 18, 2006), http://www.stratfor.com/products/premium/read_article.php?id=261022 [Accessed February 7, 2006].

Militants who dedicate themselves to political violence are a motley-lot, full of unyielding devotion to the cause, but possessing varying levels of understanding about their craft. While dedication is important, intentions do not equal capabilities. Indeed, what is striking about several recent terrorist attacks in Western Europe, such as the failed car bombings in the West End neighborhood of London and the Glasgow International Airport in the summer of 2007, is the apparent incompetence of the perpetrators. The London and Glasgow attacks, carried out by presumably intelligent and well-educated medical doctors, involved the amateurish use of sedans and S.U.V.s stuffed with gas canisters, gasoline, and nails, a noxious but slipshod stew, suggesting the attackers were incapable of acquiring, let alone building, simple explosive devices. The doctors who carried out the attacks surely had violent intentions, but they lacked the capability, particularly the experience and the expertise, to achieve their bloody objectives.²

This report, based largely, but not exclusively, on the Principal Investigator's field research in Spain and the United Kingdom, begins from these two assumptions: that terrorism requires knowledge, and that not all terrorists possess it in equal measure. These assumptions beg an important, yet understudied, question: how do terrorists actually acquire the information and expertise they need to carry out acts of political violence? The answer, this study shows, depends on the type of knowledge being acquired. Abstract technical knowledge, what ancient Greek poets and philosophers referred to as *techne*, lends itself to codification in knowledge-based artifacts and can be readily taught through formal instruction. Terrorists acquire *techne* through training

² See Jason Burke, "New face of the bomber," *The Observer* (July 1, 2007); and Alan Cowell and Scott Shane, "2 Doctors Held in British Bomb Plots Had Looked to U.S.," *New York Times* (July 7, 2007).

camps and knowledge-based artifacts, such as bomb-making recipes and tradecraft manuals. In recent years Al Qaeda and other militants have created a variety of training camps and instructional materials to teach their brand of terrorist *techne* to aspiring fanatics. These facilities and knowledge-based artifacts, many of which are now available on the Internet, have received substantial attention from government officials, the media, and scholars.

While *techne* is important to terrorists, it is not their only, or even most important, source of knowledge. Terrorists also rely on experiential, intuitive knowledge, what the ancient Greeks called *mētis*, to develop the practical expertise that allows them to perform violent acts in local settings. *Mētis* encompasses a variety of skills—including ingenuity, elusiveness, even cunning and deceit—that athletes, statesmen, and terrorists use to adapt to continually changing environments.³ This sort of cunning intelligence is essential to terrorism and other illicit pursuits, including drug trafficking and human smuggling. Indeed, this research suggests that *mētis* helps account for the resilience of “Islamist terrorism” since the war on terror began seven years ago.⁴

This study makes three contributions to the small, but growing, body of literature on terrorism and learning. First, the research focuses on two case studies, Islamist terrorism in Spain and the United Kingdom, and Western Europe more generally, that have been largely ignored in existing studies on terrorism learning. Second, contrary to current research and media accounts, this study critically examines the role of the Internet

³ James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven, CT: Yale University Press, 1998); and Marcel Detienne and Jean-Pierre Vernant, *Cunning Intelligence in Greek Culture and Society*, translated from the French by Janet Lloyd (Sussex, UK: The Harvester Press, 1978).

⁴ In this report, the PI uses descriptive terms, such as “Islamists,” “Islamist militancy,” “Islamic terrorism,” that have become highly politicized and misunderstood in recent years. The PI clarifies his use of these terms, which all mean very different things, in a brief discussion beginning on page 18.

in facilitating terrorism learning. While the Internet likely plays an important role in disseminating terrorist *techne*, it is not clear whether and how it facilitate learning-by-doing, allowing militants to develop the sort of experiential *mētis* they need to plan and execute actual attacks. Third, contrary to existing studies, which emphasize terrorists' ability to adapt their operations in response to counter-terrorism pressure, this report acknowledges this insight but also suggests that Islamic terrorists' ability to learn is actually limited. Mistakes and poor tradecraft are prevalent in terrorist operations, both in failed conspiracies that never make it beyond the talking stage and devastating attacks that claim hundreds of civilian lives.

But do militants actually learn and, if so, are they good at it? The data presented in this report offer a mixed picture. While numerous informants concede that terrorists learn, they also caution that many militants are not particularly good at it, at least not compared to other, more professional terrorist organizations, such as the Provisional Irish Republican Army. Rather than fitting the stereotype of highly adaptive, hyper-sophisticated militants found in news reports, this study suggests that many European militants are neither operationally sophisticated, nor particularly protean. In preparing for and conducting attacks, terrorists in Spain and the United Kingdom frequently commit basic errors in operational tradecraft, suggesting that their ability to learn from experience is limited. Day-to-day adaptations by militants tend to contain fairly simple tactical responses to state security efforts, such as changes in communications practices or shifting attacks from “hard” to “soft” targets. Militants' preference towards suicide attacks, or what they call martyrdom operations, also limits their ability to learn from experience, particularly when practitioners lose their lives in the operation, preventing the

gradual accumulation of *mētis* through direct experience. Unlike the “Provos” in Great Britain or Basque militants in Spain and France, Islamist militants in Europe have carried out individual attacks, not extended terrorist campaigns, severely curtailing their ability to learn from their own operational experience.

One reason for this has to do with government counter-terrorism policy. In recent years law enforcement and intelligence agencies in the United States and Western Europe have created an increasingly hostile environment for militants, intercepting their communications, arresting their members, and disrupting several alleged plots. While militants respond to enforcement pressure by changing their practices in simple ways, they are often ambivalent about the need for day-to-day tactical adaptations that help keep law enforcers at bay. This paradox stems from their unshakeable belief that their fate is pre-determined, that no amount of precautions or adaptations can change what Allah has already destined for them. As one informant, a former leader of Al-Muhajiroun in the United Kingdom, explains, “If my destiny is to go prison... there’s nothing anyone can do about it... we do not need to change that much.”⁵

To be sure, even simple adaptations can be effective, and the same militants that practice poor tradecraft are also capable of carrying out devastating attacks, a point underscored by the destructive impact of the 3/11 bombings in Madrid and the 7/7 bombings in London. Hence, the following report. But it is important to keep the threat in perspective. In spite of the attention Islamist militancy has received in Western Europe in recent years, the actual number of terrorist attacks by “Islamists” in the

⁵ Author’s interview with former head of Al-Muhajiroun in the United Kingdom, London, September 22, 2007. Before being banned by government authorities, Al-Muhajiroun called on its members to establish an Islamic state wherever they reside, including Britain, and to support jihad, whether or not it has been sanctioned by an Islamic state.

European Union pales in comparison with the number of attacks by national separatists and by left-wing and anarchist groups. In 2006, according to the annual terrorism trend report published by the European Law Enforcement Organization (EUROPOL), there were 498 “failed, foiled, and successfully executed” terrorist attacks in nine European countries, including Denmark, France, Germany, Greece, Italy, Spain, and the United Kingdom. 424 or eighty-five percent of these attacks were carried out by national separatists, mostly Basque militants in Spain and France and Corsican militants in France. Fifty-five attacks, representing eleven percent of the attacks for 2006, were carried out by left-wing and anarchist extremists, mostly in Greece, Italy, Germany, and Spain. Only one attack during 2006, representing 0.2 percent of the attacks for that year, was perpetrated by “Islamists.” These trends continued in 2007, when the number of attacks reported by these same countries rose twenty-four percent to 583. Any increase in terrorist attacks is clearly an unwelcome development. However, 517 or eighty-eight percent of the attacks in 2007 were executed by national separatists in Spain and France. Only four of the 2007 attacks, representing 0.7 percent of the total number of attacks in the countries surveyed, were claimed by or attributed to “Islamists.” Notwithstanding the relatively high, and growing, number of terrorist attacks in the European Union, the vast majority of these incidents are arson attacks by Basque separatists and Corsican militants “aimed at causing material damage,” rather than killing large numbers of people.⁶ Of course, in recent years religiously-motivated terrorists have been the perpetrators of the most devastating attacks in Europe, involving high numbers of civilian casualties,

⁶ Europol, TE-SAT 2008: EU Terrorism Situation and Trend Report 2008 (The Hague, Netherlands: April 2008), http://www.europol.europa.eu/publications/EU_Terrorism_Situation_and_Trend_Report_TE-SAT/TE-SAT2008.pdf [Accessed May 2, 2008]: pp. 10 & 50; and Europol, TE-SAT 2007: EU Terrorism Situation and Trend Report 2007 (The Hague, Netherlands: March 2007), http://www.europol.europa.eu/publications/EU_Terrorism_Situation_and_Trend_Report_TE-SAT/TE-SAT2007.pdf [Accessed May 2, 2008]: p. 13.

including the Madrid bombings in 2004 and the London bombings in 2005. While a focus on these perpetrators is therefore warranted, it should not come at the expense of overstating the threat of “Islamist terrorism,” or overlooking the threat of non-Islamist militancy.

The Literature on Learning

Social scientists have produced a large body of research on organizational and social learning in recent decades. While scholars have long debated the prospect and constitutive elements of learning, a consensus has emerged that individuals, acting on behalf of groups, organizations, networks, and other collective forms, often modify existing practices, and create new ones, in response to information and experience.⁷ Organizations learn when their participants learn for them: acquiring, interpreting and applying information and experience. Participants acquire explicit knowledge through artifacts and training that codify information; they acquire implicit knowledge through socialization, apprenticeships, and inter-personal narratives (conversations, story telling, gossip, etc.).

The method of diffusion depends on the type of knowledge being shared. Abstract technical information (*techne*) is similar to explicit knowledge in that it can be codified in knowledge-based artifacts and taught to participants through formal instruction. *Techne* is structured and communicated in “small, explicit, logical steps” that

⁷ See Chris Argyris and Donald A. Schön, *Organizational Learning II: Theory, Method, and Practice* (Reading, MA: Addison-Wesley, 1996); Barbara Levitt and James G. March, “Organizational Learning,” *Annual Review of Sociology* vol. 14 (1988): 319-340; and Herbert Simon, *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organizations* (New York: Macmillan, 1947).

can be broken down and verified,⁸ like a cooking recipe—or an explosives preparation. Terrorists may acquire bomb-making *techne* by reading manuals and other documents that provide detailed, step-by-step recipes for making explosives, or attending training camps where experienced practitioners teach these small, explicit, logical, and deadly steps as part of their curriculum. Such technical knowledge is universal; it does not vary across local settings. Certain chemicals react with other chemicals to cause explosions, whether the reaction occurs in a training camp in Waziristan or an apartment building in Madrid. Such knowledge is useful, in large part, because it is fungible. Practitioners can acquire it at a training camp in Waziristan, from an online training manual, or at a farmhouse outside of Madrid.⁹

However, not all knowledge can be acquired and applied in this manner. Practitioners of a specific activity or tradecraft, such as medicine, diplomacy, and terrorism, often rely on intuitive, practical knowledge of their craft (*mētis*) that the practitioner only gradually acquires with the accumulation of personal experience.¹⁰ Similar to tacit knowledge, practitioners develop *mētis* by doing, engaging in the activity itself, rather than by formal study of knowledge-based artifacts.¹¹

Unlike *techne*, which can be expressed as general principles that apply across time and space, *mētis* is not “settled knowledge.”¹² *Mētis* varies across local contexts.

⁸ James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven, CT: Yale University Press, 1998): p. 320.

⁹ This, of course, assumes that the technical information contained in these manuals is accurate, which often times it is not. The PI discusses the poor quality of many Internet training materials below.

¹⁰ For a fascinating analysis of *mētis* and *techne*, see Scott, *Seeing Like a State*, especially Chapter 9; also see Marcel Detienne and Jean-Pierre Vernant, *Cunning Intelligence in Greek Culture and Society*, translated from the French by Janet Lloyd (Sussex, UK: The Harvester Press, 1978); and Martha C. Nussbaum, *The Fragility of Goodness: Luck and Ethics in Greek Tragedy and Philosophy* (Cambridge, UK: Cambridge University Press, 1986).

¹¹ Scott, *Seeing Like a State*: pp. 312-315.

¹² Scott, *Seeing Like a State*: p. 320.

What works in one location may not work in another. Street smarts in London are different from cave smarts in Afghanistan. The seasoned *muhajideen* does not always, or even often, make the best urban terrorist in Western Europe and the United States. The tradecraft required to succeed at urban terrorism in the West is not easily learned through “jihadist” training camps, even the best Al Qaeda camps in Afghanistan. This is because *mētis* resists simplification into knowledge-based artifacts and is not readily taught as a formal discipline. If individuals acquire *techne* “by abstraction,” they learn *mētis* by doing, by engaging in the activity itself, gradually developing a knack or “feel” that comes with practice.¹³ Terrorists acquire *mētis* less by formal training, which is useful for learning *techne*, and more by doing, developing their violent talents through practice, combat, and carrying out attacks, in specific settings.

Mētis is crafty intelligence that “bears on fluid situations which are constantly changing and which at every moment combine contrary features and forces that are opposed to each other.”¹⁴ While *metis* is often translated from classical Greek as “cunning intelligence,” James Scott points out that this fails to capture the full range of *mētis*-related skills that medical doctors, firefighters, emergency responders, military commanders, and statesmen use to adapt to changing environments.¹⁵ Defining attributes of *mētis*, including dexterity, ingenuity, improvisation, and elusiveness, are not captured in conventional distinctions between tacit and explicit knowledge, which focus on questions of codification and information transfer.¹⁶ Such attributes are, however,

¹³ Scott, *Seeing Like a State*: p. 316.

¹⁴ Detienne and Vernant, *Cunning Intelligence in Greek Culture and Society*: p. 20

¹⁵ Scott, *Seeing Like a State*: p. 313.

¹⁶ For discussion of tacit and explicit knowledge, see Michael Polanyi, *Knowing and Being*, edited by Marjorie Grene (Chicago, IL: University of Chicago Press, 1969); Ikujiro Nonaka and Hirotaka Takeuchi, *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation* (New

essential in allowing terrorists to adapt their activities in response to government counter-terrorism efforts. To execute attacks, terrorists must adapt themselves “constantly to events as they succeed each other and be pliable enough to accommodate the unexpected.”¹⁷ In planning and carrying out operations, they must shield their activities from law enforcers and respond to unexpected events by changing their day-to-day practices in simple but effective ways.

Experienced practitioners share *mētis*, to the extent that it can be shared, through sustained interaction with other practitioners, including less experienced acolytes. “Veterans” tell “novices” stories about their past experiences; they demonstrate how to perform specific tasks; and they mentor aspiring fanatics by building social relationships with them. Like tailors, midwives, butchers, and photocopy technicians, terrorists share *mētis* by participating in “communities of practice,” social communities formed by veterans and novices that interact on a regular basis, creating and re-creating experiential knowledge expressed in shared narratives, practices, and routines.¹⁸ Much of the learning that goes on inside militant networks occurs implicitly, through interactions among participants that share *mētis* through group narratives—and enact *mētis* by planning, practicing, and executing terrorist attacks.

York: Oxford University Press, 1995); Daniel W. Drezner, “The Limits of Transformation in World Politics,” unpublished manuscript (January 2003); and Ralph D. Stacey, *Complex Responsive Processes in Organizations: Learning and Knowledge Creation* (New York: Routledge, 2001).

¹⁷ Detienne and Vernant, *Cunning Intelligence in Greek Culture and Society*: p. 20

¹⁸ On communities of practice, see Wanda J. Orlikowski, “Knowing in Practice: Enacting a Collective Capability in Distributed Organizing,” *Organization Science* 13, no. 3 (2002): 252; Jean Lave and Etienne Wenger, *Situated Learning: Legitimate Peripheral Participation* (New York: Cambridge University Press, 1991); Davide Nicolini, Silvia Gherardi, and Dvora Yanow, eds., *Knowing in Organizations: A Practice-Based Approach* (Armonk, N.Y.: M. E. Sharpe, 2003); John Seely Brown and Paul Duguid, “Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation,” *Organization Science* 2, no. 1 (1991): 40–57; Julian E. Orr, *Talking About Machines: An Ethnography of a Modern Job* (Ithaca: Cornell University Press, 1996); and Pierre Bourdieu, *The Logic of Practice*, trans. Richard Nice (Cambridge, UK: Polity Press, 1990).

To date, much of the theoretical and empirical work on learning has focused on legally sanctioned organizations, such as business firms, government bureaucracies, international organizations, and universities. Although this body of work has deepened our understanding of how organizations learn—and fail to learn—it largely ignores the “dark” side of organizational life, where people acting on behalf of organizations learn for less than benevolent purposes. During World War II, the Nazi bureaucracy led by Adolph Eichmann exterminated millions of human beings, devising numerous innovations that allowed them to overcome logistical challenges to genocide.¹⁹ More recently, scientists from the Aum Shinrikiyo cult learned the intricate physical processes involved in developing and dispersing Sarin and other chemical agents for use in violent attacks against their fellow Japanese.²⁰ As these examples suggest, organizations can “learn” activities that cause great harm to human beings and become more adept at these tasks with the accumulation of experience. While this observation may appear commonsensical, until very recently social scientists that study learning have largely ignored whether and how terrorist groups and other illicit non-state actors gather, analyze, and apply information and experience.

Similarly, the large body of literature on terrorism studies that has emerged since the late 1970s has generally disregarded learning in terrorist groups. While some leading students and practitioners of counter-terrorism have recently used the popular term

¹⁹ Chris Argyris and Donald A. Schön, *Organizational Learning II: Theory, Method, and Practice* (Reading, MA: Addison-Wesley, 1996): 19 & 193; Michael Berenbaum and Abraham J. Peck, eds., *The Holocaust and History: The Known, the Unknown, the Disputed, and the Reexamined* (Bloomington, IN: Indiana University Press, 1998).

²⁰ Jessica Stern, *The Ultimate Terrorists* (Cambridge, MA: Harvard University Press, 1999): 60-65; John Parachini, “Aum Shinrikiyo,” in *Aptitude for Destruction, Volume 2: Case Studies of Organizational Learning in Five Terrorist Groups*, by Brian A. Jackson *et al.* (Santa Monica, CA: RAND Corporation, 2005): 11-35.

“learning organization” to describe al Qaeda’s development in the post-9/11 period,²¹ these observers tend to gloss over how terrorists actually learn, in the sense of acquiring, analyzing and applying knowledge and experience to their activities. Since social learning is sensitive to a variety of individual and institutional impediments, including bounded rationality, coalition dynamics, and organizational inertia, this intricate process is better explained, with reference to specific cases, than assumed *a priori*. Moreover, because terrorist networks are different than the formal organizations typically studied by students of organization behavior it is unclear how their distinctive attributes, including informal decision structures, loosely compartmented inter-group networks, and the need to maintain strict operational secrecy in hostile law enforcement environments, may facilitate or impede learning.

Fortunately, over the years a number of criminologists and terrorism studies scholars have provided isolated clues that can help us understand how militant extremists acquire their violent tradecraft. In a seminal study published in 1937, Edwin H. Sutherland argued that the professional thief possesses a “complex of abilities and skills” derived in association with other thieves that participate in interactional networks that

²¹ During his unclassified 2004 threat briefing before the U.S. Senate Select Committee on Intelligence, CIA director George Tenet characterized al Qaeda as “a learning organization that remains committed to attacking the United States, its friends and allies.” See George Tenet, Director of Central Intelligence, “The Worldwide Threat 2004: Challenges in a Changing Global Context,” *Current and Projected National Security Threats to the United States*, hearings before the United States Senate Select Committee on Intelligence (24 February 2004), <http://intelligence.senate.gov/0402hrg/040224/tenet.pdf> [Accessed 26 February 2004]: p. 3. In her recently published book, Jessica Stern, terrorism expert at Harvard University’s Kennedy School of Government, uses the same “learning organization” phrase to describe al Qaeda’s umbrella network, the International Islamic Front. Jessica Stern, *Terror in the Name of God: Why Religious Militants Kill* (New York: Ecco, 2003): p. 254. Writing two years before 9/11, Ariel Merari, Director of the Research Unit on Political Violence at Tel Aviv University, observed, without elaborating further, that terrorist groups “have an ‘organizational memory’; they learn from experience.” Ariel Merari, “Attacks on Civil Aviation: Trends and Lessons,” in *Aviation Terrorism and Security*, edited by Paul Wilkinson and Brian M. Jenkins (London: Frank Cass, 1999): p. 10.

constitute a form of criminal organization.²² More recently, Howard Abadinsky builds on Sutherland to argue that the process of becoming a professional criminal “requires a tutelage that includes not only the skills of theft, but also the common code, language (argot), and attitude that distinguish the professional thief from the rest of society.”²³ Similarly, Ronald Akers and his colleagues draw on Sutherland to suggest that “deviant” behavior is learned within social collectives, including terrorist groups, that espouse values and norms conducive to criminality and violence.²⁴ While the proposed research identifies militants, rather than professional thieves or white collar criminals, as the primary units of analysis, research on terrorism learning follows in the sociological tradition pioneered by Sutherland and his followers.

Beginning in the late 1970s, several counter-terrorism scholars, concerned by the apparent spread of terrorist violence across national borders, identified a number of mechanisms for this diffusion or “contagion” process, including cooperation and cross-training among different terrorist groups, the imitation of attacks by groups located in different countries, and the role of the media in spreading information about attack methods through television broadcasts and print publications.²⁵ More recently, Mia

²² Edwin H. Sutherland, *The Professional Thief by a Professional Thief*. Annotated and interpreted by Edwin H. Sutherland (Chicago: University of Chicago Press, 1937): pp. 209-218. Also, see Edwin H. Sutherland, *On Analyzing Crime*, edited and with an introduction by Karl Schuessler (Chicago: University of Chicago Press, 1973): pp. 8-9; and Edwin H. Sutherland, *Principles of Criminology* (Chicago: J.B. Lippincott, 1934).

²³ Howard Abadinsky, *The Criminal Elite: Professional and Organized Crime* (Westport, CT: Greenwood Press, 1983): p. 21.

²⁴ Ronald L. Akers, *Social Learning and Social Structure: A General Theory of Crime and Deviance* (Boston: Northeastern University Press, 1998); Ronald L. Akers and Adam L. Silverman, “Toward a Social Learning Model of Violence and Terrorism,” in *Violence: From Theory to Research*, edited by Margaret A. Zahn, Henry H. Brownstein, and Shelly L. Jackson (Cincinnati: Lexis Nexis, 2004): pp. 19-35.

²⁵ See Charles A. Russell, Leon J. Banker, Jr., and Bowman H. Miller, “Out-Inventing the Terrorist,” in *Terrorism: Theory and Practice*, edited by Yonah Alexander, David Carlton, and Paul Wilkinson (Boulder, CO: Westview, 1979): pp. 3-42; Edward Heyman and Edward Mickolus, “Imitation by terrorists: quantitative approaches to the study of diffusion patterns in transnational terrorism” in *Behavioral and Quantitative Perspectives on Terrorism*, edited by Yonah Alexander and John M. Gleason (New York:

Bloom and Robert Pape have built on the terrorism contagion literature in their studies of the spread of suicide terrorism among different terrorist groups throughout the world.²⁶

Similar to earlier contagion process scholars, Bloom and Pape argue that terrorist groups learn by imitating tactics, such as suicide bombings, that other extremist groups have used successfully.

Contagion process scholars tend to equate the process of learning with an output—a change in some practice or attack method. However, there are many sources of change in groups and organizations, including leadership turnover, coalition dynamics, and political pressure.²⁷ Just because a group has changed a practice, producing a new output, does not mean it has learned, in a cognitive or even behavioral sense. Nor can one adequately explain the theoretical and empirical richness of learning processes by reducing them to an output.

Recent research, some of which has been funded by the National Institute of Justice, makes an important contribution to the literature on terrorism learning. A team of RAND researchers, led by Brian Jackson, examined several terrorist groups, including the Provisional Irish Republican Army, Aum Shinrikyo, Jemaah Islamiyah, Hizballah,

Pergamon Press, 1981): pp. 175-228; Manus I. Midlarsky, Martha Crenshaw, and Fumihiko Yoshida, "Why violence spreads: the contagion of international terrorism." *International Studies Quarterly* 24 (2) (June 1980): pp. 262-298; Robert T. Holden, "The Contagion of Aircraft Hijacking," *American Journal of Sociology* 91, no. 4 (January 1986): 874-904; Martha Crenshaw Hutchinson, *Revolutionary Terrorism: The FLN in Algeria, 1954-1962* (Stanford, CA: Hoover Institution Press, 1978); and Amy Sands Redlick, "The transnational flow of information as a cause of terrorism," in *Terrorism: Theory and Practice*, edited by Yonah Alexander, David Carlton, and Paul Wilkinson (Boulder, CO: Westview, 1979): pp. 73-95.

²⁶ See Mia Bloom, *Dying to Kill: The Allure of Suicide Terror* (New York: Columbia University Press, 2005); Robert A. Pape, *Dying to Win: The Strategic Logic of Suicide Terrorism* (New York: Random House, 2005); and Robert A. Pape, "The Strategic Logic of Suicide Terrorism," *American Political Science Review* 97 (3) (August 2003): pp. 343-361.

²⁷ Philip E. Tetlock, "Learning in U.S. and Soviet Foreign Policy: In Search of an Elusive Concept, in *Learning in U.S. and Soviet Foreign Policy*, edited by George W. Breslauer and Philip E. Tetlock (Boulder, CO: Westview Press, 1991): 22-23; Karl E. Weick and Frances Westley, "Organizational Learning: Affirming an Oxymoron," in *Handbook of Organization Studies*, edited by Stewart Clegg, Cynthia Hardy, and Walter R. Nord (Thousand Oaks, CA: Sage Publications, 1996): 440-458.

and the radical environmentalist movement.²⁸ In a separate study, Mark Hamm, professor of criminology at Indiana State University, draws on court documents from the *American Terrorism Study* and the criminological literature on social learning to explore how some political extremists acquire the skills to perform their violent tradecraft.²⁹ While these studies offer insights into how numerous terrorist groups train their members and develop certain technological innovations, they do not systematically examine the *internal* processes of group learning and interpretation, as experienced by militants themselves. Nor do Jackson and Hamm consider violent Islamist networks in Spain and the United Kingdom, which remain critical—yet unstudied—cases.³⁰

Research Methodology

This study is based primarily, but not exclusively, on primary source interview data the PI gathered during five months of field work in Britain and Spain during the summer and fall of 2007.³¹ Beginning at the end of May and continuing through October 2007, the PI visited numerous locations in both countries, including Madrid, Granada, and Ceuta (a Spanish enclave in northern Morocco) in Spain, and London and

²⁸ Brian Jackson, *Tactical and Operational Learning by Terrorist Groups* (National Institute of Justice, U.S. Department of Justice, 2006); Brian A. Jackson, John C. Baker, Kim Cragin, John Parachini, Horacio R. Trujillo, and Peter Chalk, *Aptitude for Destruction, Volume 2: Case Studies of Organizational Learning in Five Terrorist Groups* (Santa Monica, CA: RAND Corporation, 2005). Also see Brian A. Jackson, *Aptitude for Destruction, Volume 1: Organizational Learning in Terrorist Groups and Its Implications for Combating Terrorism* (Santa Monica, CA: RAND Corporation, 2005).

²⁹ Mark S. Hamm, *Crimes Committed by Terrorist Groups: Theory, Research and Prevention* (National Institute of Justice, U.S. Department of Justice, September 2005).

³⁰ However, Hamm does briefly discuss the Madrid 2004 and London 2005 bombings in his subsequent book, based on the NIJ study, *Terrorism as Crime: From Oklahoma City to Al-Qaeda and Beyond* (New York: New York University Press, 2007), see Chapter 6.

³¹ From the perspective of anthropology, where researchers often immerse themselves in field sites for months, even years, at a stretch, five months may not seem like a long time. In the context of terrorism studies, however, where “field work,” if undertaken at all, often consists of highlight tours where researchers fly in for a day or two of workshops followed by another few days of “site visits,” five months in the field represents a significant step in the right direction.

Birmingham in England. He chose these locations because of the variation they provided on dependent and explanatory variables, as well as the access they provided to research informants. Guided by the ethnographic maxim of choosing respondents for their expertise rather than their representativeness, the PI spent considerable time and effort identifying and initiating contact with prospective informants. Cultivating access to reliable informants “in-the-know” was a persistent challenge in this research.³²

The PI responded to this challenge by constructing a diverse sample of respondents with expertise on Islamic militants in Europe. This nonprobability sample includes government officials, journalists, scholars, Muslim community members, and Islamic social and political activists. In Britain, the PI interviewed fifty-seven separate informants, including: twenty-one “Islamic activists,” six active or former “Islamists,” six active or former “militants,” eighteen government officials, and six journalists, academics, and think tank researchers. In Spain and Ceuta, he interviewed thirty-one informants, including eleven Islamic activists, eleven government officials, and ten academics, journalists, and think tank researchers. The PI’s government respondents included American, British, and Spanish law enforcement and intelligence officials. Most of these officials were employed at the time of the interview, although several were retired. The PI also interviewed several journalists, policy analysts from prominent think tanks, and counter-terrorism scholars from different universities. For an extended discussion of the research methods used in this report, including how the PI constructed

³² Other researchers have noted the difficulty of accessing knowledgeable extremists. “Conducting research on radical Islamic groups is inherently difficult,” observes Quintan Wiktorowicz, author of a case study on Al-Muhajiroun. “The primary obstacle is access, as reflected by the paucity of studies based on ethnographic fieldwork. Activists are usually suspicious of outsiders. This suspicion has become more accentuated since September 11 and the ‘war on terror.’” Quintan Wiktorowicz, *Radical Islam Rising: Muslim Extremism in the West* (Lanham, MD: Rowman and Littlefield, 2005): 31.

his respondent sample, accessed and interviewed informants, and coded and analyzed field notes and interview transcripts, see the appendix at the end of this report.

A Note on Terminology

The PI's sample includes several respondents that have been labeled Islamic "fundamentalists," "radicals," and "extremists" by the media and government authorities, including former Guantánamo Bay detainees, former members of the now-defunct Al-Muhajiroun (The Emigrants) group in Britain, and active and former members of Hizb ut-Tahrir (The Liberation Party), an Islamic party that seeks to re-establish the Caliphate. Many of these informants reject such labels, which they view as misleading and derogatory at best. Some respondents go further, viewing such labeling as a thinly-disguised attempt by certain media outlets and government authorities to discredit their views, thereby preventing any meaningful engagement of their ideas and justifying officials' perceived unjust treatment of people that hold such beliefs. As a former leader of Al-Muhajiroun in Britain explains:

I don't think it is very useful to use pejorative and emotional terms like extremism, fundamentalism, terrorism, etc., because at the end of the day, people are not going to look beyond the terms. Once you're defined as a terrorist or an extremist, then basically you fall into some neat category, and therefore the government can perhaps have laws against you, they can treat you in a certain way and they're not really that interested in the ideology, in the concepts which motivate you. And I think this is the fundamental failure of the American and British government when dealing with Islam and Muslims.³³

The PI, in contrast, is interested in the concepts that motivate his informants. When interviewing them, he found it essential to avoid using such judgmental terms as "extremist," "radical," and "fundamentalist," not only because some of his informants

³³ PI interview with former leader of Al-Muhajiroun, London, September 22, 2007.

found them offensive, but also because they are inherently ambiguous and prejudicial.³⁴ One man's "extremist" is another man's "activist"; one man's "radical" is another man's "moderate"; one man's fundamentalist is another man's "practicing Muslim." In this report, the PI avoids such labels when referring to his informants,³⁵ preferring less politicized, though admittedly still problematic terms, like "Islamic activists," "Islamists," "militants," and "terrorists," all of which mean different things.³⁶

The latter point is an important one. Among many Western observers, there is a shortsighted tendency to "represent Islamic activism as a more or less unitary phenomenon," often labeled "Islamism" or "political Islam" or "Islamic fundamentalism," and to juxtapose this representation against "Islam," as practiced by "ordinary" (read apolitical) Muslims.³⁷ However, there are striking differences, in belief and action, between Salafi religious reformers, Muslim Brotherhood activists, and Al Qaeda militants, to name only three examples. Rather than support conceptual lumping,

³⁴ For a similar observation by an ethnographic researcher of American "racialist" groups, see Arthur J. Jipson and Chad E. Litton, "Body, Career and Community: The implications of researching dangerous groups," in *Danger in the Field: Risks and Ethics in Social Research*, edited by Geraldine Lee-Treweek and Stephanie Linkogle (New York: Routledge, 2000): p. 154.

³⁵ However, when quoting interviews directly, the PI employs the language of his informants, even when they pepper their observations with such politically-charged terms as "Islamic extremists," "radicals," and "fundamentalists." The PI does so to be consistent with his respondents' terminology, rather than to concede that these are the most precise and accurate terms available to scholars.

³⁶ This caveat will not satisfy all of the PI's informants, particularly some of the Salafis he interviewed. When asked to provide alternative terminology to describe "Islamic terrorists," these respondents suggested two possibilities: "takfiris" and "Kharijis." The verb *takfir* means to declare a Muslim to be an apostate. *Takfiris* are those who willingly issue such declarations against other Muslims, usually the leaders of Middle Eastern states such as Egypt, Jordan, and Saudi Arabia. While this may have the practical effect of sanctioning violence against these leaders, not all Muslims who issue such declarations are jihadists, let alone terrorists. *Kharijis* is an historical reference that refers to a sect of Muslims that rejected and killed Ali, the Prophet Mohammed's cousin and son-in-law and the fourth "rightly guided" Caliph. In contemporary parlance, *Kharijis* refers to those who have "seceded" from Islam. Like *takfiris*, the connotation is pejorative, its application imprecise: many individuals that have been labeled *Kharijis* do not engage in nor support political violence. To be sure, these concepts are complex and have a long history in Islamic jurisprudence. Rather than engage in conceptual debates about Islam for which he is ill-suited, the PI will attempt to use such terms as "Islamic activists," "Islamists," "militants" and "jihadists," and terrorists as objectively as he can, while conceding that none of his terminological choices will satisfy all readers.

³⁷ International Crisis Group, "Understanding Islamism," *Middle East/North Africa Report*, No. 37 (March 2, 2005): 1.

the PI recognizes the spiritual and ideological diversity of Islam by distinguishing between the different types of “Islam” and “Islamic activism” that are relevant for this study.

Beginning with the most general designation, “Islamic activists” is a catch-all moniker that describes a wide variety of religious reformers, community workers, and political activists, all of whom base their political and apolitical activism on their respective interpretations of Islam, conceived not just as a religion of law but as a way of ordering social life in the community. “Islamists” represent a subset of Islamic activists, particularly political activists for whom Islam and the *sharia*, or Islamic law, provide a just basis for organizing political and legal authority in the community, a basis they seek to establish through *peaceful* political advocacy. What distinguishes “Islamists” from “Islamic activists” more generally is the political orientation of the former’s activism. “Militants” and “jihadists,” two terms that are used interchangeably in this study, refer to a subset of Islamists, particularly those that have participated in or actively supported an *armed* struggle by Muslim fighters against non-Muslim forces, either to remove the latter from what they define as Muslim lands or to impose *sharia* on recalcitrant populations.³⁸ And, finally, “terrorists” refers to a subset of militants and jihadists, particularly those

³⁸ While the Arabic verb “jahidu” is often defined as to “strive” or “exert oneself” in the path of God, during the first decades of Islamic history, jihad came to signify an armed struggle by Muslims living in a state of injustice against non-believers. In subsequent centuries, the notion of “greater” jihad, as consisting of an individual’s personal, and spiritual, struggle to become a better Muslim, was developed by Al-Ghazali and other scholars in the Sufi tradition of Islam. In the 20th Century, as numerous Muslim countries struggled against Western colonialism, Islamist thinkers such as Abdul Ala Mawdudi, Hasan al-Banna, and Sayyid Qutb, reinvigorated the classical notion of jihad as military fighting against non-believers. See Mohammed Ayoob, *The Many Faces of Political Islam* (Ann Arbor: University of Michigan Press, 2008); Michael Bonner, *Jihad in Islamic History: Doctrines and Practice* (Princeton: Princeton University Press, 2006), Richard Bonney, *Jihad: From The Qur’an to bin Laden* (Hampshire, United Kingdom: Palgrave MacMillan, 2004), and David Cook, *Understanding Jihad* (Berkeley: University of California Press, 2005).

fighters that have participated in or actively support the use of political violence against civilian noncombatants.³⁹

To avoid the sort of simplistic generalizations about Islam that remain prevalent, generalizations that may contribute to shortsighted policies, it is important to keep these distinctions front and center of the analysis. Many Islamic activists, including some of the PI's informants, are not Islamists. Rather, they are apolitical religious reformers who do not actively support using the *sharia* as a basis of political rule in Western democracies, even if they concede in their personal beliefs that Islamic law represents a legitimate basis for political rule in Muslim countries. Likewise, many Islamists, including some of the PI's informants, are not militants or jihadists because they do not accept the contemporary examples of legitimate fighting against non-Muslim forces, even if they concede that historically jihad has sometimes involved a military struggle against non-believers, as described in the Koran and interpreted by classically trained religious scholars well-versed in Islamic jurisprudence and the relevant *Hadith* (reports of the Prophet Mohammed's sayings and deeds, not reported in the Koran). Finally, many militants and jihadists, including those interviewed by the PI, are not terrorists, because

³⁹ Because the focus of this study is "Islamic" militancy and terrorism the PI uses the terms militant and terrorist to signify those militants and terrorists whose political violence is inspired by their interpretation, however misguided, of Islam. In using these terms, the PI is not suggesting that all Islamists, let alone all Muslims, are militants or terrorists. Nor does he wish to imply that only followers of Islam engage in what scholars call religious or "sacred" terrorism. Just as secular extremists draw on a variety of political ideologies to justify acts of violence, historical and contemporary followers of Christianity, Judaism, Sikhism, Hinduism, Buddhism, among other religious traditions, have justified their violent attacks through their interpretation, many would say misinterpretation, of religious doctrine and scripture. Such individuals, including Timothy McVeigh, Paul Hill, and Baruch Goldstein, are no more representative of mainstream interpretations of their respective faiths than Osama bin Laden is of his. For discussion of religious terrorism, see David C. Rapoport, "Fear and Trembling: Terrorism in Three Religious Traditions," *American Political Science Review* 78, no. 3 (1984): 658-677; and Mark Juergensmeyer, *Terror in the Mind of God: The Global Rise of Religious Violence*, 3rd edition (Berkeley: University of California Press, 2003).

they categorically reject the use of political violence against civilian non-combatants.⁴⁰

In sum, not every Muslim is an Islamic activist, not every Islamic activist is an Islamist, not every Islamist is a militant or a jihadist, and not every militant or jihadist is a terrorist.

When Western decision-makers fail to make such distinctions in crafting and implementing counter-terrorism programs, they run the risk of defining the “target set” too broadly, feeding into a counter-productive “clash of Civilizations” thesis, and validating the world views of Al Qaeda-inspired terrorists, while enhancing their ideological marketability among potential supporters.⁴¹

Research Propositions

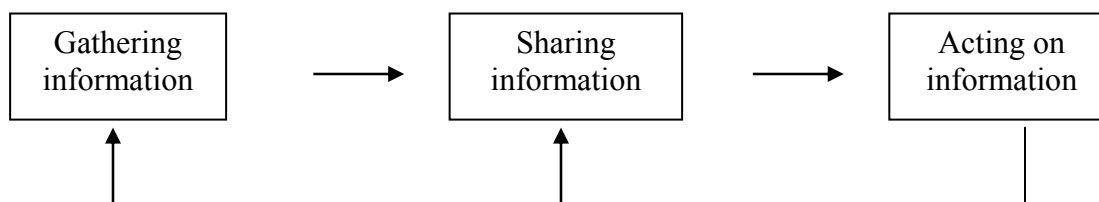
This research proposes that militants and terrorists adapt their operations in response to information and experience, including, but not limited to, what they learn about government counter-terrorism efforts. More specifically, the PI suggests that participants in terrorist groups learn by: (1) acquiring information about their activities and government counter-terrorism efforts, (2) sharing their knowledge through conversations, meetings and other social interactions, and (3) applying knowledge and experience to their daily practices and procedures. This simple process model of learning, undertaken by individuals acting collectively, whether on behalf of formal

⁴⁰ Consistent with conventional academic usage, the PI reserves the terrorist label to those that participate in or actively support acts of political violence against *civilian non-combatants* for the purpose of influencing a wider audience through fear and intimidation. For definitions of terrorism, see Alex P. Schmid and Albert J. Jongman, *Political Terrorism: A New Guide to Actors, Authors, Concepts, Data Bases, Theories, and Literature*, expanded and updated edition (New Brunswick: Transaction Publishers, 1988); Brian M. Jenkins, “International Terrorism: The Other World War,” in *The New Global Terrorism: Characteristics, Causes, Control*, edited by Charles Kegley Jr. (Upper Saddle River, NJ: Prentice Hall, 2003): 15-26; and Jessica Stern, *The Ultimate Terrorists* (Cambridge: Harvard University Press, 1999).

⁴¹ International Crisis Group, “Understanding Islamism,” *Middle East/North Africa Report*, No. 37 (March 2, 2005): 1.

organizations or informal groups and social networks, can be summarized in the following diagram.

Figure 1: Process model of organizational learning⁴²



The PI hypothesizes that terrorists learn through social networks, communities of practice, and, to a limited extent, the Internet. Existing research suggests that jihadists and terrorists connect to like-minded militants through friendship and kinship ties, as well as social affiliations based on common religious or ethnonational backgrounds, geographic proximity, and shared experiences.⁴³ Network ties among participating “nodes” are sustained and deepened through regular interactions, including communication, information sharing, and coordination of collective action. However, the literature on terrorist networks has not examined the question of whether these webs of affiliation facilitate learning and, if so, how this process unfolds. In this research, the PI draws on a separate body of literature in organizational sociology to propose that social networks facilitate learning among terrorists through “weak ties” that provide access to

⁴² Adapted from Richard L. Daft and Karl E. Weick, “Toward a Model of Organizations as Interpretation Systems,” *Academy of Management Review* 9, no.2 (1984): 284-95, and David A. Garvin, *Learning in Action: A Guide to Putting the Learning Organization to Work* (Boston: Harvard Business School Press, 2000).

⁴³ See Marc Sageman, *Understanding Terror Networks* (Philadelphia: University of Pennsylvania Press, 2004); Quintan Wiktorowicz, *Radical Islam Rising: Muslim Extremism in the West* (Lanham, MD: Rowman and Littlefield, 2005); and Miles Kahler, “Collective Action and Clandestine Networks: The Case of Al Qaeda,” in *Networked Politics: Agency, Power, and Governance*, edited by Miles Kahler (Ithaca: Cornell University Press, forthcoming).

new information and “strong ties” that increase participants’ receptivity to such information because it comes from trusted sources.⁴⁴

Learning is not limited to social networks. Other collectives, movements, organizations, and groups also learn. The PI suggests that participants in terrorist networks form communities of practice when veterans interact with novices, socializing them to ideas and behavioral norms and sharing their knowledge of violent tradecraft. Militants subsequently expand—and refine—their “knowledge in practice” as novices apply the information to their own activities, and share the fruits of their experience with other community members through storytelling and practical demonstrations. In doing so, novices become full-fledged practitioners in the community of practice, increasing their knowledge of terrorist tradecraft, and solidifying their identity as pious Muslims engaged in a cosmic struggle against infidels and apostates.

Terrorist communities of practice also facilitate the diffusion of *mētis*, the intuitive, experiential knowledge practitioners exploit when adapting to fluid environments. Experienced militants share *mētis* by interacting with novices, telling them stories about their past experiences, showing them how to perform specific tasks, and mentoring them by building social relationships based on shared identities and trust. These relationships often contain an element of hierarchy, stemming from the veteran’s greater expertise and experience.

⁴⁴ Damon Centola and Michael Macy, “Complex Contagions and the Weakness of Long Ties,” *American Journal of Sociology* 113, no. 3 (2007): 702-734; Mark S. Granovetter, “The Strength of Weak Ties,” *American Journal of Sociology* 78, no. 6 (1973): 1360-1380; and Walter W. Powell, “Neither Market nor Hierarchy: Network Forms of Organization,” in *Research in Organizational Behavior* 12, edited by Barry M. Staw and L.L. Cummings (Greenwich, Conn.: JAI, 1990): 295-336.

To investigate the explanatory power of these propositions, the PI gathered primary source data from interviews with a diverse, wide-ranging sample of expert informants in Spain and the United Kingdom. During interviews, the PI asked his informants questions about whether militants and terrorists learn and, if so, how this process occurs in militant groups and networks. Avoiding jargon whenever possible, he also asked respondents questions about social networks, communities of practice, *mētis*, and *techne*.

Many, but not all, of the discussions relating to terrorism learning took place with government law enforcement and intelligence officials, who were well-placed and willing to answer the PI's questions about this topic. One potential source of bias when relying on counter-terrorism officials as informants is that they may exaggerate the learning capacities of militants, in part because their agencies depend on maintaining the threat of terrorism to enhance their organizational identity and to receive resources to carry out their enforcement mission. In other words, to ensure the organizational prosperity and survival of their bureaucracies, some counter-terrorism officials may overstate the adaptability, and overall sophistication, of their illicit adversaries.

However, the picture that emerges from these interviews is different. While numerous respondents concede that terrorists learn from information and experience, they stress that militants are not particularly good at it, at least not compared with other militant groups, such as the Provisional Irish Republican Army (IRA). Nor do they bear a close resemblance to the caricature of sophisticated adaptive agents prevalent in media accounts of Islamist militancy. Some of them “adapt, sure,” explains one FBI

intelligence analyst, “but I don’t see a super terrorist out there.”⁴⁵ “These guys are not criminal masterminds,” adds a senior counter-terrorism investigator with the London Metropolitan police. “They make mistakes and they don’t have much experience.”⁴⁶ Other informants limit their assessment of “super terrorists,” or at least professional ones, to the *Provos* that carried out systematic bombing campaigns in the United Kingdom in recent decades. One long-time Metropolitan police inspector argues that while the IRA often took steps to learn proficiently, “the new guys do not appear to do this.”⁴⁷ Another former police official explains that although the *Provos* were “masters” of learning, Islamic terrorists now based in the United Kingdom are “not going through the same process as the IRA,” trying to apply lessons from previous operations to their current activities. The reason, he adds, is that active terrorists carry out isolated attacks in Britain, “rather than an IRA-like campaign, so they don’t learn from previous attacks.”⁴⁸

These comments, as typical in the PI’s sample as they are suggestive, offer a useful starting point from which to analyze terrorism learning. They also provide an important corrective to popular, media-driven narratives that stress the infallible adaptability of Islamist terrorism. Not all terrorists learn, and those that do appear limited in their ability to do so.

⁴⁵ PI interview with intelligence analyst, Federal Bureau of Investigation, US Embassy, London, United Kingdom, October 29, 2007.

⁴⁶ PI interview with senior investigative officer, Counter-Terrorist Command, Specialist Operations, Metropolitan Police, London, United Kingdom, September 5, 2007.

⁴⁷ PI interview with Detective inspector, Metropolitan Police, Specialist Operations, August 9, 2007.

⁴⁸ PI interview with former Metropolitan police official, Specialist Operations, July 26, 2007. For discussion of learning by the Provisional Irish Republican Army, see Brian A. Jackson, “Provisional Irish Republican Army,” in *Aptitude for Destruction, Volume 2: Case Studies of Organizational Learning in Five Terrorist Groups*, Brian A. Jackson, et al., 93-140 (Santa Monica, Calif.: RAND Corporation, 2005).

How Terrorists Learn

If terrorists do learn, as many of the informants in this research suggest, how does this process unfold? One way of thinking about terrorism learning is to conceptualize it as a three-stage process, as summarized in Figure 1 above. In practice these stages often overlap and occur simultaneously. Like other “learners,” terrorists acquire, analyze, and apply information and experience concurrently—and haphazardly. Individuals are only “boundedly rational”: their “computational” abilities are limited and they make mistakes. To compensate and distinguish signals from noise, militants rely on mental models or “frames of reference” that bias their interpretation in subtle ways, causing them to miss some signals, while misinterpreting others.⁴⁹ Meanwhile, terrorist networks often contain structures that impede information sharing, such as the compartmentation of participants—and information flows—into discrete units or “cells.”

In short, contrary to the suggestive imagery conveyed in Figure 1, the process of learning belies simple sequential models. Learning is fluid, messy, and subject to numerous constraints. Learning often occurs under conditions of profound ambiguity as people and organizations struggle with incomplete information, bounded rationality, inaccurate and biased inferences, organizational inertia, and a host of other problems that can impede the learning process.⁵⁰ Even when they manage to overcome these difficulties, learning does not inevitably lead to improved task performance or more intelligent behavior. Individuals and groups are capable of learning the “wrong” lessons

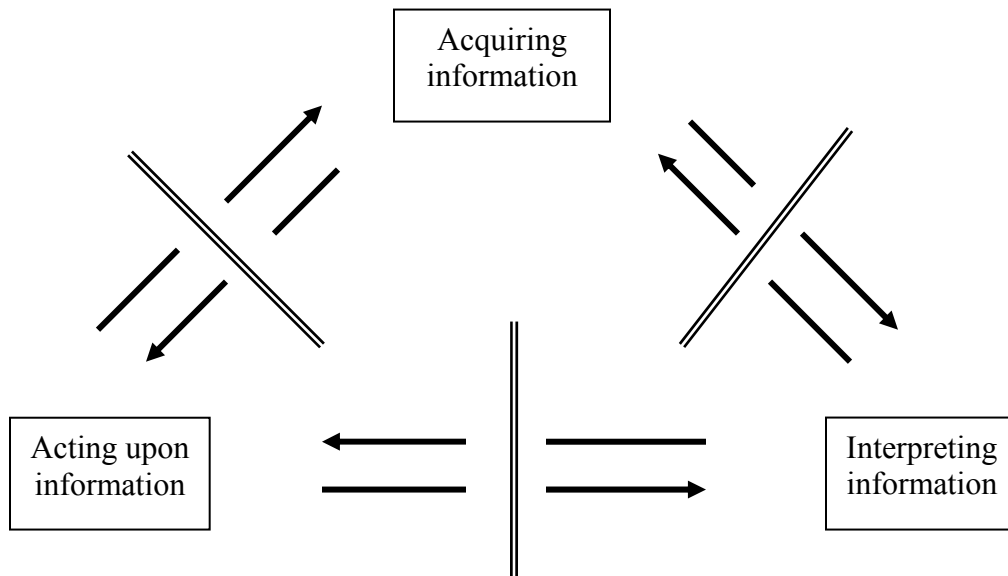
⁴⁹ On bounded rationality, see Herbert A. Simon, “A Behavioral Model of Rational Choice,” *Quarterly Journal of Economics* 69 (1955): 99-118. On mental models and information processing, see Robert Axelrod, “Schema Theory: An Information Processing Model of Perception and Cognition,” *American Political Science Review* 67, no. 4 (December, 1973): 1248-1266; Dan Reiter, *Crucible of Beliefs: Learning, Alliances, and World Wars* (Ithaca, NY: Cornell University Press, 1996).

⁵⁰ James G. March and Johan P. Olsen. “The Uncertainty of the Past: Organizational Learning under Ambiguity,” in *Decisions and Organizations*, edited by James G. March. New York: Basil Blackwell, (1988): 335-358.

as well as “right” ones, of adopting inferior practices as well as superior ones. Figure 2 (below) models the ambiguous and complicated nature of learning.

Still, for the purpose of analyzing terrorism learning, the PI, like other social scientists, finds it useful to disaggregate the learning process into these constitutive elements. Alone, none of these elements are sufficient for learning; all of them must occur at some point in order for learners, be they individuals, groups, or networks, to learn in the behavioral sense employed in this study. In gathering data about terrorism learning, the PI asked his informants about each step in the process, requesting that they provide specific examples, whenever possible, in support of their observations.

Figure 2: Bounded process model of organizational learning



Note: Double-headed arrows signify that learning does not always follow sequential order of acquiring, then analyzing, then applying information. Double-sided lines indicate that learning can be blocked at different points in the process

Gathering Information

Existing research on terrorism learning suggests that militants gather information from a variety of sources, including press reports, government documents, knowledgeable individuals who may or may not be terrorists, and other militants with whom they share overlapping social networks.⁵¹ The means by which terrorists acquire operational and ideological knowledge also vary. When asked how terrorists acquire information, numerous informants in this study highlighted commercially available communications technologies, including television, the Internet, and *locutorios*, those ubiquitous little phone shops in Spain (and England) where patrons can place telephone calls and access the Internet. These observations confirm a commonsensical yet significant insight: terrorists, like other clandestine non-state actors, rely on open sources of communication to gather information about their activities and government counter-terrorism efforts.

“It’s easy to absorb the general message that Osama Bin Laden projects,” explains one American intelligence official. “All you have to do is watch CNN. If you follow more media reports, then it would be even easier.”⁵² Another U.S. official, based in Madrid, makes a similar observation: “They rely on the media for information, *El País*, *El Periodico*, the open press that is available on the Internet, which makes it easier to get the information. On television they may watch Al Jazeera,” or other news channels.⁵³

⁵¹ See, for example, Michael Kenney, *From Pablo to Osama: Trafficking and Terrorist Networks, Government Bureaucracies, and Competitive Adaptation* (University Park: Pennsylvania State University Press, 2007), and “How Terrorists Learn,” in *Teaching Terror: Knowledge Transfer in the Terrorist World*, edited by James J.F. Forest (Rowman & Littlefield, 2006): 33-51; Brian A. Jackson, John C. Baker, Kim Cragin, John Parachini, Horacio R. Trujillo, and Peter Chalk, *Aptitude for Destruction, Volume 2: Case Studies of Organizational Learning in Five Terrorist Groups* (Santa Monica, CA: RAND Corporation, 2005); and Bruce Hoffman, *Inside Terrorism* (New York: Columbia University Press, 1998).

⁵² PI interview with American official, London, United Kingdom, October 24, 2007.

⁵³ PI interview with U.S. State Department official, Madrid, Spain, June 25, 2007.

“The Islamists are good at knowing what we know,” his colleague adds. “They gather information about police activities and Western society in general through the press, books, and movies.”⁵⁴ A former high-ranking official in the Aznar administration in Spain, which was in power at the time of the March 11, 2004 attacks in Madrid, concurs: “The Islamists gathered information from... news reports and government websites, such as the Defense Ministry web site, which contained a lot of information.”⁵⁵ Indeed, a week after coordinating the Madrid bombings, Jamal Ahmidan consulted the online versions of several periodicals, including *El País*, *El Mundo*, *La Razón*, the BBC, and CNN, apparently looking for information about the police investigation. One *La Razón* article he read reported that Spanish authorities had just arrested five people in connection with the robbery of explosives used in the attacks.⁵⁶ From this and other reports, Ahmidan likely inferred that the police were hot on his trail, critical intelligence that may have helped him and his colleagues avoid capture for two more weeks.

The Role of the Internet

These comments suggest that at least some militants are capable of exploiting computer-mediated communications technologies, such as the Internet, to gather information about their activities. This knowledge can be used by militants to plan specific attacks, communicate with their supporters, or respond to law enforcement efforts to disrupt them. A counter-terrorism official in London observes that militants “communicate instructions over the Internet” for counter-surveillance purposes, “to

⁵⁴ PI interview with U.S. State Department official, Madrid, Spain, June 25, 2007.

⁵⁵ PI interview with former official in the Aznar administration, Madrid, Spain, June 8, 2007.

⁵⁶ Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): p. 57.

prevent the disruption and infiltration of their communications and operations.”⁵⁷ Two police officers in Ceuta insist that militants use the World Wide Web in order to gather information in preparation for attacks. “They download operations manuals, instructions for bomb-making” from websites and watch “videos that show how to build bombs and participate in chat rooms that discuss bomb-making techniques.”⁵⁸ Jamal Ahmidan and his fellow Madrid bombers reportedly downloaded an instructional manual from the Global Islamic Media website that authorities believe they used to plan and carry out their attacks. The manual, “Preparations chain for the struggle” (*Cadena de preparativos para la lucha*) contained suggestions for placing bombs inside hand bags or “something similar” (the Madrid bombers used backpacks) and how to communicate by cell phones without attracting law enforcement surveillance.⁵⁹

In general, the Internet has allowed militants to create an “online” community of practice, where, as one U.S. State Department official in Madrid puts it, “they learn government counter-measures, share techniques for doing things, and connect to a broader, virtual global Islamist network.”⁶⁰ This is an important development given the difficulties of maintaining real world training camps in the face of a hostile counter-terrorism environment. In comparing the IRA with Islamic militants, a former Metropolitan police official says that the “Internet is the biggest change,” from when the *Provos* engaged in terrorism:

⁵⁷ PI interview with Detective superintendent, Counter-terrorism command, Metropolitan Police, London, United Kingdom, July 19, 2007.

⁵⁸ PI interview with two counter-terrorism police inspectors, Ceuta, Spain, June 18, 2007. Also, PI interview with former official, Guardia Civil, Madrid, Spain, June 25, 2007.

⁵⁹ Pere Escobar Solsona, “Tras el rastro electrónico de un atentado,” *El País* (October 25, 2007), http://www.elpais.com/articulo/espana/rastro/electronico/atentado/elpepuesp/20071025elpepinac_12/Tes [August 5, 2008]; Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): p. 145.

⁶⁰ PI interview with U.S. State Department official, Madrid, Spain, June 25, 2007.

The IRA used the Internet, mostly for spreading its propaganda and we know they used it for communications. But they were also wary of how they used the Internet. It wasn't a huge factor for them, like it is for the Islamists today. The IRA would store information on their PCs, but they didn't use the Internet to research potential targets. They felt the Internet was too insecure and they were very big on security precautions. Perhaps it was a generational thing as well; they didn't feel as comfortable with the communications technology as people are today... The online trade publications, such as Al Battar, which are tailor made to current operations, you didn't find this sort of thing with the IRA. With the IRA, one-to-one personal interaction and information sharing was most important, these guys are trying to get beyond this a bit through their online publications.⁶¹

Other informants, including Islamic activists in London, emphasize the Internet's growing role in radicalizing young men in Europe and elsewhere, which is consistent with the recent work of some scholars.⁶² Firebrand preachers and jihadi recruiters have reportedly exploited the Internet to communicate their message to local youth. A community activist in East London describes how some local recruiters use electronic communications in their efforts to radicalize young men. "They use email and text messages to keep up to date with recruits, to keep a topic of discussion hot, to discuss what's actually going on, and to communicate about reconnaissance."⁶³ Another youth worker discusses how "radical preachers" use the Internet to spread their message and communicate with their supporters, even after they have been incarcerated or deported. "Their followers are still here, they haven't gone away. Though they lack face-to-face access with their teachers, they still buy their books and tapes on the Internet."⁶⁴ While some preachers convicted of fomenting violence, such as Abu Hamza, were imprisoned, "their ideology is not. Or rather it's both in and outside the prison, and on the

⁶¹ PI interview with Detective inspector, Metropolitan Police, Specialist Operations, August 9, 2007.

⁶² Marc Sageman, for example, argues that beginning in 2004 online radicalization started to replace face-to-face radicalization among European jihadists. See Marc Sageman, *The Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia: University of Pennsylvania Press, 2008), especially Chapter Six.

⁶³ PI Interview with community activist, East London, August 3, 2007.

⁶⁴ PI interview with Salafi activist and youth worker, London, August 6, 2007.

Internet.”⁶⁵ The informant provides an example of a militant preacher who was barred from returning to Britain after leaving the country for what was supposed to be a brief trip to Lebanon in 2005:

Omar Bakri, who was not allowed to return from Lebanon, maintains contact with his followers and spreads his message through chat rooms, websites. His followers visit him... The ideology is available on various sites. These guys... are still respected as heads/sheikhs of ideology in Great Britain. People still say, ‘My Sheikh... says this,’ invoking their leader’s authority in discussion.”⁶⁶

Another informant, a senior-level member of the Hizb ut-Tahrir, an Islamist party that builds sophisticated websites to help spread its vision of establishing an Islamic Caliphate in the Middle East, also acknowledges the Internet’s importance as a communications tool, while suggesting that the content and appeal of the message is more decisive than the tool itself.

You can’t be a political party and not be utilizing the Internet these days. Every major political party whether Islamic or secular has a web presence. But I don’t want to overplay the importance of the Internet. We aim to change public opinion. The ideas and the values we espouse are more important than the means by which we espouse them.⁶⁷

Information Costs of Terrorism

Respondents that stress the importance of open sources of communication for militants also discount the knowledge needed to carry out terrorist attacks. The information costs of terrorism are low, according to these informants, in part because terrorism does not require much know-how, but also because the knowledge that is needed is widely available, particularly in the Internet age. For example, one American

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*

⁶⁷ PI interview with Hizb ut-Tahrir Britain executive committee member, London, August 20, 2007. For an example of a sophisticated Hizb ut-Tahrir website, see <http://www.hizb.org.uk/hizb/> [last accessed September 11, 2008].

intelligence official that emphasizes the value of *CNN* and other media outlets for spreading al Qaeda's message observes that "we make it out to be a big secret about learning to be a terrorist, but it's really not that hard."⁶⁸ She offers herself as a hypothetical example to illustrate the ease with which violent knowledge can be acquired, while acknowledging that different attacks vary in terms of sophistication—and information costs. "If I had a week," she suggests, "I would know how to turn my car into a bomb. I don't think it's that hard. Of course, you could say they want to do something symbolic, a 9/11 type thing. This requires more work and preparation. But a lot of terrorist attacks are not that sophisticated. It's very easy to take a gun and kill five people."⁶⁹ "A lot of these activities are relatively easy," adds an FBI intelligence analyst, referencing an alleged plot to attack a military base in New Jersey that was broken up by law enforcers in May 2007. "It's easy to do a Fort Dix, shoot 'em up type attack... Our fear regards how well and how easily the capability needed to carry out attacks is diffused."⁷⁰

These government respondents underscore an important point: many terrorist attacks, particularly shootings and crude bombings, do not impose substantial information costs on the perpetrators. The Internet has lowered the information costs for such attacks even further, by making basic terrorist *techne* more readily available to aspiring militants through websites and online chat rooms. Numerous online forums provide documents,

⁶⁸ PI interview with American official, London, United Kingdom, October 24, 2007.

⁶⁹ *Ibid.*

⁷⁰ PI interview with intelligence analyst, Federal Bureau of Investigation, US Embassy, London, United Kingdom, October 29, 2007. For more on the Fort Dix plot, see Christine Hauser and Anahad O'Connor, "6 Arrested in Plot to Attack Fort Dix," *New York Times* (May 8, 2007), <http://www.nytimes.com/2007/05/08/us/08cnd-dix.html> [Accessed September 11, 2008]; and David Kocieniewski, "6 Men Arrested in a Terror Plot Against Fort Dix," *New York Times* (May 9, 2007), <http://www.nytimes.com/2007/05/09/us/09plot.html> [Accessed September 11, 2008].

videos, and chat room transcripts containing bomb-making recipes and other do-it-yourself preparations.

Notwithstanding the Internet's role in diffusing terrorist *techné*, it is important to keep in mind that the amount of knowledge involved in preparing for and executing successful terrorist attacks is a variable, not a constant. As the American intelligence official cited above suggests, the knowledge required for a particular attack will fluctuate, depending on the sophistication of the plot and the technology involved. Attacks with relatively low information costs, such as shootings and even some crude car "bombings," like those attempted in London's West End and Glasgow in the summer of 2007, may be undertaken by perpetrators that gathered much of the technical information they needed through open communication sources, including the Internet. More sophisticated operations, such as the 9/11 attacks or London bombings in 2005, typically involve greater preparation and higher information costs.

In fact, numerous respondents stress the difficulty and information costs involved in many attacks. "People forget that it's difficult to conduct an attack," explains an intelligence analyst from the British Foreign and Commonwealth Office. "To build something, an explosive device, is difficult. It takes a certain amount of training, not only to build explosives, but to avoid security forces, and to engage in general operational security."⁷¹ "There's a lot they [the terrorists] need to learn," adds a counter-terrorism official from the London Metropolitan Police. "They have to learn about fraud, how to make bombs. They need knowledge for all this."⁷²

⁷¹ PI interview with counter-terrorism analyst, Foreign and Commonwealth Office, United Kingdom, London, July 24, 2007.

⁷² PI interview with Detective superintendent, Counter-terrorism command, Metropolitan Police, London, United Kingdom, July 19, 2007.

Interestingly, informants that stress the difficulty and high information costs of terrorism tend to cite more complex activities, such as manufacturing explosive devices, in support of their position, while those that stress the ease and low information costs of terrorism tend to emphasize simple activities, like discharging firearms. In fact, according to incident-level data in the *Global Terrorism Database (GTD 2)*, explosives and firearms are by far the two most commonly used weapons in terrorist attacks. Explosives, including bombs, dynamite, and other munitions, were employed in approximately 3,996 terrorist attacks between 1998 and 2004, representing fifty percent of the incidents in that period. Firearms were used in 2,369 terrorist attacks between 1998 and 2004, representing more than thirty percent of the incidents during those years.⁷³ Given that explosives were the weapons of choice in approximately half the terrorist attacks during this period and the greater information costs involved in acquiring and manufacturing explosives, examples that focus only on shooting incidents may understate the information costs associated with terrorism.⁷⁴

Moreover, even the most rudimentary attacks, including shootings, require some physical coordination and tactile knowledge, or *mētis*, which is generally not

⁷³ Other weapon types used in attacks during this period include biological (9 attacks), chemical (19), fake weapons (7), incendiary (522), melee (208), sabotage equipment (15), other (90), and unknown (584). While the GTD treats firearms and explosives as discrete events, some attacks use both types of weapons. The GTD is the only open source database that includes both international and domestic incidents. However, given the difficulty of gathering data on all domestic-level terrorist incidents throughout the world, these data should be interpreted with caution. The data provided here may undercount the number of incidents that actually occurred. However, it is not clear what systematic bias on weapons type may emerge from under-reporting. The *Global Terrorism Database* is maintained by the National Consortium for the Study of Terrorism and Responses to Terrorism (START) at the University of Maryland, <http://209.232.239.37/gtd2/> [Accessed June 13, 2008]. Unfortunately, the *Terrorism Knowledge Base* data set maintained by the National Memorial for Prevention of Terrorism has been discontinued, preventing the PI from accessing these data.

⁷⁴ Unfortunately, the incident data maintained by START often does not include information on the type of explosive device used in the attack and whether it was purchased or manufactured by the perpetrators. Some explosives, such as Molotov cocktails, are easier to make than others, incurring fewer information costs on the attackers. Similarly, acquiring an already made explosive, as in the case of the Madrid bombings in 2004, is less (information) costly than building one from scratch.

acknowledged by respondents who stress the low information costs of terrorism.

Because *mētis* is difficult to codify in documents and is often learned by doing, it imposes substantial information costs on practitioners. Consider the relatively easy example of learning how to discharge a firearm. To gather information about the specifications of a firearm and basic instructions on how to operate it (*techne*) one can study the operations manual or be taught by an experienced practitioner. However, to gain even a modest degree of proficiency in using the rifle or gun (*mētis*) one must actually handle, load, and fire the weapon. “There is a practical aspect to this,” explains a former counter-terrorism agent with the State Department. “It is almost like sitting in a firearms class and saying here is a nine millimeter pistol and this is the velocity and these are the rounds that you are carrying and this is how you take it apart. But you still have to go to the range.”⁷⁵ To acquire greater proficiency in shooting, including the ability to perform adequately under stressful conditions, one must go to the firing range and practice. Even the simplest actions involved in terrorism require some *mētis*, more so when the activity in question, such as manufacturing explosives or tradecraft, is more complicated, involving additional action and knowledge of local conditions. *Mētis* requires practice—and practice increases the information costs of the activity.

The Internet’s Limitations for Learning Terrorism

The need for practice underscores an important limitation regarding the Internet’s role as a source of violent know-how. In recent years, a number of studies have highlighted the value of extremist web sites, chat rooms, blogs, and other online

⁷⁵ PI telephone interview with former counter-terrorism official, U.S. State Department (August 13, 2008).

resources for terrorists and insurgents around the world. While numerous reporters and scholars detail the myriad and creative ways militants have exploited the Internet to spread propaganda, indoctrinate followers, raise funds, recruit supporters, and train recruits, few have critically examined the accuracy and reliability of online training materials available to terrorists. Instead, these reports typically describe different bomb-making and guerrilla warfare manuals that can be obtained through password protected discussion boards and websites that provide document uploading services, without evaluating the accuracy and reliability of these knowledge-based artifacts. While the Internet clearly has great potential as a source of online radicalization and “teaching terror” to aspiring militants, it is not clear whether and how these computer-mediated technologies actually facilitate hands-on learning, and whether the Internet effectively transfers experiential *mētis*, as opposed to more easily acquired *techne*.

When asked to consider the distinction between *mētis* and *techne*, several informants interviewed in this study suggest that the Internet’s value as a source of terrorist tradecraft is overblown. A counter-terrorism intelligence analyst with the British Foreign and Commonwealth Office points out that while many bomb-making manuals, which contain general technical knowledge, are now readily available online, building an explosive device is “not so easy as reading something from the Internet. Bomb-building requires practical experience.”⁷⁶ “The practical knowledge of actually putting together bombs often goes beyond the Internet,” admits a counter-terrorism official from the

⁷⁶ PI interview with counter-terrorism analyst, Foreign and Commonwealth Office, United Kingdom, London, July 24, 2007.

London Metropolitan Police, which explains why many “Islamist” bomb-making experts “have received some sort of training overseas.”⁷⁷

Training is essential, particularly when it provides fledgling bomb-makers local, situated knowledge and the opportunity to practice, to learn how to construct bombs from locally available materials using their own hands. Emphasizing the importance of such hands-on instruction, one former counter-terrorism agent discusses a hypothetical example, from the terrorist’s perspective:

You start thinking, well, how do you get bomb-making skills?... Where can I go to get my hands on detonators and C4 or Semtex, or powder explosives? How do I learn how to put together this device without killing myself? Where is there a ready supply of these kinds of materials without drawing attention to myself?⁷⁸

One place, he answers, is Iraq, “where the sheer number of jihadists flooding [in] ... to learn these skills was unbelievable compared to what we were dealing with in Afghanistan many years ago.”⁷⁹ Other informants emphasize the federally administered tribal areas of Pakistan, which have emerged as an important sanctuary for Al Qaeda and Taliban militants in recent years. “Training in Pakistan is important,” adds a senior investigative officer from Scotland Yard’s counter-terrorism command “in part because of the bad information that’s available on the Internet.”⁸⁰ “You can’t compensate for the lack of hands-on-training,” explains a counter-terrorism analyst with the Royal United Services Institute for Defence and Security Studies, observing that several of the most

⁷⁷ PI interview with Detective superintendent, Counter-terrorism command, Metropolitan Police, London, United Kingdom, July 19, 2007.

⁷⁸ PI telephone interview with former counter-terrorism official, U.S. State Department (August 13, 2008).

⁷⁹ PI telephone interview with former counter-terrorism official, U.S. State Department (August 13, 2008).

⁸⁰ PI interview with senior investigative officer, Counter-Terrorist Command, Specialist Operations, Metropolitan Police, London, United Kingdom, September 5, 2007.

significant terrorist plots in the United Kingdom involved people with bomb-making expertise, acquired at training camps in Pakistan and elsewhere.⁸¹

Testimony from the Operation Crevice trial, which ended in the conviction of five men for their involvement in a 2004 plot to detonate fertilizer-based explosives around London, underscores the importance of practical, hands-on training. In his testimony during the trial, Mohammed Junaid Babar, a participant in the conspiracy who later turned state's evidence, describes how he and his co-conspirators practiced building explosives using different fertilizers, including ammonium nitrate and Di-Ammonium Phosphate (DAP). After Babar and his colleagues successfully detonated the ammonium nitrate bomb, they decided to test a second bomb using DAP. Babar explained why: "It was in case we couldn't get ammonium nitrate we wanted to see if this was a suitable substitute."⁸² The explosion failed because "the chemicals did not react properly," providing Babar and his colleagues useful feedback for their planned operation.

Evidence that emerged following the 2004 Madrid bombings also suggests the importance of first-hand practice, even when, as in this case, the perpetrators simplified their task by acquiring ready-made explosives. Prior to the attacks, Jamal Ahmidan and his colleagues obtained more than one hundred kilograms of Goma-2 Eco dynamite from a mine in Asturias province, in northwest Spain. To assemble the bombs, the perpetrators still had to attach detonators and triggering mechanisms to the dynamite. When assembling these dynamite-bombs at a house in Chinchón they rented for this purpose,

⁸¹ PI interview with counter-terrorism analyst, Royal United Services Institute for Defence and Security Studies, London, United Kingdom, August 2, 2007.

⁸² Testimony of Mohammed Junaid Babar, Operation Crevice trial, Central Criminal Court, London, March 28-29, 2006. Copy of Babar's testimony provided to the PI by Mr. Jason Burke, senior reporter, *The Observer*.

the bombers reportedly tested the cell phone triggers and detonators, before connecting them to the explosives, to make sure they functioned properly.⁸³

As these examples suggest, developing a feel or “knack” for building bombs and performing other violent acts requires learning-by-doing, something that is difficult to acquire purely from the Internet, no matter how many web sites one visits, no matter how many online instructional videos one watches, no matter how many chat rooms one visits. “Terrorists can only learn so much by watching indoctrination tapes,” explains the former State Department counter-terrorism agent. “They still have to go out and practice... you have certain skills that really need to be practiced... like the bomb-maker.”⁸⁴ A former counter-terrorism official with the Metropolitan Police makes this point with an analogy comparing building bombs to assembling furniture:

Most of the time it’s going to be more difficult to do it [build a bomb] based solely off information from the Internet than through actual practice. It’s like putting together furniture for the first time from instructions that come with the purchase versus putting together furniture with the knowledge gained from doing it.⁸⁵

Of course, difficult does not mean impossible. A small number of terrorists, such as the perpetrators behind the May 2003 bombings in Casablanca and the April 2005 bazaar bombings in Cairo, succeeded in building homemade explosive devices from instructions they reportedly downloaded from the Internet.⁸⁶ But to date the quality, and destructive impact, of these munitions appears limited. Nor is it clear from published accounts whether the perpetrators of these attacks had the opportunity to practice building

⁸³ José María Irujo, *El Agujero: España invadida por la yihad* (Madrid: Aguilar, 2005): 292; Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007).

⁸⁴ PI telephone interview with former counter-terrorism official, U.S. State Department (August 13, 2008).

⁸⁵ PI interview with former Metropolitan police official, Specialist Operations, July 26, 2007.

⁸⁶ Marc Sageman, *Understanding Terror Networks* (Philadelphia: University of Pennsylvania Press, 2004): 53-54; Marc Sageman, *The Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia: University of Pennsylvania Press, 2008): p. 110.

their bombs and test them to see if the recipes worked, a common practice among terrorists.

In fact, successful bomb-making often requires a combination of *mētis* and *techne*. Abstract technical knowledge, as found in codified bomb-making recipes, is essential because it contains precise measurements for combining different, often volatile chemicals in precise ways to produce the desired compounds. To be useful, this technical knowledge must be clearly expressed in coherent, step-by-step instructions that readers can follow. However, even when bomb-making recipes are accurate and reliable, which often times they are not, applying this abstract knowledge to meet local needs and circumstances requires practice, the act of assembling bombs from different artifacts with one's own hands, repeatedly. With practice, bomb-makers develop the ability to combine abstract know-what with experiential know-how. This intuitive blending of the abstract with the concrete forms the cornerstone of real world expertise. In this sense, terrorist *techne* and terrorist *mētis* are complementary, not mutually exclusive.

All this, of course, assumes the bomb-making instructions are accurate. In reality, oftentimes they are not. Even respondents that stress the importance of the Internet for terrorist communication and information gathering concede that online training manuals often contain mistakes. Acknowledging that online recipes are error-prone, one of the counter-terrorism police officers in Ceuta admits, "I wouldn't build a bomb with my own hands based on an Internet manual," a sentiment echoed by other informants.⁸⁷ An FBI official based in London declares that many bomb-making recipes available on the Internet contain inaccurate technical information. There are lots of explosives recipes

⁸⁷ PI interview with two counter-terrorism police inspectors, Ceuta, Spain, June 18, 2007.

“out there,” he says, but their technical accuracy “is another matter.” “Many of these contain problems,” he adds charitably.⁸⁸

Indeed, one munitions expert the PI consulted, an advisor on explosives to the British and American governments, characterizes many online bomb-making recipes as “absolute rubbish.”⁸⁹ The PI spent the better part of a day with this expert, poring over online bomb-making manuals, including *The Islamic Terrorist Explosive Manual* and *The Muhajadeen Explosives Handbook*, along with other manuals and a chat room transcript from a militant web site, to assess the accuracy of their deadly preparations. The introduction to *The Islamic Terrorist Explosive Manual* highlights the professionalism and quality of the document and claims the contributors to the manual are university-educated explosives experts. Notwithstanding the contributors’ reputed laurels, many of their recipes are riddled with mistakes, leading the consultant to compare their “expertise” to schoolboys “just learning chemistry.”⁹⁰

The manual routinely, and mistakenly, refers to agricultural sulfate, when the contributors really mean sulfur. One recipe provides instructions for making methyl nitrate, rather than nitro methane, the compound the manual’s contributors claim to be making. The manual frequently, and confusingly, combines recipes for different types of explosives into a single preparation, without clearly distinguishing where one recipe leaves off and the other begins. The diagrams in the document are crude and not drawn to scale, suggesting to the consultant that the contributors lack formal training in

⁸⁸ PI interview with Federal Bureau of Investigation official, US Embassy, London, United Kingdom, October 29, 2007. Also see the discussion in Michael Kenney, *From Pablo to Osama: Trafficking and Terrorist Networks, Government Bureaucracies, and Competitive Adaptation* (University Park: Pennsylvania State University Press, 2007): p. 140.

⁸⁹ PI interview with explosives expert, England, August 21, 2007.

⁹⁰ *Ibid.*

“conventional international science education.”⁹¹ “Somebody with a degree in chemistry or...someone who specialized in high school in chemistry should be able to see that some of these things can’t be right,” the consultant adds. “There are glaring mistakes.”⁹²

In short, the shoddiness and imprecision of the recipes in *The Islamic Terrorist Explosive Manual* belies the alleged professionalism of its contributors. Asked whether a novice would be able to build a bomb from downloading this document from the Internet and reading it, along with other manuals he examined, the consultant emphasizes this would be very difficult. The recipes contain numerous errors that he, an explosives expert, can recognize but that a dilettante would not, preventing the would-be terrorist from being able to build a bomb based on most of the recipes he examined. Those with the knowledge necessary to identify such mistakes would not likely need the online manual in the first place, or at least know where to acquire more accurate technical information.⁹³ While the consultant stresses that some of the recipes are “accurate enough” that a “competent” person following them could build dangerous explosives, he adds that for every one recipe that works there are four or five others that are complete “rubbish.” “Most of it,” he concludes “is the blind teaching the blind.”⁹⁴

This assessment, to be sure, involves a small sample of the online training manuals available to aspiring terrorists. These results should not therefore be considered conclusive, by any stretch of the interpretive imagination. More systematic studies,

⁹¹ *Ibid.*

⁹² *Ibid.*

⁹³ Indeed, there is evidence that some of the more sophisticated terrorist plotters, such as Dhiren Barot, an experienced militant who pleaded guilty to planning several attacks in the United Kingdom and the United States, conducted research for explosive devices using standard reference books, many of which are available in libraries and for purchase from online retailers.

⁹⁴ PI interview with explosives expert, England, August 21, 2007.

involving the use of expert informants that can evaluate the practical value of existing online terrorism manuals, are needed. At the very least, however, a note of caution is in order when describing online bomb-making manuals allegedly used by militants. This note of caution is currently absent from many existing studies of terrorism and the Internet. Many scholars and reporters highlight the operational value of these documents without examining, even in a cursory fashion, the accuracy and reliability of the information they contain. In doing so, these observers essentially ignore the critical question of whether militants can actually use these documents to build bombs and other destructive devices.

This report, in contrast, suggests that inexperienced terrorists, who lack the *techné* to distinguish accurate recipes from mistaken ones, and the *mētis* to translate abstract knowledge into concrete artifacts using locally available materials, may be incapable of exploiting these recipes to lethal effect. One cannot become an expert bomb-maker simply by reading an online training manual, no matter how fervent his devotion to the cause. Developing such expertise requires a minimum level of scientific education in chemistry and the opportunity to develop the necessary tactile talents through practice, something that many militants do not currently possess. Terrorist wannabes that are forced to rely exclusively on Internet manuals to build bombs will not likely achieve the same level of operational skill and expertise as those who have received specialized, hands-on training directed by knowledgeable veterans. Some Internet-directed amateurs will still succeed in building crude explosive devices, but the quality and lethal effectiveness of these munitions will be limited by the perpetrators' lack of real world experience.

Social Networks and “Closed” Information Sources

While many informants stress the importance of “open source” information, such as press reports, for preparing terrorist attacks, several respondents point out that militants are not limited to such information sources. Terrorists also exploit knowledge from “closed” sources, such as communications within their own social networks. “What is consistent in terms of information acquisition,” explains an FBI official in London, “is the importance of personal contacts for suicide bombers and other terrorists.”⁹⁵ Terrorists “gather information by word of mouth from other trusted cell members or acquaintances in their broader social network,” observes a Madrid-based State Department official.⁹⁶ This includes tips about ongoing police operations, such as warnings to fellow cell members or friends and acquaintances to be careful “because something is up.”⁹⁷ The emphasis on trust is significant because, as organizational sociologists have long recognized, people often value information from sources they “have dealt with in the past and found to be reliable.”⁹⁸ Social networks based on shared ideals, trust and reciprocity are rich sources of information, enhancing participants’ “ability to transmit and learn new knowledge and skills.”⁹⁹ Social networks not only provide links to other, like-minded militants, they also provide access to knowledge and expertise, something that isn’t widely recognized among terrorism scholars.

⁹⁵ PI interview with Federal Bureau of Investigation official, US Embassy, London, United Kingdom, October 29, 2007.

⁹⁶ PI interview with U.S. State Department official, Madrid, Spain, June 25, 2007. This official also underscores the transnational nature of some social networks, where militants in one country such as Spain will communicate with their contacts in Iraq, Syria or elsewhere, sometimes through trusted intermediaries.

⁹⁷ *Ibid.*

⁹⁸ Walter W. Powell, “Neither Market nor Hierarchy: Network Forms of Organization,” in *Research in Organizational Behavior* 12, edited by Barry M. Staw and L.L. Cummings (Greenwich, Conn.: JAI, 1990): 304.

⁹⁹ *Ibid.*

Social networks that include veteran militants are particularly important for gathering information and preparing for attacks. “To conduct [terrorist] actions,” observes a police inspector in Spain, “you need access to the knowledge necessary to perform these actions, usually through contact with knowledgeable veterans.”¹⁰⁰ If potential terrorists, he adds, do not have “the right contacts,” if they don’t “know someone who could teach them, it’s much more difficult for them to become actively involved.”¹⁰¹ Veterans facilitate involvement in terrorism by teaching novices concepts and values that support political violence, behavioral norms on how to treat fellow militants and outsiders, and tactical know-how for conducting attacks, including how to case targets, build bombs, lay landmines, safeguard operational security, and handle different types of firearms. Militants with overseas experience fighting or training for “jihad” are valuable resources for militant groups and highly sought after by fellow travelers. In Britain and Spain experienced “jihadists” like Djamel Beghal and Amer Azizi helped inspire local youth and recruited new supporters to the cause, often by meeting with impressionable young men and sharing stories based on their experiences in Afghanistan and elsewhere.¹⁰²

Several recent foiled plots and attacks in the United Kingdom were reportedly led by more experienced militants, including Mohammed Siddique Khan from the 7/7 bombings, Omar Khyam from Operation Crevice, and Dhiren Barot from the 2004 fertilizer-based bomb plot. “All these plots appear to involve people who were more experienced in the group, who dominated the group and shared their knowledge and

¹⁰⁰ PI interview with police inspector, UNETA, Madrid, Spain, June 9, 2007.

¹⁰¹ *Ibid.*

¹⁰² Sean O’Neil and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006); José María Irujo, *El Agujero: España invadida por la yihad* (Madrid: Aguilar, 2005); Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007).

experience with the less experienced members,” explains a London-based counter-terrorism intelligence analyst.¹⁰³ Other “veterans” may include seasoned criminals that draw on their illicit expertise and criminal associations to prepare for politically motivated terrorist attacks.¹⁰⁴ Jamal Ahmidan, one of the operational leaders of the 2004 Madrid bombings, was an experienced drug trafficker who traded hashish for explosives and detonators supplied by Emilio Suárez Trashorras and other criminals that drew on their own contacts and local knowledge to steal the explosive materials from the Conchita mine in Asturias. Zakaria Miloudi, one of the leaders of the 2003 Casablanca bombings, was also an experienced hashish dealer, whose criminal activities provided the funds for the coordinated attacks that killed forty-five people, while wounding over one hundred more.¹⁰⁵

In addition to trusted friends and knowledgeable veterans, extremists also collect useful information simply by following terrorism tradecraft. When preparing for attacks, militants typically surveil potential targets, taking note of the amount of human traffic, existing security measures, and infrastructural vulnerabilities at each site. Militants later analyze this information with an eye towards designing effective attack plans, or shifting their focus to other, less protected sites. Once targets have been selected for attack, terrorists may conduct practice runs, gathering additional tactical intelligence and simulating the attack by carrying articles that will be used later, such as a bag for transporting explosive devices. If the projected target is a building or other fixed location, the would-be attackers may spend time observing the site from a nearby

¹⁰³ PI interview with counter-terrorism analyst, Royal United Services Institute for Defence and Security Studies, London, United Kingdom, August 2, 2007.

¹⁰⁴ PI interview with former Spanish government intelligence official, Madrid, June 11, 2007.

¹⁰⁵ Mark S. Hamm, *Terrorism as Crime: From Oklahoma City to Al Qaeda and Beyond* (New York: New York University Press, 2007) p. 199.

location, such as a neighborhood coffee shop, walking around the neighborhood, entering the site itself, gathering information on the level of human activity, and determining the best time for an attack.¹⁰⁶ If the target is a plane, train, bus, or other mode of transportation, the perpetrators may ride the vehicle, collecting information on the physical lay-out and the number of passengers on board.

“The 7/7 bombers [in London] did a reckoning beforehand,” explains a counter-terrorism official with the London Metropolitan Police. “They carried out a practice run, riding the subways with their knapsacks.”¹⁰⁷ Indeed, on June 28, 2005, just over a week before the attacks, Mohammed Siddique Khan, Shehzad Tanweer, and Germain Lindsay traveled from Beeston to Luton and then to King’s Cross station in London, where they rode around the city on the Tube.¹⁰⁸ “The Islamists, definitely conduct surveillance,” adds a State Department official in Madrid. “They conduct trial runs of their attacks. For example, the M11 bombers rode around on the metro before the attacks,” though he cautions “it’s difficult to say whether they were just riding the subway or preparing for an attack,” a caveat which applies to the 7/7 bombers as well.¹⁰⁹

Sharing Information

When asked if militants share information with each other, respondents uniformly responded in the affirmative, discussing a variety of ways in which such knowledge

¹⁰⁶ PI telephone interview with former counter-terrorism official, U.S. State Department (August 13, 2008).

¹⁰⁷ PI interview with Detective superintendent, Counter-terrorism command, Metropolitan Police, London, United Kingdom, July 19, 2007.

¹⁰⁸ After the 7/7 attacks, police also discovered train tickets in the apartment where the perpetrators built the explosives, suggesting they had made additional trips to London several months earlier. British House of Commons, Home Office, *Report of the Official Account of the Bombings in London on 7th July 2005* (May 11, 2006): p. 24.

¹⁰⁹ M11 is a Spanish acronym meaning 11 de marzo, or March 11th, to signify the 2004 bombings in Madrid. PI interview with U.S. State Department official, Madrid, Spain, June 25, 2007.

exchange occurs. “The jihadists talk amongst each other,” the two counter-terrorism police officers in Ceuta confirm.¹¹⁰ “People will meet and chat and share information,” observes a counter-terrorism official with London’s Metropolitan Police.¹¹¹ “Groups get together to discuss things,” says the FBI official in London. They pass along information “by word of mouth, through the Internet, telephone, all different communication methods.”¹¹² Violent extremists share knowledge “through stories, the Internet, chat rooms, eating dinner, even singing songs,” adds an intelligence analyst from the British Foreign and Commonwealth Office.¹¹³ The police officers in Ceuta complain that local militants exploit their civil liberties and political rights, including freedom of speech and freedom of association, not to discuss their “radical” views in public, but rather to meet with people of similar mindset, to make friends and acquaintances, and to recruit potential supporters to the cause.¹¹⁴

Several informants stress the informal, even fortuitous nature of information sharing among jihadists, where young men get together to watch a movie, discuss recent events, or engage in a physical activity of some sort, such as playing football or paintballing.¹¹⁵ “They meet through informal social settings,” explains a State Department official in Spain. “They’ll meet up in *halal* butcher shops, mosques, where

¹¹⁰ PI interview with two counter-terrorism police inspectors, Ceuta, Spain, June 18, 2007.

¹¹¹ PI interview with Detective superintendent, Counter-terrorism command, Metropolitan Police, London, United Kingdom, July 19, 2007.

¹¹² PI interview with Federal Bureau of Investigation official, US Embassy, London, United Kingdom, October 29, 2007.

¹¹³ PI interview with counter-terrorism analyst, Foreign and Commonwealth Office, United Kingdom, London, July 24, 2007.

¹¹⁴ PI interview with two counter-terrorism police inspectors, Ceuta, Spain, June 18, 2007.

¹¹⁵ Of course, this does not mean that any group of young Muslim men that engage in such activities are budding terrorists. In fact, Islamic activists working on “counter-radicalization” in London and Ceuta incorporate physical activities, including soccer, boxing, and paintballing, into their youth development programs, as a way of fostering team building among participants. PI interview with Abdul Haqq Baker, Chairman, Brixton Mosque and Islamic Cultural Centre, London, United Kingdom, October 23, 2007; with President, Union of Islamic Communities in Ceuta, Spain, October 11, 2007.

they talk with each other and share information.”¹¹⁶ Such encounters appear to be directed as much towards collective indoctrination in “jihadist” ideology and team building as they are towards sharing tactical information about their activities and government counter-terrorism efforts. “The meetings they have are to build and share their in-group world view,” explains a counter-terrorism official in the Spanish Civil Guard. He adds that the information shared at these meetings “are based more on harangues than technical knowledge.”¹¹⁷ “*Halal* butcheries, *madrassas*, cultural centers, mosques, so-called “Islamic” businesses,” observes the Spanish legislator. “These are all important for radicalization, places where guys can hang out and indoctrinate each other.”¹¹⁸

The meetings and social gatherings convened by one group of young men, several of whom were later implicated in the 2003 Casablanca attacks and the 2004 Madrid bombings, provide a striking and diagnostic example. In the years leading up to these attacks, a fluid group of young men met regularly in Madrid and its environs, usually in different participants’ apartments. These meetings were closed to outsiders, for fear of infiltration by police informants. To attend, one had to express an affinity for the group’s jihadist ideology and be invited by one of its members. The young men met frequently: daily during the Islamic holy month of Ramadan and weekly afterwards. These reunions lasted anywhere from three to eight hours. During Ramadan, meetings often lasted all night, from sunset until dawn the next day. In these extended encounters, participants

¹¹⁶ PI interview with U.S. State Department official, Madrid, Spain, June 25, 2007.

¹¹⁷ PI interview with Lieutenant Colonel, Unidad Central Operativa, Direccion General de la Policia y de la Guardia Civil, Madrid, Spain, June 12, 2007.

¹¹⁸ PI interview with member, Spanish national congress, Madrid, Spain, June 27, 2007. Also, see Javier Jordán and Fernando M. Mañas, “External Signs of Radicalization and Jihadist Militancy,” *Jihad Monitor Occasional Paper No.4*. (March 3, 2007). Translated by Peter Billerbeck, <http://www.athenaintelligence.org/externals.pdf> [August 6, 2008].

talked about religious topics at length, always returning to the basic theme of jihad, debating the proper conditions for waging it and discussing whether attacks in Morocco, Spain, and other countries were justified under *sharia*.

To support their collective, increasingly militant interpretation of Islam, they watched videos together showing scenes of jihadists fighting in Afghanistan and Chechnya; they listened to taped sermons by militant preachers such as Abu Qatada and Abdullah Azzam; they read books and pamphlets about jihad and discussed their contents within the group; they complained about governments in the Maghreb and Persian Gulf they considered to be un-Islamic, and those they viewed as major oppressors of Muslims, the United States, Britain, and Spain; they even memorized and sang rhythmic songs glorifying jihadist campaigns in Afghanistan and Chechnya.¹¹⁹ One police informant who attended several meetings described them as “spiritual preparation” for jihad.¹²⁰ But the Madrid group did not deny the importance of physical preparation. During weekends group members gathered with other young men for outings at the Alberche river west of the Spanish capital, where they played soccer, swam, ate, prayed, and listened to experienced militants such as Imad Barkat Yarkas and Amer Azizi preach about the necessity of jihad.¹²¹

One of the leaders of the group meetings and a regular participant in the picnics was Serhane ben Abdelmajid Fakhed, a young Tunisian doctoral student who underwent a

¹¹⁹ *Indictment 20/2004*, Committal for Trial (*Auto de Procesamiento*), Juzgado Central de Instrucción Número Seis, Audiencia Nacional, Madrid, signed by magistrate Juan del Olmo (April 10, 2006): pp. 1224-1235.

¹²⁰ *Indictment 20/2004*, Committal for Trial (*Auto de Procesamiento*), Juzgado Central de Instrucción Número Seis, Audiencia Nacional, Madrid, signed by magistrate Juan del Olmo (April 10, 2006): p. 1230.

¹²¹ Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 113-114. For a similar account of group radicalization, centered around the Finsbury Park mosque in north London, see Sean O’Neill and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006).

gradual process of “radicalization,” in which he came to accept *takfiri* doctrine and the legitimacy of carrying out violent attacks on Spanish soil.¹²² Serhane subsequently became one of the ideological or spiritual leaders of the group that carried out the Madrid bombings. In addition to attending the meetings and weekend gatherings at Alberche river, Serhane played soccer with young men in Madrid, some of whom he invited to his house for tea, during which he would talk about the suffering of Arab Muslims in Palestine and show graphic videos depicting the wanton slaughter of Muslim children in Bosnia and Chechnya or listen to sermons from firebrand preachers.¹²³ In this manner, Serhane and his colleagues sought to recruit new members for the group.¹²⁴

Such activities are not limited to Spanish militants. In reflecting on the collective indoctrination of militants in London, a counter-terrorism official with the Metropolitan police draws reference to the Madrid bombers: “they watch videos together and they discuss them afterwards, similar to the Madrid extremists.”¹²⁵ In this manner, militants create collective interpretations of world events, interpretations that are informed by their understanding of *jihad* and their identity as righteous soldiers engaged in a heroic struggle against the “enemies of Islam.”

¹²² Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 113-114, 119; *Indictment 20/2004*, Committal for Trial (*Auto de Procesamiento*), Juzgado Central de Instrucción Número Seis, Audiencia Nacional, Madrid, signed by magistrate Juan del Olmo (April 10, 2006): pp. 1224-1235.

¹²³ Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 112-120, 128; *Indictment 20/2004*, Committal for Trial (*Auto de Procesamiento*), Juzgado Central de Instrucción Número Seis, Audiencia Nacional, Madrid, signed by magistrate Juan del Olmo (April 10, 2006): p. 1346.

¹²⁴ However, the group was also suspicious of outsiders, for fear of infiltration by police informants. Indeed, the police informant that infiltrated the group claimed that he was regarded with suspicion by some members, particularly after one participant, Jamal Zougam, accused him of being an informant.

¹²⁵ PI interview with Detective inspector, Metropolitan Police, Specialist Operations, July 19, 2007.

Mosques as a Source of Radicalization—and Counter-Radicalization

Islamic mosques have come under greater scrutiny in recent years as alleged sites of group “radicalization.” Indeed, a couple of (non-Muslim) informants interviewed in this research emphasize the importance of mosques as sources of radicalization. However, numerous informants, including Islamic activists as well as counter-terrorism officials in the United Kingdom and Spain, stress that these formal religious establishments are not significant locales for information sharing and “radicalization.” While some militants take advantage of large mosques to build social networks and furtively recruit new supporters, they are often obliged to shield their activities from mosque administrators that seek to protect their centers from militancy. Even before 9/11, when some militants openly expressed their views inside established mosques, while leading prayers or during study circles, they were challenged by non-militant leaders who questioned their views and sometimes asked them to leave.

Throughout much of the 1990s, the Brixton Mosque and Islamic Cultural Centre, a Salafi mosque located in one of south London’s tougher neighborhoods, resisted the efforts of several militants that sought to spread their “pure” interpretation of Islam.¹²⁶ As early as 1993, mosque leaders prohibited Abdullah al-Faisal, an outspoken imam who later was later convicted of soliciting murder and inciting racial hatred, from preaching further at their center. Following his ban from the Brixton mosque, al-Faisal, subsequently identified by the British government as a major influence on one of the 7/7 bombers (Germaine Lindsay), held study circles in the private home of one of his supporters. When al-Faisal began to openly talk of taking over the mosque during these

¹²⁶ PI discussions with Detective inspector, Metropolitan Police, Specialist Operations, various dates, summer and fall 2007; Also, see Richard Jackson, “Counter-Terrorism and communities: an interview with Robert Lambert,” *Critical Terrorism Studies* 1, no. 2 (August 2008): p. 297.

meetings, several of his students, including Abdul Haqq Baker, who was an active member of the mosque, rejected his interpretation of Islam and defended the center against al-Faisal's takeover attempt.¹²⁷ The following year mosque trustees elected Baker to lead the mosque, which he and his followers continued to defend from what he describes as *takfiri* influences from al-Faisal and other militant preachers, including Abu Hamza and Abu Qatada, as well as members from Hizb ut-Tahrir, the Islamic party that seeks to reestablish the caliphate.¹²⁸

Confronted by the assertive and, when necessary, physical willingness of the new Salafi leaders to defend their mosque, these militants no longer sought to forcibly take over the center, as Abu Hamza later did at the Finsbury Park mosque in north London.¹²⁹ There, Abu Hamza, a charismatic imam with jihadist credentials, and his young followers used force to intimidate Sufi leaders and transform the mosque into a hotbed of militancy, a place where young militants from Europe and the Maghreb could gather and engage in collective indoctrination, often with the assistance of peripatetic jihadists that used the mosque as a resting place of sorts between campaigns in Afghanistan, Bosnia, and elsewhere.¹³⁰ Realizing that physical intimidation would not work at the Brixton mosque, which catered to street wise black converts, Abu Hamza, Abdullah al-Faisal, and other militant imams instead sought to infiltrate the center with their own supporters.

¹²⁷ PI interview with Abdul Haqq Baker, Chairman, Brixton Mosque and Islamic Cultural Centre, London, United Kingdom, October 23, 2007; Alan Cowell, "Britain Deports Man Accused of Ties to Attacker in '05 Bombing," *New York Times* (May 26, 2007), <http://www.nytimes.com/2007/05/26/world/europe/26britain.html> [August 11, 2008].

¹²⁸ PI interview with Abdul Haqq Baker, Chairman, Brixton Mosque and Islamic Cultural Centre, London, United Kingdom, October 23, 2007.

¹²⁹ See Sean O'Neill and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006). Also, see Richard Jackson, "Counter-Terrorism and communities: an interview with Robert Lambert," *Critical Terrorism Studies* 1, no. 2 (August 2008): p. 297.

¹³⁰ Sean O'Neill and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006): pp. 34-52, 86, 114-115, 133.

“They would be coming outside the mosque and leafleting,” explains Abdul Haqq Baker. “Some of their followers or foot soldiers, as it were, would come into the mosque and, after prayer, talk quietly to other individuals, to [get them to] come to Faisal’s study circle... our fight continued for a number of years with those who were continually coming outside our mosque and inside the mosque to try and actively recruit.”¹³¹

Two of these foot soldiers were Richard Reid and Zacarias Moussaoui, both of whom would later gain international notoriety as Al Qaeda operatives. Reid was a petty criminal and British convert who tried to destroy an American Airlines flight to Miami with a shoe bomb three months after 9/11; Moussaoui was a French Moroccan who lived in London and traveled to the U.S. for flight training, where he was arrested by the FBI three weeks before 9/11.¹³² Reid first visited the Brixton mosque in 1996 following his release from prison for committing burglaries and other crimes. Abdul Haqq Baker encouraged Reid and other ex-convicts who visited his center to give up their illicit lifestyles and accept the orthodox Salafi interpretation of Islam.¹³³ Reid initially accepted Baker’s challenge but soon, along with his friend Zacarias Moussaoui, came under the influence of Abdullah al-Faisal, the former Brixton imam, and Abu Hamza, the militant cleric who incorporated *takfiri* leanings into his teachings at the Finsbury Park mosque. After falling in with these militant imams, Reid and Moussaoui continued to

¹³¹ PI interview with Abdul Haqq Baker, Chairman, Brixton Mosque and Islamic Cultural Centre, London, United Kingdom, October 23, 2007. Also, see PI interview with Salafi activist, Saracen Youth Project, London, United Kingdom, August 29, 2007.

¹³² Sean O’Neill and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006): pp. 215-234.

¹³³ PI interview with Abdul Haqq Baker, Chairman, Brixton Mosque and Islamic Cultural Centre, London, United Kingdom, October 23, 2007; Sean O’Neill and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006): pp. 220-221; CNN, “London mosque leader recalls bomb suspect,” (December 26, 2001), <http://archives.cnn.com/2001/WORLD/europe/UK/12/26/baker.cnn/index.html> [Accessed August 15, 2008].

visit the Brixton mosque but they became increasingly disruptive, arguing with others during prayer meetings and criticizing Baker's non-violent stance over what they felt was the West's brutal oppression of Muslims throughout the world.¹³⁴ Zacarias "thought we were preaching a watered-down version of Islam and that he was following a pure Islam," recalls Abdul Haqq Baker.¹³⁵ In his interview with the PI, Baker describes how he confronted Moussaoui during one of his visits to the mosque.

I next saw him [Zacarias] and Xavier [Djaffo]¹³⁶ come into the mosque wearing Army greens and boots and there was a physical show of where they were going [their desire to wage jihad]. When I met up with him, I took him into the canteen cooler and he became very vociferous. He was shouting when we tried to address him or engage with him. He would come out with outbursts in the mosque and I said to him, 'Look, if this is going to continue, then don't come back here because you're too problematical.'... And I think after that we didn't see him in the mosque [though he continued to remain active in the Brixton community].¹³⁷

One evening in 1999, two years before his ill-fated attempt to destroy an airliner over the Atlantic Ocean, Reid attended a lecture at the Brixton mosque. "Richard came in with some of his friends," recalls a Salafi parishioner who spoke with him for several hours that night. "They tried to come in and argue."

So we said, 'Look, we have nothing to hide, if you've got some time sit down with us.' This was after the Isha prayer, around 9 or 10 at night... We sat him down and we went through issues and we picked his argument apart at every angle to the point that two other people couldn't take it, so they ran out. But he stayed. He stayed all the way until six or seven in the morning. We talked all night. And in the end, he said, 'You know, I can see now that I was wrong and

¹³⁴ Sean O'Neill and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006): pp. 220-221; Nasreen Suleaman, "Restless convert in quest for jihad," *BBC News* (May 3, 2006), <http://news.bbc.co.uk/1/hi/uk/4942924.stm> [Accessed August 22, 2008].

¹³⁵ Nasreen Suleaman, "Restless convert in quest for jihad," *BBC News* (May 3, 2006), <http://news.bbc.co.uk/1/hi/uk/4942924.stm> [Accessed August 22, 2008].

¹³⁶ Xavier Djaffo (spelled Jaffo in some media reports) was a boyhood friend of Zacarias' who followed him from France to London and later went to fight in Chechnya, where he was reportedly killed by Russian troops. Sean O'Neill and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006): p. 93; Steven Erlanger and Chris Hedges, "The Trail: Terror Cells Slip through Europe's Grasp," *New York Times* (December 28, 2001).

¹³⁷ PI interview with Abdul Haqq Baker, Chairman, Brixton Mosque and Islamic Cultural Centre, London, United Kingdom, October 23, 2007.

I've got to turn away from this.' We said, 'That's fine, we're here, don't feel ashamed... We want to help you. We are not going to stop you from coming... after that he stopped coming and then we didn't see him and the next thing I saw him [Reid had been arrested]... Obviously what he did was he went straight back into the arms of his people. They sat with and messed about with his head again to the fact that he scampered away and he did what he did.¹³⁸

Despite their best efforts, the Brixton parishioners and mosque leaders did not succeed in “de-radicalizing” Reid, Zacarias Moussaoui, and other young militants. When Reid and Moussaoui failed to disabuse the Brixton congregants of their creed, they returned to the Finsbury Park mosque, where, under the tutelage of Abu Hamza and other veteran jihadists, they became increasingly militant. Under Abu Hamza's leadership and the active participation of numerous veterans from Algeria's internecine conflict in the early 1990s, the Finsbury Park mosque developed into a preparatory school for aspiring jihadists.

The expressive Abu Hamza provided his listeners with the ideological justification for waging jihad, based on a selective reading of certain Koranic verses and *Hadith* sayings, while Algerian veterans, like Djamel Beghal, told Reid and other young charges stories of the “jihad” then raging in his country. Some malleable recruits, including Reid and Moussaoui, were eventually sent to training camps in Afghanistan. Unlike many of his fellow British recruits, Reid reportedly thrived under the demanding conditions of the camps. Reid's success in Afghanistan, as well as his British citizenship, reportedly led Al Qaeda associates to task him for a reconnaissance mission to Israel, where he studied El Al airplane security procedures and cased potential bombing targets in Jerusalem, Haifa, Bethlehem, and Tel Aviv.¹³⁹ Reid later told authorities that he got

¹³⁸ PI interview with Salafi activist, Saracen Youth Project, London, United Kingdom, August 29, 2007.

¹³⁹ United States of America v. Richard Colvin Reid, United States District Court, District of Massachusetts, *Government's Sentencing Memorandum* (January 17, 2003),

the idea for placing explosives in his shoes after observing that security personnel working for El Al, the Israeli national airline, which has a well-deserved reputation for rigorous security procedures, did not bother checking inside his shoes.¹⁴⁰ Several months later, Reid returned to Afghanistan, where authorities believe an experienced Al Qaeda bomb-maker, Abu Khabbab al-Masri, gave him a pair of hiking shoes containing the bombs he later failed to detonate onboard American Airlines Flight 63 to Miami.¹⁴¹

After 9/11, and subsequent terrorist attacks in Madrid and London, many mosques in Great Britain and Spain have become even more vigilant in weeding out potential militant influences, partly in response to state and societal pressures. Some respondents credit mosque administrators and Muslim community leaders with taking a more active role in regulating what happens inside their mosques.¹⁴² “Nowadays extremists realize that the Muslim community of Birmingham is being more vigilant,” explains a community liaison worker for a prominent mosque in Birmingham, which has the largest number of Muslim residents outside of London.¹⁴³ In north London, after British authorities closed down the Finsbury Park mosque following a counter-terrorism investigation in 2003, a group of community activists, including Mohammed Qassem Sawalha of the Muslim Association of Britain, worked with local police to reclaim and

<http://news.findlaw.com/cnn/docs/terrorism/usreid11703gsentm.pdf> [Accessed August 19, 2008]; Sean O’Neill and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006): pp. 224-226, 228; PI interview with Detective inspector, Metropolitan Police, Specialist Operations, July 19, 2007; Alan Cullison and Andrew Higgins, “How Al Qaeda Agent Scouted Attack Sites in Israel and Egypt,” *Wall Street Journal* (January 16, 2002): A1.

¹⁴⁰ He also stated that he decided to switch his target from Israel to the United States after the U.S. began bombing Afghanistan in Operation Enduring Freedom in the fall of 2001. United States of America v. Richard Colvin Reid, United States District Court, District of Massachusetts, *Government’s Sentencing Memorandum* (January 17, 2003), <http://news.findlaw.com/cnn/docs/terrorism/usreid11703gsentm.pdf> [Accessed August 19, 2008].

¹⁴¹ Sean O’Neill and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006): pp. 215, 230.

¹⁴² PI Interview with President, Union of Islamic Communities in Ceuta, Spain, October 11, 2007.

¹⁴³ PI interview with community liaison officer, mosque, Birmingham (August 28, 2007); Greater London Authority, *Muslims in London* (London, October 2006): p. 18.

reopen the mosque. When Abu Hamza's followers tried to re-assert their presence by physically attacking the new mosque trustees, Sawalha and other activists responded in kind, forcibly removing the militants from the premises.¹⁴⁴

Since reopening in 2005, the Finsbury Park mosque has resumed its prominent position in the London community by providing a peaceful, non-militant place of worship for local Muslims. However, Sawalha's role in these events did not escape the attention of London reporters, who cited a U.S. grand jury indictment alleging that the political activist "had previously been in charge of Hamas terrorist operations within the West Bank" during the early 1990s, before relocating to London.¹⁴⁵ Relying on innuendo rather than evidence, some observers argue that Sawalha's background indicates that the Finsbury Park center is destined to remain a militant mosque.¹⁴⁶ Tellingly, this ignores the observations of those that have actually worked with Sawalha during his career as a community activist in Britain.

One well-placed Metropolitan police official, who collaborated closely with Sawalha during and after the reopening of the north London mosque unequivocally describes him as "one of the best guys in the business to get young people back from Al

¹⁴⁴ PI discussions with Detective inspector, Metropolitan Police, Specialist Operations, August 16 and 23, 2007; PI interview with Islamists, London, August 14, 2007; PI interview with Islamist, London, September 4, 2007.

¹⁴⁵ United States of America v. Mousa Mohammed Abu Marzook, et. al., Special August 2003 Grand Jury, *Second Superseding Indictment*, U.S. District Court, Northern District of Illinois, Eastern Division (unsealed August 2004): pp. 17, 10-11; Nick Fielding and Abul Taher, "Hamas link to London mosque," *The Sunday Times* (February 13, 2005), <http://www.timesonline.co.uk/tol/news/uk/article513868.ece> [August 14, 2008]. In this indictment, Sawalha is listed as one of several alleged Hamas co-conspirators, all of whom are accused of racketeering offenses, including first degree murder and conspiracy to commit first degree murder, conspiracy to kill, kidnap, maim or injure persons in a foreign country, and hostage taking.

¹⁴⁶ For example, in his recent book on Hamas Matthew Levitt writes: "Sawalha was named one of five trustees designated to lead the mosque when it was reopened in early 2005. His appointment, however, was not likely to mark a change in direction from [Abu Hamza] al-Masri's leadership, if Sawalha's own decade-long history of supporting Hamas terrorist operations was any indication." Matthew Levitt, *Hamas: Politics, Charity, and Terrorism in the Service of Jihad* (New Haven: Yale University Press, 2006): p. 77. Also, see Melanie Phillips, *Londonistan: How Britain is Creating a Terror State Within* (London: Gibson Square, 2006): p. 54.

Qaeda. He's full of street cred."¹⁴⁷ According to this informant, and two London Islamists interviewed by the PI, several of Abu Hamza's former acolytes continued to attend the Finsbury Park mosque once it reopened and, through their interactions with Sawalha and other mosque leaders, gradually moderated their militant interpretation of Islam.¹⁴⁸ "Ironically, the most effective voices against al-Qa'ida have regularly been labeled extremists themselves by influential media commentators," writes Detective Inspector Robert Lambert, then head of Scotland Yard's Muslim Contact Unit, which helped bring about the mosque's reopening. What these observers often miss, Lambert continues, is that "youth workers need religious and street credibility in equal measure" to be successful.¹⁴⁹

In other words, part of what makes Mohammed Sawalha so effective, and gives him credibility among young Muslim men in London, is precisely his controversial past and his willingness to challenge Her Majesty's Government on foreign and domestic policies perceived as inimical to "Muslim" interests. While one may disagree with Sawalha's politics, or take offense to his past involvement in what he and other Islamists, rightly or wrongly, view as a legitimate military struggle in Palestine, in London he has worked to counter the influence of Abu Hamza and other militant imams, helping to create a safer environment for Muslims and non-Muslims alike.

¹⁴⁷ Detective inspector, Metropolitan Police, Specialist Operations, briefing at Islington Police Station, London, August 23, 2007.

¹⁴⁸ PI discussions with Detective inspector, Metropolitan Police, Specialist Operations, August 16 and 23, 2007; PI interview with Islamists, London, August 14, 2007; PI interview with Islamist, London, September 4, 2007.

¹⁴⁹ Bob Lambert, "Reflections on Counter-Terrorism Partnerships in Britain," *Arches* (January-February 2007): p. 6. Also, see Robert Lambert, "Empowering Salafis and Islamists Against Al Qaeda: A London Counterterrorism Case Study," *PS: Political Science and Politics* (January 2008): pp. 31-35; and Richard Jackson, "Counter-Terrorism and communities: an interview with Robert Lambert," *Critical Terrorism Studies* 1, no. 2 (August 2008): pp. 293-308.

Similarly, in the Príncipe Alfonso neighborhood of Ceuta, often described in the media as a hotbed of “radicalization,”¹⁵⁰ community leaders seek to counter militancy in local mosques through informal regulation. “We work with the mosques,” explains the head of the Union of Islamic Communities in Ceuta. “We help select and pay for their imams.”¹⁵¹ The reason, he explains is to “better control what happens in the mosques, to make sure the imam’s message is not extremist, and to prevent extremist, terrorist, and criminal influences in the mosques.”¹⁵² When asked about the *Mezquita Darkawia*, a mosque in Príncipe Alfonso that reportedly served as a recruiting grounds for perpetrators of an alleged terrorist plot broken up by the Spanish authorities in 2006, he replies that the mosque has since been cleaned up. “The previous people associated with the mosque, including the radical imam, have left. We are working with the mosque. They are now bringing in very healthy imams (imames muy sanas).”¹⁵³ “The cleaning up of the mosque is good for our security, the security of our community here in Ceuta,” he concludes.¹⁵⁴ Similarly, other respondents in Madrid interviewed by the PI stress that Spanish mosques are becoming more open and tolerant in the wake of recent attacks, creating a less supportive environment for would-be terrorists.¹⁵⁵

Faced with a less hospitable environment after 9/11, militants in Spain and the United Kingdom continued to attend established mosques, which they sought to exploit

¹⁵⁰ See, for example, José María Irujo, “Ceuta y Melilla se convierten en un objetivo de la 'yihad' islámica,” *El País* (November 5, 2006), Andalucía Edición; José María Irujo, “‘El Caballo de Troya’ de Al Qaeda,” *El País* (17 de diciembre de 2006), Barcelona Edición; Jamal Ouahbi, “Barrios marginales de Tetuán, cuna de terroristas suicidas,” *El Faro Ceuta y Melilla* (9 de noviembre de 2006), <http://www.elfarocentamelilla.com/noticia.asp?ref=18811> [June 24, 2007]; and Jorge A. Rodríguez, “El sueño de Al Andalus,” *El País* (15 de abril de 2007).

¹⁵¹ PI Interview with President, Union of Islamic Communities in Ceuta, Spain, October 11, 2007.

¹⁵² PI Interview with President, Union of Islamic Communities in Ceuta, Spain, October 11, 2007.

¹⁵³ PI Interview with President, Union of Islamic Communities in Ceuta, Spain, October 11, 2007.

¹⁵⁴ PI Interview with President, Union of Islamic Communities in Ceuta, Spain, October 11, 2007.

¹⁵⁵ PI interview with professor of Islamic Studies, the Universidad Autónoma de Madrid, Madrid, June 7, 2007.

as recruitment sites, but they became more circumspect in how they talked and acted in these religious centers. Some of the PI's respondents suggest that this was an adaptive response on the part of militants to law enforcement pressure. "These guys know that all the mosques are under surveillance," argues an Islamic activist who works on counter-radicalization in South London, "so they're very careful not to do anything that attracts attention to them."¹⁵⁶ A confidential police informant that interacted with several perpetrators of the Madrid bombings explains that local militants who attended the Abu Bakr center, a prominent mosque in the Spanish capital, did not like to speak of jihad in the center "because there could be snitches (chivatos) that would act against the brothers."¹⁵⁷

To be sure, some mosques in London, Madrid, and Ceuta are so large, often attracting several thousand worshippers for *juma*, the Friday congregational prayer, that mosque administrators cannot prevent all potential militants from exploiting their communal services to establish contact and share information with fellow travelers, particularly if, as is typically the case, they take pains to hide their views from the larger congregation. However, when engaging in the secretive, time-consuming process of group radicalization, militants often meet outside the mosques, notwithstanding the notorious Finsbury Park exception. Militants meet in each others' houses, apartments, and small commercial establishments, where they feel safe sharing their ideas free from

¹⁵⁶ PI interview with Salafi activist and youth worker, London, August 6, 2007. Similarly, a recent issue of the online magazine *Sada al-Jihad* (Echo of Jihad) includes an article on jihadist recruitment in hostile law enforcement environments which suggests that recruiters avoid mosques because they may be under surveillance. See Fred Burton and Scott Stewart, "Moroccan Arrests and the Security of Militant Recruiters," *Stratfor Weekly* (May 21, 2008), http://www.stratfor.com/weekly/moroccan_arrests_and_security_militant_recruiters [June 30, 2008].

¹⁵⁷ *Indictment 20/2004*, Committal for Trial (*Auto de Procesamiento*), Juzgado Central de Instrucción Número Seis, Audiencia Nacional, Madrid, signed by magistrate Juan del Olmo (April 10, 2006): p. 1228.

unwanted interference.¹⁵⁸ These so-called “garage mosques” contain “small groups of radicals that meet together on a personal, face-to-face basis, in groups. They form a subculture, they have their own networks of contacts,” explains a counter-terrorism official with the London Metropolitan police.¹⁵⁹ While this subculture “is largely unnoticed within the larger Muslim community,”¹⁶⁰ the garage mosques that nourish it are a greater threat to peace and security than formal religious establishments, such as the Brixton mosque in London and the M-30 mosque in Madrid, that are sometimes inaccurately portrayed as incubators of extremist violence by non-Muslim commentators.

Several years before carrying out the 7/7 bombings in London, Mohammed Siddique Khan and Shezhad Tanweer left their local Deobandi mosque and began meeting at the Iqra Learning Center in Beeston, where they freely engaged in group radicalization away from the moderating influence of mosque imams and their parents.¹⁶¹ Similarly, Serhane ben Abdelmajid Fahket gradually became disenchanted with the M-30 mosque in Madrid, where he had worked for several years as an assistant accountant and translator. When Serhane became increasingly involved with Amer Azizi, Imad Yarkas, and other militants from the Alberche river gatherings, he began to question the teachings of the M-30 imams. Instead, he and his fellow militants began to consult Hicham Temsamani, an imam based in Toledo who had delivered a fiery sermon at another prominent Madrid mosque several months earlier, and Samir Ben Abdellah, an imam from the Alcorcón mosque, who participated in several meetings with the militants to

¹⁵⁸ PI interview with professor of Islamic Studies, the Universidad Autónoma de Madrid, Madrid, June 7, 2007; PI interview with police inspector, UNETA, Madrid, Spain, June 9, 2007.

¹⁵⁹ PI interview with Detective inspector, Metropolitan Police, Specialist Operations, July 19, 2007.

¹⁶⁰ *Ibid.*

¹⁶¹ Mitchell D. Silber and Arvin Bhatt, *Radicalization in the West: The Home Grown Threat* (New York: NYPD, Intelligence Division, 2007): pp. 40-41.

discuss the concept of jihad.¹⁶² As Serhane's estrangement from the M-30 mosque grew, he turned his house into a meeting place and lodging quarters for young men, some of whom he recruited from the mosque. There, guided by Amer Azizi's austere interpretation of Islam, they watched incendiary videos depicting Western oppression of Muslims and held innumerable discussions on jihad, which they characterized as the need to fight the United States, Britain, and Spain by striking non-believers wherever they could, through robbery, bombings, and killings.¹⁶³ Serhane's final break with the M-30 mosque came in the wake of 9/11 when one of the mosque's imams publicly condemned the attacks on the World Trade Center. Apparently infuriated by this perceived betrayal, Serhane lost his job at the mosque and now declared that it was a sin to pray there.¹⁶⁴

Whether they meet in private residences or "safe" business establishments, militants use meetings to create collective interpretations of the world and build social bonds and trust among each other. An FBI official in London stresses the importance of "group-building exercises," not only "to learn more about the Koran," but to "build trust among the young men."¹⁶⁵ These exercises may include white water rafting, paint balling, playing football, martial arts, or "any quasi-military activity that builds bonds to gain the trust of fellow group members."¹⁶⁶ Such activities "allow participants to get to know each other better and find out more about what their group does," adds a counter-

¹⁶² *Indictment 20/2004*, Committal for Trial (*Auto de Procesamiento*), Juzgado Central de Instrucción Número Seis, Audiencia Nacional, Madrid, signed by magistrate Juan del Olmo (April 10, 2006): p. 1229; Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 116.

¹⁶³ *Indictment 20/2004*, Committal for Trial (*Auto de Procesamiento*), Juzgado Central de Instrucción Número Seis, Audiencia Nacional, Madrid, signed by magistrate Juan del Olmo (April 10, 2006): p. 1227.

¹⁶⁴ Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 108-109, 116-117, 121-122; Mitchell D. Silber and Arvin Bhatt, *Radicalization in the West: The Home Grown Threat* (New York: NYPD, Intelligence Division, 2007): p. 39.

¹⁶⁵ PI interview with Federal Bureau of Investigation official, US Embassy, London, United Kingdom, October 29, 2007.

¹⁶⁶ *Ibid.*

terrorism official with the Metropolitan Police Authority.¹⁶⁷ These bonding experiences are not necessarily limited to participants from the same conspiracy. An FBI intelligence analyst in London explains, “We know that Mohammed Siddique Khan [the alleged leader of the 7/7 London bombings] and some guys involved in the 2004 fertilizer bomb plot got together.”¹⁶⁸ Indeed, evidence that emerged during the Operation Crevice trial in London, which included hours of audio wiretaps and video surveillance of the perpetrators, showed that Khan had met with Omar Khyam, the ringleader of the Crevice fertilizer bomb plot, on several occasions.¹⁶⁹

Meetings are also important for sharing intelligence and planning attacks. “Yes,” replies the intelligence analyst from the Foreign and Commonwealth Office when asked whether militants use meetings to analyze information about impending attacks: “If they can hold meetings to analyze information and experience they will.”¹⁷⁰ Such encounters are not exceptionally difficult for militants to arrange, even in hostile counter-terrorism environments where they face greater exposure to law enforcers. In his testimony in the Operation Crevice trial, Mohammed Junaid Babar describes how he met with Omar Khyam on several occasions to discuss possible targets in the United Kingdom, including pubs, nightclubs, and trains, and brainstorm different ideas for smuggling detonators into the country.¹⁷¹

¹⁶⁷ PI interview with oversight and review officer, Metropolitan Police Authority, London, August 9, 2007.

¹⁶⁸ PI interview with intelligence analyst, Federal Bureau of Investigation, US Embassy, London, United Kingdom, October 29, 2007.

¹⁶⁹ Jane Perlez and Eliane Sciolino, “5 Britons Guilty; Tied to 2005 London Bombers,” *New York Times* (May 1, 2007), <http://www.nytimes.com/2007/05/01/world/europe/01crevice.html> [June 12, 2008]; Elaine Sciolino and Stephen Grey, “British Terror Trial Traces a Path to Militant Islam,” *New York Times* (November 26, 2006), <http://www.nytimes.com/2006/11/26/world/europe/26crevice.html> [June 12, 2008].

¹⁷⁰ PI interview with counter-terrorism analyst, Foreign and Commonwealth Office, United Kingdom, London, July 24, 2007.

¹⁷¹ Testimony of Mohammed Junaid Babar, Operation Crevice trial, Central Criminal Court, London, March 28-29, 2006. Copy of Babar’s testimony provided to the PI by Mr. Jason Burke, senior reporter, *The Observer*.

Veterans, Training Camps, and Prison

Like they do for information gathering, veterans facilitate information sharing among militants, within and across groups. “The veteran-novice relationship is important for sharing knowledge and experience,” confirms an intelligence analyst from the British Foreign and Commonwealth Office.¹⁷² Militants with combat experience are highly regarded among aspiring jihadists, with whom they share war stories from their fighting days, regaling them with tales of the *muhajideens*’ bravery and skills. Such encounters, whether they occur among aspiring militants in Western Europe or visitors to overseas training camps, act as “a bomb that captures the attention of the young ones,” explains a Spanish counter-terrorism police inspector.¹⁷³ Veteran militants also provide young men with role models they can emulate.¹⁷⁴

In Madrid, Amer Azizi, a reportedly charismatic and experienced jihadist who fought in Afghanistan and Bosnia, inspired and recruited young men for jihad by telling them war stories.¹⁷⁵ Several of Azizi’s followers later became critical players in the Madrid bombings: Serhane ben Abdelmajid Fakhret became one of the ringleaders of the attacks; Jamal Zougam was convicted of placing one of the bombs on the Atocha-bound trains; Mohammed Afalah and Said Berraj also allegedly placed bombs on the trains but fled Spain before they could be captured; Fouad El Morabit was sentenced to twelve years in prison for belonging to the terrorist group; and Mohamed Larbi Ben Sellam was

¹⁷² PI interview with counter-terrorism analyst, Foreign and Commonwealth Office, United Kingdom, London, July 24, 2007.

¹⁷³ PI interview with police inspector, UNETA, Madrid, Spain, June 9, 2007.

¹⁷⁴ Marc Sageman, *The Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia: University of Pennsylvania Press, 2008): p. 159.

¹⁷⁵ José María Irujo, *El Agujero: España invadida por la yihad* (Madrid: Aguilar, 2005); Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007).

convicted of helping Afalah, Berraj and other perpetrators in the attacks escape Spain.¹⁷⁶

The participation of so many of Azizi's recruits in the Madrid attacks has led some observers to conclude that he essentially created the nucleus of a social network that subsequently evolved into the 3/11 conspiracy.¹⁷⁷ Serhane, the alleged ideological leader of the Madrid bombings, reportedly "idolized" Azizi, whose background and allure earned him the respect and admiration of aspiring militants who hoped to move beyond talk to action. When he met Amer, Serhane's approach changed, Khalid Zeimi Pardo, one of Serhane's closest friends, later told a Spanish magistrate: "at first he was religious, but he didn't talk of Jihad, and as a result of getting in touch with Amer Azizi he changed his approach and began to have thoughts of Jihad..."¹⁷⁸

A former jihadist interviewed in this research, a British citizen who spent three years in American military custody, much of it at Guantánamo Bay, recalls visiting a training camp in Afghanistan as a young man, where he met several veteran fighters:

It was fascinating to be in a place where you knew that great parts of the resistance against the Soviet occupation had taken place. There were unmarked graves, or what we were told were unmarked graveyards of martyrs that had been killed in fighting. That in itself was quite amazing, and then somebody, one of the instructors, or the *emir*, the leader of the camp explained the history of that region and what happened here. It is extremely fascinating because you're taken in by the surroundings, the mountains, the atmosphere, and then him, explaining what had happened in this place, this camp set up by the Kashmiris. And this camp has a history... and you start thinking about it. You really start putting yourself historically to this place, what happened here and what sorts of things people had to endure.¹⁷⁹

¹⁷⁶ Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 114, 240, 252. Translated by PI; *Playing Chess with the Dead*, <http://chesswithdead.blogspot.com/2007/11/sentences.html> [August 6, 2008]; *Playing Chess with the Dead*, <http://chesswithdead.blogspot.com/2008/07/appeals-against-sentence.html> [August 7, 2008].

¹⁷⁷ Luis de la Corte Ibáñez and Javier Jordán, *La yihad terrorista* (Madrid: Editorial Síntesis, 2007): p. 247.

¹⁷⁸ *Indictment 20/2004*, Committal for Trial (*Auto de Procesamiento*), Juzgado Central de Instrucción Número Seis, Audiencia Nacional, Madrid, signed by magistrate Juan del Olmo (April 10, 2006): p. 1345. Also see Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 119.

¹⁷⁹ PI interview with former "jihadist," Birmingham, England, August 15, 2007.

While the informant emphasizes that he only visited the camp for a few days, his interactions with veteran militants made a lasting impression. “The Afghan visit was a life-changing experience for me,” he wrote years later, in an autobiographical account of his imprisonment at Guantánamo. “No few days ever affected me like that. I had met men who seemed to me exemplary, in their faith and self-sacrifice, and seen a world that awed and inspired me.”¹⁸⁰ Intoxicated by his surroundings, and moved by the real world example of these veteran fighters, the novice fervently absorbed the emir’s war stories, solidifying his identity as a “practicing Muslim,” and deepening his dedication to “jihad,” a cause to which he would remain faithfully committed in the years ahead.¹⁸¹

Training camps are not only important for the socialization of militants, but for the training they provide in operational tradecraft, and the social networking opportunities they offer to like-minded fighters from different parts of the world. Underscoring the limitations of online “training” materials and weekend paint-ball sessions for aspiring jihadists, several respondents in this research stress that the most significant terrorist plots in London, including the 7/7 bombings and the liquid explosives plot in August 2006, involved people who had allegedly received at least some operational training from more experienced militants in the federal tribal areas in north west Pakistan. “We know that there is a tendency for groups to go to Pakistan now to seek out training as a means of getting the information they need to get the scheme

¹⁸⁰ [Author name and book information deleted].

¹⁸¹ Like other “jihadists” the PI interviewed, this informant took pains to distinguish jihad from terrorist attacks such as the 7/7 bombings: “I speak out against suicide bombings, not just suicide bombing but the bombing of anything indiscriminate against innocent civilians. But I also support the right for the people to defend themselves in Iraq and in Afghanistan against the occupation so I speak for both to try to make that balance known to people... Now the problem is that they might say I support suicide bombers. No, I don’t, as long as it’s against civilians, no, I would never support that. But how do you explain that? Once you say I support jihad, ok therefore you must be a terrorist or a terrorist supporter. And a lot of that is very, very difficult to explain.” PI interview with former “jihadist,” Birmingham, England, August 15, 2007.

accomplished,” explains an FBI official in London, “They are developing the basic knowledge and ability they need by going through the training camps.”¹⁸² “If you’re going to carry out an attack,” adds a counter-terrorism intelligence analyst with the British Foreign and Commonwealth Office, “you need a certain amount of training. You need someone who can help you translate the recipe into action.”¹⁸³

That someone is often an experienced trainer working in the tribal areas of northern Pakistan or elsewhere. These veteran jihadis, who are more often affiliated with Kashmiri militants fighting for independence from India than “Al Qaeda Central,” teach novices how to handle AK-47s and other weapons, and, less frequently, how to build reliable explosives and detonators.

The training camps at which these activities unfold are often modest affairs, particularly in comparison with some of the Afghanistan camps prior to 9/11. The new “camps,” such as they are, may consist of a tent or two located in isolated mountain terrain, or a house in a town surrounded by a wall.¹⁸⁴ Classes may contain a trainer, his assistant, and a class of ten to twenty students. Opportunities to practice what has been learned may be limited, for fear of arousing suspicion with the sound of weapons fire or chemical explosions. In his testimony in the Operation Crevice trial, Mohammed Junaid Babar recalls that trainees were only allowed to fire a couple of shots from their weapons

¹⁸² PI interview with Federal Bureau of Investigation official, US Embassy, London, United Kingdom, October 29, 2007.

¹⁸³ PI interview with counter-terrorism analyst, Foreign and Commonwealth Office, United Kingdom, London, July 24, 2007.

¹⁸⁴ Testimony of Mohammed Junaid Babar, Operation Crevice trial, Central Criminal Court, London, April 4, 2006; and Marc Sageman, *The Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia: University of Pennsylvania Press, 2008): p. 128.

at the end of the training camp to avoid creating unwelcome attention from neighbors and authorities: “Basically everyone waited until the last day to fire their weapons.”¹⁸⁵

However unassuming, these facilities do provide some hands-on instruction by knowledgeable veterans. In 2003, Omar Khyam and Salahuddin Amin, both of whom were later convicted for their involvement in the so-called Crevice plot, traveled to Kohat, Pakistan, near Peshawar, where they reportedly received two days of bomb-making training.¹⁸⁶ These training sessions also provide what one FBI intelligence analyst describes as a “bonding experience,” bringing together people of similar mindset, to share an intense experience, “where they can form lasting bonds.”¹⁸⁷

When aspiring jihadis from Europe connect with seasoned trainers at such facilities, the consequences can be devastating. The British-born jihadists that were convicted for their involvement in the Crevice plot received training in Pakistan and obtained more than half a ton of ammonium nitrate fertilizer suitable for constructing bombs, which they stored near London, by the time the authorities disrupted their preparations.¹⁸⁸ While British authorities may have dodged a bullet in Operation Crevice, they were less fortunate in the London Tube and bus bombings of 2005. “Mohammed Siddique Khan and Shehzad Tanweer from the 7/7 bombings went to Pakistan to receive training,” explains a former Metropolitan police counter-terrorism official. “Their original intention was to go to Afghanistan and fight there, but in

¹⁸⁵ Testimony of Mohammed Junaid Babar, Operation Crevice trial, Central Criminal Court, London, April 4, 2006.

¹⁸⁶ Elaine Sciolino and Stephen Grey, “British Terror Trial Traces a Path to Militant Islam,” *New York Times* (November 26, 2006), <http://www.nytimes.com/2006/11/26/world/europe/26crevice.html> [June 12, 2008].

¹⁸⁷ PI interview with Federal Bureau of Investigation intelligence analyst, US Embassy, London, United Kingdom, October 29, 2007.

¹⁸⁸ Elaine Sciolino and Stephen Grey, “British Terror Trial Traces a Path to Militant Islam,” *New York Times* (November 26, 2006), <http://www.nytimes.com/2006/11/26/world/europe/26crevice.html> [June 12, 2008].

Pakistan while they were experiencing difficulty trying to get to a training camp they met... who told them, ‘Look, you’re from Britain, instead of getting trained and going to Afghanistan, why don’t you go back to the UK and do something there?’”¹⁸⁹ The aspiring suicide bombers apparently took their mentor’s advice to heart, with tragic consequences for dozens of Londoners.

While terrorism scholars continue to debate the extent to which such attacks are directed, managed, influenced, or merely inspired by “Al Qaeda” (whatever that highly politicized and ambiguous term means nowadays), the sobering fact remains that in recent years a small number of European jihadis, perhaps as many as several dozen by one estimate, have attended real-world training camps in Pakistan and elsewhere.¹⁹⁰ Presumably armed with the requisite knowledge and practical experience to “translate the recipe into action,” these aspiring terrorists constitute a viable security threat to Western Europe.

Penitentiaries are another place where novices come into contact with veterans, who opportunistically try to enlist them to their cause. Prison is “an important recruiting grounds for Islamic radicals,” explains a Scotland Yard counter-terrorism official.¹⁹¹ Prisons are “perhaps the most sophisticated recruitment system for jihadis in Spain,” adds a member of the Spanish national congress.¹⁹² When perpetrators of terrorist attacks are arrested and sent to prison, a commander with the Spanish Civil Guard elaborates, “they actively seek to recruit and radicalize other inmates in the prison.”¹⁹³ A former leader of

¹⁸⁹ PI interview with former Metropolitan police official, Specialist Operations, July 26, 2007.

¹⁹⁰ Marc Sageman, *The Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia: University of Pennsylvania Press, 2008): p. 128.

¹⁹¹ PI interview with Detective inspector, Metropolitan Police, Specialist Operations, July 19, 2007.

¹⁹² PI interview with member, Spanish national congress, Madrid, Spain, June 27, 2007.

¹⁹³ PI interview with commander, Servicio de Información de la Guardia Civil, Carmona, Spain, July 4, 2007.

Al-Muhajiroun in Britain, makes a similar point, using different language: “The stronger the Muslim is, the more he will continue the struggle... even in jail... And these people, when they come out, they are also going to be soldiers in the struggle.”¹⁹⁴

In fact, scholars are currently debating the importance of prisons as a locale and source of “radicalization.” Two recent reports on prison “radicalization” in the United States came to different conclusions on the matter. One “study,” essentially a task force report, argues that the radicalization of American prisoners represents a viable security threat to the U.S., even as the report’s authors concede that there is “insufficient information” to qualify, let alone quantify, this threat.¹⁹⁵ The second report, a scholarly case study on prison radicalization in the United States, which includes interviews with prison chaplains and prisoners in California and Florida, suggests that the threat of prisoner radicalization is often exaggerated.¹⁹⁶ While Mark Hamm, the author of this second study, points out that “extremist groups have long viewed the prison as fertile grounds for recruitment,” he emphasizes this occurs “*only in the rarest of cases.*”¹⁹⁷ Citing the criminological literature on prison radicalization, Hamm maintains that there is “no relationship between prisoner conversions to Islam and terrorism” in the United States. “If anything,” he adds, “just the opposite is true. Research shows that Islam has a moderating effect on prisoners which plays an important role in prison security and rehabilitation.”¹⁹⁸

¹⁹⁴ PI interview with former leader of Al-Muhajiroun, London, September 22, 2007.

¹⁹⁵ Homeland Security Policy Institute and Critical Incident Analysis Group Prisoner Task Force, *Out of the Shadows: Getting Ahead of Prisoner Radicalization* (Washington, D.C.: The George Washington University/Charlottesville, VA, University of Virginia School of Medicine, n.d.).

¹⁹⁶ Mark S. Hamm, *Terrorist Recruitment in American Correctional Institutions: An Exploratory Study of Non-Traditional Faith Groups* (National Institute of Justice, U.S. Department of Justice, December 2007).

¹⁹⁷ Hamm, *Terrorist Recruitment in American Correctional Institutions*: p. 28. Emphasis in the original.

¹⁹⁸ Hamm, *Terrorist Recruitment in American Correctional Institutions*: pp. 25-26.

As Hamm’s research shows many prisoners in the United States experience jail house conversions to Islam and other religions, something that also happens in Britain and Spain. Less clear, however, is whether the prisoners undergoing such conversions are sincere in their beliefs or merely seeking companionship or to protect themselves in these dangerous environments by bonding with other prisoners. While some versions of “prison Islam” do seek to exploit the anger their young converts feel towards the United States and other Western governments, expressing anger and making verbal threats is not the same as engaging in acts of political violence. “Some times young kids talk, especially in prison, to appear tough, but its just talk,” explains an official in Britain’s Prison Service, before an audience of prison imams. When evaluating the merits of such verbal threats, the official considers the young man’s age and whether his threat is credible—or nonsense. “And usually it is [nonsense]. An 18-year-old might say he’s going to bomb something but never would.” “We have to be careful about how we evaluate these incidents,” she adds.¹⁹⁹

We also have to be careful about determining when someone becomes “radicalized,” an inherently ambiguous and complex process. Often-repeated claims that Richard Reid, the so-called “shoe bomber” who tried to blow up a Miami-bound aircraft from Paris in December 2001, and Jamal Ahmidan, one of the leaders of the Madrid bombings, were radicalized while serving time for non-terrorism related crimes are not persuasive.²⁰⁰ While both Reid and Ahmidan both apparently became more religious during their respective prison stays, it is not clear when their growing religiosity gave

¹⁹⁹ PI field notes, speech by official, Her Majesty’s Prison Service, Britain, August 19, 2007.

²⁰⁰ Ironically, both of the studies on prison radicalization discussed above cite Richard Reid as an example of so-called prison “radicalization.” See Homeland Security Policy Institute and Critical Incident Analysis Group Prisoner Task Force, *Out of the Shadows*: p. iii; and Hamm, *Terrorist Recruitment in American Correctional Institutions*: p. 30.

way to *political* “radicalization,” and the extent to which this shift occurred in prison or after. As discussed above, Abu Hamza, the Finsbury Park imam, shaped Reid’s increasingly militant interpretation of Islam. But the impressionable Reid did not fall under Abu Hamza’s influence until he completed his prison sentence. And while Jamal Ahmidan reportedly became more religious and politically aware during his prison stay in Morocco, where he served time for manslaughter, it was only after he returned to Spain and fell under the influence of Serhane ben Abdelmajid Fakhet, the ideological leader of the Madrid bombings, that his militancy became more pronounced, according to Ahmidan’s widow, Rosa.²⁰¹ Students of the growing cottage industry on “radicalization” should keep in mind that just because someone adopts a Salafi-inspired interpretation of Islam and starts to emulate the Prophet Mohammed in dress and action, or voices their displeasure with U.S. counter-terrorism policy, does not mean that person has become “radicalized,” in deed or thought.

However it is also true that in Spain and the United Kingdom individuals arrested for petty crimes or even terrorism-related actions have been sent to correctional facilities where they have reportedly come into contact with more knowledgeable, and militant, veterans, who seek to indoctrinate them to their vision of Islam and engage them in their activities. In some cases these veterans belong to existing organizations, such as the Armed Islamic Group (*Groupes Islamiques Armés* or GIA in French), or form their own networks, including the so-called Martyrs for Morocco that allegedly planned to blow up the Spanish national court and other public venues in central Madrid. Instrumental in the latter plot, which never made it beyond the planning stage, was Mohammed Achraf, a

²⁰¹ Pablo Ordaz, “Entrevista: con la esposa de Jamal Ahmidan,” *El País* (8 de marzo de 2007): pp. 1, 19-22.

peripatetic, veteran jihadist who served time in several Spanish prisons, including Valdemoro, Palma de Mallorca, and Topas (Salamanca). At each stop in his cross-country tour of the Spanish prison system, the experienced militant allegedly sought to radicalize young inmates, some of whom he recruited into Martyrs for Morocco.²⁰²

Many prisons, even high-security facilities designed for dangerous criminals, provide opportunities for inmates to engage in social interactions and build relationships. Prisoners regularly come into contact with each other during their daily routines. Dining halls, television lounges, exercise rooms, outdoor yards, even jail cells all provide opportunities for experienced and aspiring jihadists to make contact, build social networks, and share information and tradecraft. These social contacts and information channels are not limited to militants. In Spanish prisons, jihadists come into contact with Basque separatists from the ETA (an acronym for *Euskadi Ta Askatasuna*, or “Basque Homeland and Liberty”); in British ones, they may come into contact with Irish nationalists from the IRA. These encounters provide opportunities for militants to “talk, share stories and ideas,” explains an analyst from Spain’s union of prison officers.²⁰³ While the union official acknowledges that members from these different groups “don’t exactly have the same interests... they do share a certain affection and respect for one another,” which facilitates the informal exchange of knowledge and expertise.²⁰⁴ In some cases, jihadists, such as Hassan el Haski, who was found guilty in the Madrid bombings trial of belonging to the Moroccan Islamic Combat Group, have reportedly shared prison cells with ETA members, though Spanish authorities have apparently

²⁰² PI interview with member, Spanish national congress, Madrid, Spain, June 27, 2007; José María Irujo, *El Agujero: España invadida por la yihad* (Madrid: Aguilar, 2005): pp. 199, 377-380; José Yoldi and Jorge A. Rodríguez, “El grupo islamista desarticulado tenía dos suicidas listos para hacer volar la Audiencia,” *El País* (October 24, 2004).

²⁰³ PI interview with analyst and director of studies, ACAIP, Madrid, Spain (June 1, 2007).

²⁰⁴ *Ibid.*

curtailed this practice following the Madrid bombings. The prison union official also claims that during the 1980s, following their release from prison some ETA members moved to Algeria, where they established contact with militants. While Spanish authorities do not claim that the different militants planned operations together, they are alleged to have shared general information, like where to acquire explosives.²⁰⁵

Whether they meet in prison, training camps, or other locations, veterans not only socialize newcomers to the cause, they also share information about how they do things, such as raising money for terrorist attacks, or how to build reliable detonators. In this manner, veterans teach novices operational tradecraft. A Spanish counter-terrorism police inspector mentions the case of Allekama Lamari, one of the alleged perpetrators of the March 11, 2004 bombings, who, along with several conspirators, blew himself up during a police stand-off in Leganés, a neighboring city of Madrid.²⁰⁶ Alone among his fellow Madrid bombers, Lamari was an experienced militant. In 1997 he was convicted by a Spanish court for being a member of the Armed Islamic Group, which used a combination of guerrilla warfare and terrorism to fight Algeria's military government after it cancelled a national election won by an Islamist party.²⁰⁷ Lamari served time in several Spanish prisons, including Valencia, Valdemoro, Pontevedra, Teruel, Alcalá-Meco, and Cuenca, where, similar to Mohammed Achraf, Lamari and other veterans from Algeria, he recruited less-experienced inmates to his cause.²⁰⁸

²⁰⁵ PI interview with analyst and director of studies, ACAIP, Madrid, Spain (June 1, 2007).

²⁰⁶ PI interview with police inspector, UNETA, Madrid, Spain, June 9, 2007.

²⁰⁷ José María Irujo, *El Agujero: España invadida por la yihad* (Madrid: Aguilar, 2005); Daniel Benjamin and Steven Simon, *The Next Attack: The Failure of the War on Terror and a Strategy for Getting it Right* (New York: Times Books, 2005): p. 10.

²⁰⁸ José María Irujo, *El Agujero: España invadida por la yihad* (Madrid: Aguilar, 2005): pp. 211-212; and Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): p. 92.

Through frequent meetings and conversations, Lamari and other Algerian veterans shared stories about their past exploits with their recruits, whom they indoctrinated and taught tradecraft about how to rob banks and conduct other criminal activities, with the purpose of raising money for attacks. “The Algerian influence has been important here,” the police inspector concludes, an observation echoed by other informants.²⁰⁹ However, when asked whether Lamari drew on his experience to teach his fellow perpetrators how to make the explosive devices they used in the Madrid bombings, the PI’s informants conceded that this was a possibility, but an inconclusive one.²¹⁰ Indeed, the answers to this question, and the larger one of how the Madrid bombers built their explosives, remain speculative, in part because Lamari and his colleagues died when they detonated their final blast at the apartment in Leganés.

²⁰⁹ PI interview with police inspector, UNETA, Madrid, Spain, June 9, 2007; PI interview with former official, Guardia Civil, Madrid, Spain, June 25, 2007; PI interview with former official in the Aznar administration, Madrid, Spain, June 8, 2007; PI interview with U.S. State Department official, Madrid, Spain, June 25, 2007.

²¹⁰ The PI is not alone in suspecting that Allekama Lamari may have drawn on his militant experience to help his fellow 3/11 bombers build the explosive devices used in the attacks. In their respective accounts of the Madrid bombings, Daniel Benjamin and Steven Simon, two former Clinton administration counter-terrorism officials, and José María Irujo, a leading Spanish journalist, suggest that Lamari may have taught the others how to build the bombs. Benjamin and Simon also suggest that one of the perpetrators may have downloaded bomb-making instructions from the Internet. Other possible sources of bomb-making instruction for the Madrid attacks include Rabei Osman el Sayed Ahmed, a former Egyptian Army officer who knew several of the perpetrators in Madrid and was accused—but not convicted—of being an “intellectual author” of the attacks, and Emilio Suárez Trashorras, the former miner who was convicted of providing the explosives used in the attacks and who admitted to visiting the house in Chinchón where the bombs were reportedly constructed. Somewhat confusingly, Irujo highlights Lamari’s instructional role, while also claiming that Rabei Osman taught Serhane ben Abdelmajid Fakhel how to put together bombs before he left Madrid, and suggesting that Trashorras may have taught Jamal Ahmidan how to use the detonators he sold him in exchange for hashish. Meanwhile reporters Manuel Marlasca and Luis Rendueles also highlight Trashorras’ alleged role in assembling the bombs, observing that Ahmidan called him repeatedly to ask him questions about the detonators, the dynamite, and connecting the cell phones to the bomb. See Daniel Benjamin and Steven Simon, *The Next Attack: The Failure of the War on Terror and a Strategy for Getting it Right* (New York: Times Books, 2005): p. 14; José María Irujo, *El Agujero: España invadida por la yihad* (Madrid: Aguilar, 2005): pp. 244, 290; Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): p. 184; Paloma D. Sostero, “Trashorras declara que informó a la policía de Asturias de que ‘El Chino’ buscaba explosivos,” *El Mundo* (February 28, 2007), <http://www.elmundo.es/elmundo/2007/02/27/espana/1172616687.html?a=9226ef1866a7f79b7121e16dc29be1b4&t=1172663030>; *Playing Chess with the Dead*, <http://chesswithdead.blogspot.com/2007/03/trialday-8-february-28th.html> [June 6, 2007].

Applying Information

The application of knowledge and experience is a fundamental part of the learning process. Information that has been acquired and analyzed must ultimately be acted upon, if it is to have any practical relevance. This is particularly true for militants that operate in hostile environments, where state security agencies seek to destroy them. Illicit enterprises that function in such environments have a compelling incentive to adapt their activities in response to external pressure: their survival often depends on it. To protect their operations from unwanted depredations, some enterprises change their communications practices and other day-to-day routines that law enforcers can use to track them down. To be sure, not all individuals and organizations involved in terrorism adjust their “operational signatures” in this fashion. However, those that fail to do so may eventually find themselves selected out of the system, particularly when these environments contain counter-terrorism agencies that aggressively identify and target non-state adversaries.

When asked if terrorists apply information and experience to their activities, numerous informants insist that they do, particularly in response to government counter-terrorism efforts. “Absolutely,” explains an intelligence analyst with the United Kingdom’s Foreign and Commonwealth Office, “they adapt to what the government does.”²¹¹ “They adapt in response to what the police does,” the police officers in Ceuta concur, “like any common delinquent.”²¹² “We’ve seen this sort of adaptable behavior,” adds an FBI official in London. “Information comes out in the press and they respond to

²¹¹ PI interview with counter-terrorism analyst, Foreign and Commonwealth Office, United Kingdom, London, July 24, 2007.

²¹² PI interview with two counter-terrorism police inspectors, Ceuta, Spain, June 18, 2007.

it... They adjust to what they read or hear about.”²¹³ “They’re always watching, to see what works, what doesn’t, and change their activities accordingly,” explains a U.S. State Department official in Madrid that works on counter-terrorism issues. “Within certain limits,” he adds.²¹⁴

As these comments suggest, learning by militants often involves simple changes in tactical behavior in response to government counter-terrorism efforts. Such learning involves a fairly routine, almost cybernetic process of making incremental adjustments to daily practices and tasks based on external feedback.²¹⁵ Less common, among terrorists and non-terrorists alike, are more substantial changes in organizational behavior, when decision-makers reconsider the fundamental beliefs and values guiding collective action and change their organization’s strategies and goals in response to this process.

Individuals and organizations regularly change their daily practices in response to problems and surprises, particularly when their expectations fail to match outcomes, but rarely do they reconsider, let alone alter, basic assumptions and beliefs underlying collective action and their own contribution to it. This is true of business firms, armies, hospitals, universities, and policy makers, as well as terrorists. Militants are “not that adaptable,” argues an American intelligence official. “They have a plan to execute and they work on building the skills around it.”²¹⁶ Such skill-building, as shown in this report, is not negligible: would-be terrorists must acquire the expertise to manufacture explosives, discharge firearms, and perform clandestine operations, practical talents that

²¹³ PI interview with Federal Bureau of Investigation official, US Embassy, London, United Kingdom, October 29, 2007.

²¹⁴ PI interview with U.S. State Department official, Madrid, Spain, June 25, 2007.

²¹⁵ Organization theorists have developed a variety of terms to characterize this type of learning, including “simple” learning, “low-level” learning, “tactical” learning, “single-loop” learning, “exploitation,” and “adaptation.”

²¹⁶ PI interview with American official, London, United Kingdom, October 24, 2007.

are not readily imparted through online manuals. But the intelligence official's insight about the limitations of terrorist learning is well-taken—and supported by other respondents. “Yes, they're capable of adapting to state policy,” explains a counter-terrorism official in the Spanish Civil Guard, “but these adaptations are often very rudimentary.”²¹⁷

Reflecting the hostility of counter-terrorism environments, where dozens of state security agencies hunt them down and seek to destroy them, many terrorist adaptations are geared towards operational security. Terrorists may not be criminal masterminds, but they are security conscious, and necessarily so. “Be careful of what you do,” announced one former jihadist to a group of young supporters at a public event in East London attended by the PI in the summer of 2007. “They're watching.”²¹⁸ Militants “try to secure their operations to a greater degree,” explains an FBI official, “to protect themselves from the security services and law enforcement agencies.”²¹⁹ They do so in a variety of simple ways: for example, by moving around, to prevent law enforcers from identifying their physical locations; by changing their communications methods, to prevent law enforcers from intercepting their conversations; and by altering aliases and code words, to prevent law enforcers from understanding communications they have captured.

²¹⁷ PI interview with Lieutenant Colonel, Unidad Central Operativa, Direccion General de la Policia y de la Guardia Civil, Madrid, Spain, June 12, 2007.

²¹⁸ PI field notes, London, United Kingdom, 2007.

²¹⁹ PI interview with Federal Bureau of Investigation official, US Embassy, London, United Kingdom, October 29, 2007.

Adaptations in Communications

Communications represent a critical vulnerability for terrorists. When law enforcers succeed in penetrating militants' communications, they may use this intelligence to identify and locate different participants and disrupt their activities. Consequently, many tactical adaptations by terrorists involve changes in how they communicate with their colleagues. Militants are often quick to adopt innovations in off-the-shelf communications technologies. "Before they were using regular phones to communicate," explain the counter-terrorism officers from Ceuta, "nowadays they use cell phones more."²²⁰ While many media accounts stress the significance of cell phones for terrorists, along with their alleged practice of "constantly" changing phones, a more nuanced understanding allows us to avoid overemphasizing the value of cell phones to militants.

Indeed, nowadays experienced militants realize that cell phones are vulnerable to interception, causing many to use this technology sparingly or avoiding it altogether. Allekama Lamari, the veteran Algerian militant who participated in the Madrid bombings, rarely used a cell phone "because he learned, from a previous court case, that the authorities could track these communications," explains a Spanish counter-terrorism police officer.²²¹ Spanish authorities did not realize that Lamari, who had not used any of the cell phones investigators used to identify and locate the perpetrators after the attacks, was one of the Madrid bombers until four months after his remains were

²²⁰ PI interview with two counter-terrorism police inspectors, Ceuta, Spain, June 18, 2007.

²²¹ PI interview with police inspector, UNETA, Madrid, Spain, June 9, 2007.

discovered in the wreckage of the blown up apartment in Leganés where the bombers made their last stand.²²²

Other militants, aware that cell phones are vulnerable to government surveillance, reportedly minimize their use of these devices, switching them off when not in use, making it harder for authorities to exploit the tracking signal given off by active phones.²²³ In the days surrounding the Madrid bombings, Jamal Ahmidan and Serhane ben Abdelmajid Fahket, two leaders of the attacks, reportedly turned off their cell phones to avoid being tracked down by the authorities.²²⁴ When militants do use cell phones on a regular basis they “change their calling cards and SIM cards” to throw law enforcers off their trail, observes a Spanish journalist that has reported extensively on Islamist terrorism.²²⁵ A year and a half before the Madrid bombings, Spanish police wiretapped Serhane ben Abdelmajid’s cell phone for several months and recorded his communications with several known militants. But when Serhane changed the Subscriber Identity Module (SIM) card on his phone in October 2002, the police failed to acquire his new number and lost track of his communications.²²⁶

²²² Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): p. 89.

²²³ Among the wreckage of the blown up apartment in Leganés, police discovered a jump drive that contained an electronic copy of “Preparations chain for the struggle” (*Cadena de preparativos para la lucha*), an instructional manual that described several of the communications practices employed by the Madrid bombers, including “buy prepaid phone cards and change them continually... avoid talking on the phone for more than three minutes and change your location with each call... Your phone doesn’t send information about you when it is turned off.” Pere Escobar Solsona, “Tras el rastro electrónico de un atentado,” *El País* (October 25, 2007), http://www.elpais.com/articulo/espana/rastro/electronico/atentado/elpepuesp/20071025elpepinac_12/Tes [August 5, 2008].

²²⁴ Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 23, 37.

²²⁵ PI interview with reporter, Madrid, Spain, June 25, 2007.

²²⁶ Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 124-125.

Of course, regularly changing cell phones and their accompanying SIM cards is a cumbersome undertaking. Contrary to some media accounts, which suggest that terrorists constantly change their cell phones, many militants lapse into operational negligence and change their phones or SIM cards only sporadically, especially if previous communications have given them the—possibly false—sense that their phone calls are secure. Some prominent members of Al Qaeda, including those that faced intense counter-terrorism pressure, used certain types of cell phones and SIM cards repeatedly under the mistaken assumption that these devices, purchased anonymously, could not be traced to them. Khalid Sheikh Mohammed, often described in the media as the sophisticated “mastermind” behind the 9/11 attacks, and other Al Qaeda members fell victim to their own ignorance, or sloppiness, when they repeatedly used the same SIM cards to place calls from different phones. “They'd switch phones but use the same [SIM] cards,” explains a European intelligence official. “The people were stupid enough to use the same cards all of the time. It was a very good thing for us.”²²⁷

While some militants continue to use cell phones, they frequently employ code words and aliases, limit their conversations to short durations, send text messages instead of making phone calls, or place calls but do not talk, in order to signal the recipient to communicate with them using another, more secure method.²²⁸ Such adaptations can enhance the security of sensitive information, sometimes at the expense of clear and coherent communications. “They need to use codes to communicate sensitive information to each other,” explains a senior counter-terrorism investigator with the

²²⁷ Don Van Natta Jr. and Desmond Butler, “How Tiny Swiss Cellphone Chips Helped Track Global Terror Web,” *New York Times* (4 March 2004), <http://www.nytimes.com/2004/03/04/international/Europe/04PHON.html> [Accessed 4 March 2004].

²²⁸ PI interview with reporter, Madrid, Spain, June 25, 2007; PI interview with U.S. State Department official, Madrid, Spain, June 25, 2007.

London Metropolitan police, “but this causes them to make mistakes.” He provides an example of a simple code used by some militants, adding that some militants forget the code, “making it harder for them to communicate.” “If you’re communicating in code,” he concludes, “there will be times when you get it wrong.”²²⁹

Indeed, these adaptations should be understood as simple adjustments in communications practices by imperfect, operationally circumscribed militants rather than flawless responses by hyper-sophisticated adversaries. Simple as they are, such adaptations are also seemingly endless. “They know we are on to them and they keep evolving and using new methods, and we keep finding ways to make life miserable for them,” explains a senior official interviewed by *The New York Times*. “In many ways, it's like a cat-and-mouse game.”²³⁰ A cat-and-mouse game between two sets of imperfectly informed, rationally-bounded players who sometimes respond to challenges by making incremental adjustments to their daily practices.

Not surprisingly, this cat-and-mouse communications game has migrated to the Internet. After law enforcers caught several Al Qaeda members through their SIM card usage, operatives reportedly stopped using their cell phones for business calls, switching to “email, Internet phone calls, and hand-delivered messages” when transmitting sensitive communications.²³¹ Such adaptations are not limited to “Al Qaeda Central.” A counter-terrorism officer in Spain describes how “grass roots jihadist networks” there communicate through Skype, the Internet-based phone service. They also use “email,

²²⁹ PI interview with senior investigative officer, Counter-Terrorist Command, Specialist Operations, Metropolitan Police, London, United Kingdom, September 5, 2007.

²³⁰ Don Van Natta Jr. and Desmond Butler, “How Tiny Swiss Cellphone Chips Helped Track Global Terror Web,” *New York Times* (4 March 2004), <http://www.nytimes.com/2004/03/04/international/Europe/04PHON.html> [Accessed 4 March 2004].

²³¹ *Ibid.*

chat rooms, and web cams,” he says.²³² When communicating by email, militants will pepper their correspondence with code words and aliases, to throw off electronic eavesdroppers. When communicating through online chats or message boards, they seek out large forums where they can blend in among numerous users, all of whom are protected by the relative anonymity of the Internet. When suspicious that their emails are being monitored by security officials, some militants visit pornographic websites and sexually explicit chat rooms to convince potential eavesdroppers they are not “serious” jihadists, as Mohammed Junaid Babar explained during his testimony in the Operation Crevice trial.²³³

Wary of government eavesdroppers, some terrorists, including Khalid Sheikh Mohammed and Richard Reid, communicate sensitive messages through electronic or virtual “dead drops.”²³⁴ Indeed, the use of electronic dead drops has reportedly become common among terrorists plotting attacks. A journalist who covered the Madrid bombings and subsequent trials for *El País*, a prominent Spanish daily, describes how they work. Local jihadists use Web-based email services like Hotmail or Yahoo! to compose and save emails in draft form. Then, instead of sending the emails over Internet routers, which are vulnerable to electronic surveillance, militants share their account userIDs and passwords with trusted colleagues, perhaps by posting a brief message on a password protected online message board. The intended recipient then accesses the

²³² PI interview with police inspector, UNETA, Madrid, Spain, June 9, 2007.

²³³ Testimony of Mohammed Junaid Babar, Operation Crevice trial, Central Criminal Court, London, April 25, 2006.

²³⁴ Steve Coll and Susan B. Glasser, “Terrorists Turn to the Web as Base of Operations,” *Washington Post* (August 7, 2005), http://www.washingtonpost.com/wp-dyn/content/article/2005/08/05/AR2005080501138_pf.html [Accessed August 12, 2005]. The term contains a play on the classic intelligence practice of leaving sensitive communications in a container that can be easily, and surreptitiously, retrieved by a courier.

online account, where he pulls up the draft email and responds in similar fashion or deletes the message.²³⁵

While the *El País* journalist has Spanish jihadists in mind, Richard Reid, the British shoe bomber, used virtual dead drops in the same way to communicate three final emails to a fellow militant in the lead up to his attempted martyrdom operation in December 2002.²³⁶ In his testimony in the Operation Crevice trial, Mohammed Junaid Babar describes how Omar Khyam, the leader of the fertilizer bomb plot, used a similar method to communicate with his conspirators. Before Babar left his colleagues at a training camp in the Pakistani mountains, Khyam provided him the login details to an email account he shared with Momin Khawaja, another participant in the plot, in order to communicate messages without sending them over the Internet. “That was how Khawaja and Khyam communicated,” Babar explained.²³⁷

Communicating via the Internet offers militants the dual advantage of being expedient, while making it harder for their state adversaries to intercept their messages. Internet communications are “convenient for them and difficult for us to monitor,” concede the Ceuta police officers.²³⁸ “It is very difficult for law enforcers to penetrate these sorts of communications,” acknowledges a counter-terrorism officer in Madrid, “in part because the technology itself progresses so quickly.”²³⁹ As these examples suggest, terrorists in Western Europe are more than capable of keeping up with advances in

²³⁵ PI interview with reporter, Madrid, Spain, June 25, 2007.

²³⁶ United States of America v. Richard Colvin Reid, United States District Court, District of Massachusetts, *Government’s Sentencing Memorandum* (January 17, 2003), <http://news.findlaw.com/cnn/docs/terrorism/usreid11703gsentm.pdf> [Accessed August 19, 2008].

²³⁷ Testimony of Mohammed Junaid Babar, Operation Crevice trial, Central Criminal Court, London, March 28-29, 2006.

²³⁸ PI interview with two counter-terrorism police inspectors, Ceuta, Spain, June 18, 2007.

²³⁹ PI interview with police inspector, UNETA, Madrid, Spain, June 9, 2007.

communications technologies. “They take advantage of the technology that’s available to them,” observes the Spanish journalist.²⁴⁰

Such adaptations are driven, at least in part, by militants’ awareness that their communications are vulnerable to interception by government authorities. “They communicate instructions over the Internet for counter-surveillance,” observes a detective superintendent with the London Metropolitan police, “to prevent the disruption and infiltration of their communications and operations.”²⁴¹ “The extremist chat rooms contain warnings, such as, ‘be careful what you say here, the brothers are not the only ones reading this,’” explains a counter-terrorism analyst who has read chat room transcripts. “They have a very clear awareness of possible infiltration in the chat rooms and they’ve modified their behavior accordingly in terms of what they say and share on these public forums.”²⁴² “One of the reasons we used to visit pornography sites,” adds Mohammed Junaid Babar in his testimony in the Operation Crevice trial, “was if we were being monitored it was a way to deflect attention... If I checked the news I would also check pornography sites, sports, anything like that to suggest this person isn’t as serious as they thought... because if they were reading my emails this was just a way to show the authorities we were not as serious as they thought.”²⁴³

²⁴⁰ PI interview with reporter, Madrid, Spain, June 25, 2007.

²⁴¹ PI interview with Detective superintendent, Counter-terrorism command, Metropolitan Police, London, United Kingdom, July 19, 2007.

²⁴² PI interview with counter-terrorism analyst, Royal United Services Institute for Defence and Security Studies, London, United Kingdom, August 2, 2007.

²⁴³ Testimony of Mohammed Junaid Babar, Operation Crevice trial, Central Criminal Court, London, April 25, 2006.

Adaptations in Attacks

While communications represent an important venue of terrorist adaptations, they are not the only one. Terrorists also “change their attack methods, which gives them the ability to surprise people,” explains a detective superintendent with the London Metropolitan police. “Their attacks often focus on transportation systems but they use different tactics and methods, so it’s hard for us to predict.”²⁴⁴ Driven by a fundamental desire to conduct successful attacks, terrorists adapt their operations in response to security measures. When terrorist planners confront security constraints for one target, such as a government building or military base, or class of targets, such as airplanes or embassies, they typically shift their focus to “softer,” less protected marks that still promise a high number of casualties, such as restaurants, nightclubs, or public transportation.

Following a rash of airplane hijackings by Palestinian and Cuban militants in the late 1960s and American extortionists in the early 1970s, Western governments responded by installing metal detectors and X-ray machines in airports to screen passengers and deter additional skyjackings. Faced with tougher airport security measures, terrorists adapted by switching to other forms of political violence, leading to an increase in assassinations and hostage takings.²⁴⁵ More recently, Palestinian militants have responded to Israeli counter-terrorism measures, including the construction of the security barrier in the West Bank, by shifting from suicide bombings and shootings to

²⁴⁴ PI interview with Detective superintendent, Counter-terrorism command, Metropolitan Police, London, United Kingdom, July 19, 2007.

²⁴⁵ Walter Enders and Todd Sandler, “The Effectiveness of Antiterrorism Policies: A Vector-Autoregression-Intervention Analysis,” *American Political Science Review* 87, no. 4 (December 1993): 829-844.

launching Qassam rockets against nearby Israeli towns.²⁴⁶ After anti-vehicle barriers prevented Jemaah Islamiyyah from killing more people in its truck bombing of the Australian embassy in 2004, the Indonesian militants switched to suicide bomb backpacks, which they used to attack three restaurants in Bali the following year, killing over twenty-five civilians.²⁴⁷

Nor do government security measures always succeed in making a particular class of terrorist targets impervious to attack. While many terrorists respond to counter-terrorism measures by simply shifting to softer, less protected targets, more inventive adversaries may try to overcome such counter-measures in unforeseen ways, enhancing the psychological impact of their attacks.²⁴⁸ Aviation security policies implemented since the early 1970s have arguably made airports and airplane flights more secure today than they were several decades ago. “[O]nce terrorists used a new tactic or introduced a technical innovation the aviation security complex usually adapted its procedures fairly rapidly, so as to close the hole in the system,” writes the Israeli counter-terrorism scholar, Ariel Merari. “But the terrorists have not been torpid. They have looked for news ways to circumvent the security system.”²⁴⁹ Some innovative terrorists invariably find the holes in aviation security, which they exploit to continue their attacks on airports and commercial aircraft. “Airport-security measures have simply chased out the amateurs

²⁴⁶ Edward H. Kaplan, “Tactical Prevention of Suicide Bombings in Israel (2001-2003),” National Academy of Sciences, IED workshops, <http://dels.nas.edu/comm/bcst/ieds/pdfs/Kaplan.pdf> [June 23, 2008]

²⁴⁷ Adam Dolnik, “Assessing the Terrorist Threat to Singapore’s Land Transportation Infrastructure,” *Journal of Homeland Security and Emergency Management* 4, no. 2 (2007), <http://www.bepress.com/jhsem/vol4/iss2/4> [June 23, 2008]; National Counterterrorism Center, *Worldwide Incidents Tracking System*, “ICN: 200579029 DETAILS,” <http://wits.nctc.gov/ViewIncident.do?incidentId=21097> [June 25, 2008].

²⁴⁸ Adam Dolnik, *Understanding Terrorist Innovation: Technology, Tactics, and Global Trends* (London: Routledge, 2007): 174.

²⁴⁹ Ariel Merari, “Attacks on Civil Aviation: Trends and Lessons,” in *Aviation Terrorism and Security*, edited by Paul Wilkinson and Brian M. Jenkins (London: Frank Cass, 1999): p. 24.

and left the clever and audacious,” writes Malcolm Gladwell, reporting for *The New Yorker*. Gladwell describes how terrorists have repeatedly adapted to aviation security policies put in place since X-ray machines and metal detectors were installed in U.S. airports in 1973:

For a time, the number of hijackings dropped significantly. But it soon became clear that the battle to make flying safer was only beginning. In the 1985 hijacking of TWA Flight 847 out of Athens -- which lasted seventeen days -- terrorists bypassed the X-ray machines and the metal detectors by using members of the cleaning staff to stash guns and grenades in a washroom of the plane. In response, the airlines started to require background checks and accreditation of ground crews. In 1986, El Al security officers at London's Heathrow Airport found ten pounds of high explosives in the luggage of an unwitting and pregnant Irish girl, which had been placed there by her Palestinian boyfriend. Now all passengers are asked if they packed their bags themselves. In a string of bombings in the mid-eighties, terrorists began checking explosives-filled bags onto planes without boarding the planes themselves. Airlines responded by introducing “bag matching” on international flights -- stipulating that no luggage can be loaded on a plane unless its owner is on board as well. As an additional safety measure, the airlines started X-raying and searching checked bags for explosives. But in the 1988 bombing of Pan Am Flight 103 over Lockerbie, Scotland, terrorists beat that system by hiding plastic explosives inside a radio. As a result, the airlines have now largely switched to using CT scanners, a variant of the kind used in medical care, which take a three-dimensional picture of the interior of every piece of luggage and screen it with pattern-recognition software. The days when someone could stroll onto a plane with a bag full of explosives are long gone.²⁵⁰

But not, apparently, the days when someone could stroll onto a plane carrying small knives and box cutters, critical tools in the 9/11 attacks. Of course, numerous changes were made in aviation security following that tragedy, with reportedly mixed results.²⁵¹ However, even if such reforms make substantial improvements to aviation security, they are unlikely to deter all terrorists from attacking these “high value” targets. Indeed, despite reported increases in airline security measures in the U.S. and Western

²⁵⁰ Malcolm Gladwell, “Security in the Skies,” *The New Yorker* (October 1, 2001): 50-52.

²⁵¹ The *9/11 Commission*'s final report card assigns poor grades for aviation security: Efforts to “[i]mprove airline screening checkpoints to detect explosives” receive a “C”, “Checked bag and cargo screening” merits a “D”, and “Improve airline passenger pre-screening” fails altogether. See 9/11 Public Discourse Project, *Final Report on 9/11 Commission Recommendations* (December 5, 2005): pp. 1-2.

Europe after 9/11, two months later Richard Reid, the disheveled British militant who has been dubbed “the Kramer of Al Qaeda” by some officials, managed to smuggle plastic explosives hidden inside his hiking shoes aboard an American Airlines plane from Paris to Miami, devices he failed to detonate when alert crew members and passengers restrained him as he tried to ignite the bombs.²⁵² This near disaster prompted airlines to implement additional security procedures, such as inspecting passengers’ shoes before flying, an apparently sensible, if cumbersome, precaution.

With airport security officials and airline screening technology continuing to focus on more common and readily available solid explosives, some militants turned their attention to liquid explosives, as seen in the foiled plan to blow up several U.S.-bound airplanes in the summer of 2006. “They couldn’t get matches,” explains an intelligence analyst from the British Foreign and Commonwealth Office, “they couldn’t get [solid] explosives on board planes, so they figured out how to use liquid explosives.”²⁵³ Predictably, security officials responded to this new threat with another round of safeguards, this time minimizing the amount of liquids passengers can bring aboard planes and requiring that allowable liquids be stored in small containers of three ounces or less. While these measures reportedly make it more difficult for would-be terrorists to manufacture liquid explosives on board airplanes, the cat-and-mouse game among terrorists and their counter-terrorist adversaries is likely to continue, if the history of

²⁵² United States of America v. Richard Colvin Reid, United States District Court, District of Massachusetts, *Government’s Sentencing Memorandum* (January 17, 2003), <http://news.findlaw.com/cnn/docs/terrorism/usreid11703gsentm.pdf> [Accessed August 19, 2008]; Fox Butterfield, “The Shoe Bomb Case: Qaeda Man Pleads Guilty to Flying with Shoe Bomb,” *New York Times* (October 2, 2002); Fred Burton, “Beware of ‘Kramer’: Tradecraft and the New Jihadists,” *Stratfor Weekly* (January 18, 2006), http://www.stratfor.com/products/premium/read_article.php?id=261022 [Accessed February 7, 2006].

²⁵³ PI interview with counter-terrorism analyst, Foreign and Commonwealth Office, United Kingdom, London, July 24, 2007.

aviation security and terrorism is any guide.²⁵⁴ “Now that we regulate that,” cautions the British intelligence analyst, “they’ll move on to something else.”²⁵⁵

Learning Disabilities

Terrorists’ ability to engage in cat-and-mouse games with their state adversaries does not mean their aptitude for learning is limitless. Far from it. As this report emphasizes, militants confront numerous impediments to acquiring, analyzing and applying information and experience. Many of these shortcomings are an inevitable byproduct of the way human beings think, act, and organize; others are specific to the way militants organize their operations and share information and experience. While media-driven images of highly adaptive terrorists may offer comfort to those who wish to explain the failure to prevent attacks by reifying the alleged sophistication of the perpetrators, the sobering fact remains that many, if not most, of the assaults planned and perpetrated by terrorists, including the most successful ones, are replete with basic errors in tradecraft. The persistence and ubiquity of such blunders, before, during, and after 9/11, suggests that despite numerous “lessons learned” manuals available online to aspiring terrorists, many do not learn particularly well from experience.²⁵⁶

²⁵⁴ Ariel Merari, “Attacks on Civil Aviation: Trends and Lessons,” in *Aviation Terrorism and Security*, edited by Paul Wilkinson and Brian M. Jenkins (London: Frank Cass, 1999): p. 24.

²⁵⁵ PI interview with counter-terrorism analyst, Foreign and Commonwealth Office, United Kingdom, London, July 24, 2007.

²⁵⁶ For examples of lessons learned manuals written by veteran militants for their fellow jihadists in other conflicts, see Saif al-Adel, *Message to Our People in Iraq and the Gulf [Region] Specifically, and to Our Islamic Ummah in General: The Islamic Resistance Against the American Invasion of Qandahar and Lessons Learned* (Alexandria, VA: IntelCenter/Tempest Publishing, April 2003); and Abu Musab al-Suri, *Lessons Learned from the Armed Jihad Ordeal in Syria*, Harmony Document AFGP-2002-600080 (West Point: Combating Terrorism Center), http://ctc.usma.edu/aq/aq_600080.asp [June 25, 2008]. Of course, once these documents are available online they also provide valuable “lessons learned” for counter-terrorism officials as well. PI telephone interview with former counter-terrorism official, U.S. State Department (August 13, 2008).

Militants may be driven by a higher cause but at the end of the day they remain human beings, with all the limitations and fallibilities that entails. Like all human beings, terrorists are subject to biased cognitive schema and error-prone human memories that inevitably constrain decision-making, memory recall, and information processing. Moreover, they operate in dynamic and hostile environments characterized by considerable information uncertainty and stress. Terrorism is not rocket science, but it can be nerve racking. To avoid attracting unwanted attention as they plan and execute attacks, militants must be capable of interacting with numerous people—neighbors, fellow workers, mosque acquaintances, family members—without raising suspicion about their true intentions and activities. This is not easy to do and many covert operatives experience “burn syndrome,” the pervasive fear that others know what they’re doing, leading them to make awkward movements, often without realizing that their actions make them appear more, not less, suspicious.²⁵⁷ In the heat of an operation, some militants, even those that have received extensive training, panic and make simple mistakes that appear obtuse to outside observers.

Mohammad Salameh became the poster boy for “stupid” terrorists when, following the 1993 World Trade Center bombing, he returned repeatedly to a car rental agency to claim a four hundred dollar refund on the van he and his fellow conspirators had blown to smithereens in their unsuccessful bid to topple the Twin Towers. As Mark Hamm recounts, Salameh’s desperate act had an economic motive: to acquire the money

²⁵⁷ Fred Burton, “Beware of ‘Kramer’: Tradecraft and the New Jihadists,” *Stratfor Weekly* (January 18, 2006), http://www.stratfor.com/products/premium/read_article.php?id=261022 [Accessed February 7, 2006].

he needed to upgrade his plane ticket to Jordan from a child to an adult fare. It was also “the thread that unraveled the entire conspiracy.”²⁵⁸

Several years later, Mohamed Odeh, an experienced Al Qaeda militant who reportedly built the bombs used in the 1998 U.S. embassy bombings in Kenya and Tanzania, was detained by Pakistani immigration officials in Karachi, where he had flown following the attacks. Odeh had received instruction in counter-interrogation, but he apparently failed to put his training to much use. When asked by an immigration officer whether he was a “terrorist,” Odeh remained silent; when pressed whether he had anything to do with the suicide bombings, Odeh attempted to justify them in the name of Islam to the (presumably Muslim) officer. Under questioning by Pakistani officials, he then made a complete confession over the next several days, conceding his membership in Al Qaeda, naming several fellow conspirators in the operation, and providing detailed information about where and how the bombs were made. Hamm describes how this intelligence was immediately shared with the FBI, providing the Bureau “its first solid lead connecting bin Laden to the embassy bombings.”²⁵⁹

In 1999, Ahmed Ressay, who like Odeh, Richard Reid and Zacarias Moussaoui, received training in Afghanistan, was on his way to carry out the so-called “millennium” attack at the Los Angeles International Airport, when he also wilted under pressure. During a routine Customs inspection at Port Angeles, Ressay acted nervously, earning himself closer inspection from a second officer. When that officer began an initial pat-down, Ressay foolishly tried to run away, leading officials to arrest him and discover the

²⁵⁸ Mark S. Hamm, *Terrorism as Crime: From Oklahoma City to Al Qaeda and Beyond* (New York: New York University Press, 2007): pp. 46-48.

²⁵⁹ Hamm, *Terrorism as Crime*: p. 80.

explosives he had hidden in his car's spare tire well.²⁶⁰ In all three cases, experienced militants, two of whom received Al Qaeda training, committed basic errors in operational tradecraft that led to the unraveling of the criminal conspiracies in which they participated.

Even the “planes operation,” the most devastating terrorist attack in human history, was characterized by sloppy tradecraft. Many of the 9/11 perpetrators had been trained at one or more of the Al Qaeda-affiliated camps in Afghanistan. Several, including Nawaf al Hazmi and Khalid al Mihdhar, attended the “elite” Mes Aynak camp, where they received advanced instruction in firearms, close quarters combat, and night operations. Hazmi and Mihdhar were also experienced jihadists who had fought in Bosnia. Following their selection to the 9/11 plot, Hazmi and other operatives traveled to Pakistan, where they received personal instruction from Khalid Sheikh Mohammed, himself a veteran militant who had fought in Afghanistan and been involved in numerous terrorist plots against the United States dating back to the early 1990s. Mohammed drew on his own experience living as a student for several years in North Carolina to teach the militants basic phrases in English, and how to use a phone book and rent an apartment in the United States. He also provided them instructions on making travel reservations, using the Internet, and encoding their communications.²⁶¹

Though apparently well-trained, the 9/11 perpetrators committed basic errors in tradecraft that nearly sabotaged their plans. Despite their experience in guerrilla warfare,

²⁶⁰ National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: W.W. Norton & Company, 2004): p. 177.

²⁶¹ National Commission on Terrorist Attacks Upon the United States, *Outline of the 9/11 Plot*, Staff Statement No. 16, http://www.9-11commission.gov/hearings/hearing12/staff_statement_16.pdf [Accessed 16 June 2004]: pp. 2, 4, 9; National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: W.W. Norton & Company, 2004): pp. 155, 157.

their apparent enthusiasm for the suicide mission, and their specialized instruction from Khalid Sheikh Mohammed, Nawaf al Hazmi and Khalid al Mihdhar were completely unprepared for their assigned roles of piloting the suicide aircraft. Sent to the United States to learn how to fly planes, when they arrived in California Hazmi barely spoke English and Mihdhar spoke none. Both quickly soured on their half-hearted attempts to learn the language, even though their pilot training was in English, the international language of aviation. In June 2000 Mihdhar exposed the operation by abruptly returning to Yemen to visit his family, without permission from Khalid Sheikh Mohammed, who was reportedly livid at the security breach and wanted to replace the unreliable operative.²⁶² While Hamzi stuck it out in San Diego, he increased his exposure to potential surveillance by befriending several people with no connection to the plot, cryptically boasting to one of them that he would soon become famous.²⁶³ Later on, while driving to the East Coast with Hani Hanjour, who was recruited into the plot to replace him as one of the pilots, but whose own English and piloting skills were scarcely better, Hazmi again endangered the operation when he received a speeding ticket in Oklahoma.²⁶⁴ He wasn't the only 9/11 hijacker to receive a traffic citation. Less than

²⁶² National Commission on Terrorist Attacks Upon the United States, *Outline of the 9/11 Plot*, Staff Statement No. 16, http://www.9-11commission.gov/hearings/hearing12/staff_statement_16.pdf [Accessed 16 June 2004]: p. 5.

²⁶³ National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: W.W. Norton & Company, 2004): p. 223.

²⁶⁴ National Commission on Terrorist Attacks Upon the United States, *Outline of the 9/11 Plot*, Staff Statement No. 16, http://www.9-11commission.gov/hearings/hearing12/staff_statement_16.pdf [Accessed 16 June 2004]: p. 7; National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: W.W. Norton & Company, 2004): p. 522, endnote 64.

two days before the attacks, Ziad Jarrah, the pilot for United Airlines Flight 93, got a speeding ticket while driving to his hostage team's final staging point in New Jersey.²⁶⁵

Ziad Jarrah's personality conflicts with Mohammed Atta, the dour, intense ringleader of the plot, also threatened to derail the operation. Jarrah reportedly chafed under Atta's leadership and felt excluded from operational decision-making. He also needlessly compromised the security of the impending attacks by making *four* trips overseas to visit his family and girlfriend. When Jarrah considered dropping out of the operation altogether, Khalid Sheikh Mohammed arranged to send funds to Zacarias Moussaoui, possibly to support him as a replacement pilot for Jarrah, or to facilitate his participation in an alleged second wave of attacks.

However, Moussaoui, whom Brixton mosque chairman Abdul Haqq Baker remembers as a "very headstrong individual,"²⁶⁶ was reportedly so incompetent that two days into his aviation training in Minnesota his flight instructor called the FBI to report him as a potential hijacker. Moussaoui drew attention to himself by, among other things, insisting on receiving advanced training for flying large commercial aircraft without, like most of the flight school's students, being employed as a pilot or having thousands of flying hours to his credit; paying for the expensive course with almost US\$ 9,000 in cash, without being able to account for the source of these funds when questioned; expressing a

²⁶⁵ National Commission on Terrorist Attacks Upon the United States, *Outline of the 9/11 Plot*, Staff Statement No. 16, http://www.9-11commission.gov/hearings/hearing12/staff_statement_16.pdf [Accessed 16 June 2004]: p. 10. There is also at least one report that Mohammed Atta received a ticket in April 2001 for driving without a valid driver's license and that his license was suspended on August 23rd, less than three weeks before the attacks, when he failed to appear in traffic court. However, *The 9/11 Commission Report* makes no mention of this presumably significant event. See Ken Thomas, "Feds Investigating Possible Terrorist-Attack Links in Florida," *Associated Press* (September 12, 2001); and Fred Burton, "Beware of 'Kramer': Tradecraft and the New Jihadists," *Stratfor Weekly* (January 18, 2006), http://www.stratfor.com/products/premium/read_article.php?id=261022 [Accessed February 7, 2006].

²⁶⁶ PI interview with Abdul Haqq Baker, Chairman, Brixton Mosque and Islamic Cultural Centre, London, United Kingdom, October 23, 2007.

desire to only learn how to steer a Boeing 747 in mid-air, without worrying about how to take off or land the aircraft; asking how much fuel a jumbo jet could carry and the damage it could cause if it crashed into anything; and getting extremely upset when law enforcers asked him about his religious background. Moussaoui raised enough concerns among federal agents that the same day they questioned him at the flight school in Eagan, a Minneapolis suburb, they arrested him for immigration violations, to ensure he couldn't continue his training.²⁶⁷ While Moussaoui maintained enough tradecraft sense to lie to investigators about the purpose of his U.S. visit, his arrest, largely caused by his own negligence and short-temper, exposed Al Qaeda's stateside operation to potential disruption shortly before the attacks. *The 9/11 Commission* describes him simply as "an al Qaeda mistake and a missed opportunity" for law enforcers to prevent the attacks.²⁶⁸

Like Al Qaeda's previous attacks, 9/11 was characterized less by operational sophistication and flawless execution than by steadfast, adaptable perpetrators practicing slipshod tradecraft. While the planes operation was beset with numerous problems during the preparation stages, none of these errors proved disastrous, in part because the plotters adapted to each challenge: by reassigning participants to different tasks for which they were better suited, recruiting and training more skilled hijackers, including Mohammed Atta and his Hamburg friends, and persuading Atta and Jarrah to overcome

²⁶⁷ United States of America v. Zacarias Moussaoui, United States District Court, Eastern District of Virginia, Alexandria Division, Grand Jury, *Superseding Indictment* (June 2002); United States of America v. Zacarias Moussaoui, United States District Court, Eastern District of Virginia, Alexandria Division, Grand Jury, *Statement of Facts* (April 22, 2005); National Commission on Terrorist Attacks Upon the United States, *Outline of the 9/11 Plot*, Staff Statement No. 16, http://www.9-11commission.gov/hearings/hearing12/staff_statement_16.pdf [Accessed 16 June 2004]: p. 15-17; National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: W.W. Norton & Company, 2004): pp. 246, 273, 540, endnote 90; Sean O'Neill and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006): pp. 222.

²⁶⁸ National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: W.W. Norton & Company, 2004): p. 273.

their personal animosities for the greater good of the suicide mission.²⁶⁹ The attackers' ability to fix their mistakes and adapt their activities in response to day-to-day contingencies, defining qualities of *mētis*, ensured that the planes operation, flawed as it was, was ultimately carried out with devastating results.

After 9/11: Learning from Experience?

As would be expected from a tragedy of such magnitude, the 9/11 attacks received a tremendous amount of media coverage and attention from policy makers, counter-terrorism specialists, and the general public. Over the past seven years, reporters, officials, scholars, and citizens have created a vast repository of knowledge about the attacks, information that has been codified in press accounts, government reports, academic studies, blogs, and other documents, many of which are available online. *The 9/11 Commission Report*, to take one notable, widely publicized example, contains a wealth of information about how the terrorists prepared for and executed the attacks, detailing many of the mistakes they made along the way. The report also analyzes numerous shortcomings in the government's counter-terrorism efforts, many of which, members of the original *Commission* believe, have not been adequately addressed since the attacks.²⁷⁰

While Islamic militants that have carried out operations since 9/11 have had access to much of this knowledge, they do not appear to have learned much from their predecessors' mistakes. "It seems reasonable to assume," one counter-terrorism analyst

²⁶⁹ National Commission on Terrorist Attacks Upon the United States, *Outline of the 9/11 Plot*, Staff Statement No. 16, http://www.9-11commission.gov/hearings/hearing12/staff_statement_16.pdf [Accessed 16 June 2004]: 12-16.

²⁷⁰ 9/11 Public Discourse Project, *Final Report on 9/11 Commission Recommendations* (December 5, 2005).

suggests, “that they have studied the report from the *9/11 Commission*, detailing the errors committed by the hand-picked crème de la crème of al Qaeda prior to hijacking the four aircraft.”²⁷¹ Yet, most post-9/11 plots have been even more slipshod, suggesting that the planes operation may have represented the apex of Al Qaeda’s tactical sophistication, at least to date.²⁷²

Richard Reid’s bumbling, yet dogged, attempt to ignite his hiking shoes in the passenger cabin of a commercial airliner provides one case in point. Three days before he was supposed to fly from Paris to Miami, Reid paid a travel agent \$1,800 in cash for his ticket, explaining that he was flying to the Caribbean for the Christmas holidays. On December 21, 2001, just three-and-a-half months after 9/11, Reid showed up at the airport for his flight wearing dirty clothes and carrying no luggage, leading authorities to question him for so long he missed his flight. The next day, determined to continue his operation, Reid returned to the airport, where his disheveled appearance caught the attention of his fellow passengers, one of whom later remarked, “I was immediately struck by how bizarre he looked.”²⁷³ When he finally managed to board the plane, Reid made a flight attendant suspicious by refusing to eat or drink anything, even water, on the ten hour flight. A couple of hours into the transatlantic voyage, Reid attempted to light the fuses on his shoe bomb with matches when the passenger next to him left his seat for a bathroom break. The flight attendant smelled the sulfur from Reid’s matches and quickly located him, with the assistance of a nearby passenger. When she realized that

²⁷¹ Fred Burton, “Beware of ‘Kramer’: Tradecraft and the New Jihadists,” *Stratfor Weekly* (January 18, 2006), http://www.stratfor.com/beware_kramer_tradecraft_and_new_jihadists [August 13, 2008].

²⁷² Some disrupted operations, such as the liquid explosives plot at Heathrow Airport and the series of attacks planned by Dhiren Barot and his associates, would have perhaps rivaled, or even surpassed, 9/11 in terms of tactical sophistication had the attacks been executed successfully—which they weren’t.

²⁷³ Michael Elliot, “The Shoe Bomber’s World,” *Time* (February 16, 2002), <http://www.time.com/time/world/article/0,8599,203478,00.html> [August 8, 2008].

Reid was trying to light one of his shoes, the flight attendant struggled with him and called for help. Another flight attendant and several passengers joined the scuffle, and together they subdued Reid and stopped him from igniting his shoes, narrowly averting disaster. The alertness and courage of the flight attendants and passengers, confronted with this terrifying scenario only weeks after 9/11, is commendable, even heroic. But if Reid had simply ignited the bomb fuse properly, perhaps by using a plastic cigarette lighter instead of six separate matches, or going to a more secluded spot in the plane, such as one of the lavatories, he very well might have succeeded in detonating the explosives, possibly rupturing the aircraft's fuselage and causing the plane to crash.²⁷⁴

Madrid and London Bombings

Following in the ignominious tradition of Mohammad Salameh and Ahmed Ressam, Reid's amateurish attack pegged him as another "poster boy" for dumb terrorists. But even two of the most "successful" post-9/11 attacks, the 2004 Madrid bombings and the 2005 London bombings, violated basic rules in clandestine tradecraft, leaving the perpetrators needlessly exposed to potential law enforcement surveillance and disruption of their plots.²⁷⁵ In preparing for what was intended to be a series of

²⁷⁴ United States of America v. Richard Colvin Reid, United States District Court, District of Massachusetts, *Government's Sentencing Memorandum* (January 17, 2003), <http://news.findlaw.com/cnn/docs/terrorism/usreid11703gsentm.pdf> [Accessed August 19, 2008]; United States of America v. Richard Colvin Reid, United States District Court, District of Massachusetts, *Criminal Complaint*, "Affidavit of Margaret G. Cronin" (December 23, 2001): pp. 3-4; Fred Burton and Scott Stewart, "The Heathrow Plot Trial: Retrospection and Implications," *Stratfor Weekly* (April 9, 2008), http://www.stratfor.com/weekly/heathrow_plot_trial_retrospection_and_implications [June 26, 2008]; Sean O'Neil and Daniel McGrory, *The Suicide Factory: Abu Hamza and the Finsbury Park Mosque* (London: HarperCollins, 2006): pp. 214-217, 226; Michael Elliot, "The Shoe Bomber's World," *Time* (February 16, 2002), <http://www.time.com/time/world/article/0,8599,203478,00.html> [August 8, 2008].

²⁷⁵ Examining "successful" attacks helps control, however imperfectly, for bias in collecting data from disrupted or foiled plots that received extensive reporting in the media. Relying solely on well reported failures for data about terrorist attacks may skew research findings by overemphasizing the incompetence of the perpetrators of these attacks. For this reason, the cross-case sample in this study includes examples

bombings in Madrid, not just a single day's carnage, Jamal Ahmidan, one of the coordinators of the attacks, completed what Daniel Benjamin and Steven Simon describe as a "series of amateurish and nearly botched transfers" of hashish for explosives and detonators with Emilio Suárez Trashorras, a drug dealer and former miner who provided the explosive materials used in the attacks.²⁷⁶ Following several erratic, almost comical transactions using different hashish smokers that owed Trashorras money to smuggle small quantities of explosives on bus rides from Asturias to Madrid, by the end of February 2004 Trashorras and Ahmidan decided that this method of exchange was too slow—and perilous.²⁷⁷

With the March 14th general elections that the militants hoped to influence fast approaching, Ahmidan and two colleagues drove up to Asturias themselves to visit the mine from which they planned to steal the explosives. While searching for the dynamite at the mine in the middle of the night, they got lost and had to call Trashorras for directions. After eventually finding the explosives and meeting with Trashorras the next morning, they returned to Madrid in separate cars. On the way, while driving a stolen car with false number plates and carrying a fake Belgian passport for identification, Ahmidan recklessly exposed the operation when a *Guardia Civil* officer pulled him over for speeding and cited him for lacking proper documentation for the vehicle.²⁷⁸ When the

of "successful" terrorists and their operations, such as the 9/11, 3/11, and 7/7 attacks. As this report indicates, even these operations were not wanting in poor tradecraft and basic mistakes.

²⁷⁶ Daniel Benjamin and Steven Simon, *The Next Attack: The Failure of the War on Terror and a Strategy for Getting it Right* (New York: Times Books, 2005): p. 11.

²⁷⁷ José María Irujo, *El Agujero: España invadida por la yihad* (Madrid: Aguilar, 2005): p. 287.

²⁷⁸ Daniel Benjamin and Steven Simon, *The Next Attack: The Failure of the War on Terror and a Strategy for Getting it Right* (New York: Times Books, 2005): p. 11; Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 180, 182-183; Paloma D. Sostero, "Un guardia civil declara que multó a 'El Chino' cuando volvía de Asturias con explosivos," *El Mundo* (April 24, 2007), <http://w3.elmundo.es/elmundo/2007/04/23/espana/1177316962.html> [July 23, 2008]; Retransmisión del Juicio por los atentados del 11 de marzo de 2004, "Declaración Testigo E-68411-L Guardia Civil," <http://www.datadiar.tv/juicio11m/resumen230407.htm#E68411> [June 27, 2008]; *Playing*

officer noticed Ahmidan's birthplace on the otherwise false passport, he commented, "Tetuán was a Spanish protectorate," to which the Moroccan, visibly offended, replied, "and Andalus was founded at Córdoba."²⁷⁹ This was not the first time in the run up to the attacks that the impulsive Ahmidan heedlessly shared his leanings with non-Muslim Spaniards. Several days earlier, during an argument with Trashorras' wife, Carmen Toro, he reportedly bragged, "We are the most powerful army in the world. Look at the Twin Towers." When Toro objected that many innocent people had died in the 9/11 attacks, Ahmidan prophetically countered, "innocents also die in Iraq, in Palestine. Aznar is killing people in Iraq, someday there will be blood here too."²⁸⁰

But first Ahmidan and his colleagues had to assemble the bombs Toro's husband was helping them acquire. To do so, they relied on a bomb design that used cell phone alarms to trigger the detonators, apparently not realizing, or not caring, that the phones and their SIM cards could be used by law enforcers to track them down if any of the bombs failed to detonate. This was a critical mistake. When one of the phone bombs subsequently failed to explode in the attacks, Spanish investigators traced the phone card to a *locutorio* managed by Jamal Zougam, whose arrest provided a major break in the investigation. Zougam, one of the perpetrators that placed the bombs on the trains, had supplied cell phones and SIM cards to his fellow conspirators. The Madrid bombers used

Chess with the Dead, <http://chesswithdead.blogspot.com/2007/04/trialday-28-april-23rd.html> [June 6, 2007].

²⁷⁹ Al-Ándalus is an Arabic term that refers to those parts of the Iberian peninsula that were ruled by Muslim leaders for several hundred years, from approximately CE 711 to 1492. The capital of Al-Ándalus was Córdoba, which was widely known as a center of Islamic learning and culture. Some contemporary jihadists believe that because of this history, Al-Ándalus/Spain must be recaptured for Muslim rule. The quotation is from *Indictment 20/2004, Committal for Trial (Auto de Procesamiento)*, Juzgado Central de Instrucción Número Seis, Audiencia Nacional, Madrid, signed by magistrate Juan del Olmo (April 10, 2006): p. 251.

²⁸⁰ Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): p. 177. Translated by PI.

these devices not only to build the triggers for the phone bombs but to make telephone calls to their family members and each other, providing investigators with an invaluable opportunity to track them down by exploiting their communications. When authorities discovered that the phone and SIM card in the unexploded bomb were part of a larger pack Zougam had supplied his colleagues, they traced the calls made on each SIM card that was activated in the area where the bombs were built. This electronic trail led authorities to Emilio Suárez Trashorras, who was subsequently convicted of providing the explosives used in the attacks, and the Oulad Akcha brothers, both of whom reportedly helped carry out the bombings and later died at the police standoff in Leganés.

Incredibly, Jamal Zougam, the telecommunications “specialist” for the operation, was using one of the cards when he was arrested by authorities, two days after the attacks. Zougam’s early arrest did not stop several other Madrid bombers still at large from continuing to use their phones and SIM cards to make telephone calls, which provided the authorities with additional leads and eventually led them to the apartment in Leganés, where the perpetrators decided to make their last stand. Indeed, during the police standoff in Leganés three weeks after the attacks, some of the Madrid bombers used a Zougam-supplied phone and SIM card to make farewell calls to their family members.²⁸¹

The morning of the Madrid attacks, the bombers violated the first rule of clandestine tradecraft when, instead of traveling separately to minimize their exposure to potential surveillance, they drove together in three separate cars, including a *Renault*

²⁸¹ Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): pp. 56, 75; *El Mundo* (March 1, 2007), “La policía se centró en la pista islamista el 13-M cuando llegó a la tienda de Jamal Zougam,” <http://www.elmundo.es/elmundo/2007/03/01/espana/1172774314.html> [July 23, 2008]; *Playing Chess with the Dead*, <http://chesswithdead.blogspot.com/2007/03/trialday-9-march-1st.html> [June 6, 2007]

Kangoo van, to a railway station in Alcalá de Henares. The driver of the *Kangoo* van parked the vehicle just a hundred meters from the station and together the bombers boarded the trains that would carry their devastating payloads into the Spanish capital.²⁸² Some of the terrorists needlessly drew notice to themselves by dressing in Islamic skull caps and scarves that screamed for attention among the staidly dressed businessmen that shared their morning commute into Madrid. They also left critical forensic evidence inside the *Kangoo* van they abandoned near the train station, including an audio cassette tape containing Koranic recitations, which provided investigators with an early clue that the attacks had not been carried out by Basque nationalists, as originally claimed by the Aznar administration, and several detonators and explosives remains and wrappers, which helped investigators trace the explosives back to the mine in Asturias.²⁸³ These errors in tradecraft, and the overall sloppiness of the attack, did not prevent the Madrid bombers from killing more than 190 people on that fateful day. But their mistakes and carelessness did provide critical clues that helped investigators piece together the conspiracy quickly and track down the conspirators, preventing the bombers from killing more people in their planned follow-up attacks.

The morning of the London bombings, four suicide bombers, at least two of whom reportedly received terrorism training in Pakistan, violated similar rules in clandestine tradecraft. Instead of traveling into London separately, Mohammed Siddique Khan, Shehzad Tanweer, and Hasib Hussain drove in the same car together to Luton,

²⁸² Paloma D. Sostero, “Una agente de Inteligencia detalla las incógnitas sin resolver en la investigación,” *El Mundo* (July 3, 2007), <http://www.elmundo.es/elmundo/2007/03/07/espana/1173241768.html> [June 27, 2008].

²⁸³ While it is possible that the bombers purposely left the Koranic verse cassette tape in the car to provide investigators with a clue as to their identify, it is not clear why they would have knowingly left evidence that would lead investigators to the source of their explosives so quickly, when they had planned to carry out a series of attacks in Madrid. Manuel Marlasca and Luis Rendueles, *Una historia del 11-M que no va a gustar a nadie* (Madrid: Temas de Hoy, 2007): p. 34.

thirty miles north of London. On the way to Luton, the trio stopped for snacks and gasoline at a filling station, where Tanweer drew attention to himself by arguing with a cashier over his change and looking directly at one of the ubiquitous closed-circuit television (CCTV) cameras that dot Britain. The three bombers then continued their drive to the Luton train station, where they met the fourth bomber, Germaine Lindsay, who had been anxiously waiting for them at the train station for almost two hours. The four young men then gathered their suicide backpacks, entered the Luton station, where more CCTV cameras captured them for posterity, and went through the ticket barriers together.

Like the Madrid bombers, the London quartet seemed determined to stand out among the morning business commuters, this time by dressing casually and carrying rucksacks, apparently hoping to pass themselves off as students or outdoorsmen. Some witnesses also noticed that the bombers talked loudly to each other on the train ride into London. When they arrived at King's Cross station, the four men again drew attention to themselves by hugging each other before boarding the separate Tube trains they hoped would carry them to their destiny. At the time of their deaths, all four bombers were carrying their personal identification documents, providing criminal investigators with valuable forensic evidence, along with the abundant CCTV footage, which they used to piece together the conspiracy.²⁸⁴

²⁸⁴ In this suicide operation, planned as a one-time event rather than a series of attacks, the possibility that the bombers deliberately carried their IDs to help criminal investigators, and the general public, more quickly learn the identity of their attackers, is more plausible. British House of Commons, Home Office, *Report of the Official Account of the Bombings in London on 7th July 2005* (May 11, 2006): pp. 2-4; Fred Burton, "London Bombings: OPSEC Errors or Intelligence Failure?," *Stratfor Weekly* (July 20, 2005), http://www.stratfor.com/london_bombings_opsec_errors_or_intelligence_failure [June 26, 2008].

Explaining Poor Tradecraft

What explains the sloppiness? Why do terrorists—including both experienced veterans that received the most sophisticated instruction Al Qaeda had to offer, and inexperienced novices with no formal training whatsoever—keep making basic errors in operational tradecraft? Distinguishing between the local, contextual “know-how” of *mētis* and the general, abstract “know-what” of *techne* can help us answer these questions. While both types of knowledge are necessary for terrorism, this research suggests that *mētis* is often critical for carrying out specific attacks and that terrorists often lack the practical knowledge needed to execute their attacks more effectively. What both veteran and novice terrorists in Britain and Spain often lack is a knack for clandestine tradecraft, and by extension urban terrorism. In many cases, militants possess a limited amount of terrorist *techne*, which they may have acquired through training “camps,” where the quality of instruction varies considerably, or from knowledge-based artifacts, including the frequently flawed instructional manuals that are found online. Less frequently, militants may have acquired some of their own hard-earned *mētis* in political violence, typically by fighting in one or more “jihads” raging in Bosnia, Afghanistan, Chechnya, or Iraq. But this fighting knowledge is generally limited to guerrilla warfare. Unfortunately for terrorists, and fortunately for the rest of us, *mētis* in guerrilla warfare does not necessarily translate into effective urban terrorism in Western countries, which involves appropriate local knowledge, street smarts, and a knack for clandestine operations. “[T]he skills that can be learned in insurgency situations have limited value when transferred to other settings,” explains a former deputy chief of the State Department’s counterterrorism division:

Just as fighting an insurgency is different from fighting a pitched battle or conventional war, it also different from conducting clandestine operations in a hostile environment, far from your base of support. The technical skills required to operate a rocket-propelled grenade or mortar system in hit-and-run attacks in Afghanistan or to function as a sniper in Ar Ramadi are very different from the skills needed to plan and execute a terrorist attack in New York or London.²⁸⁵

While many insurgents in Iraq have learned how to plant roadside bombs in that conflict, drawing on locally available materials and their own practical experience, these skills and knowledge do not transfer seamlessly to Western countries outside the Middle East. To detonate an improvised explosive device (IED) on the Washington Beltway, for example, an Iraqi insurgent would need to operate in clandestine fashion within the United States for days or weeks, during which time he would have to acquire the materials necessary for the attack, without attracting the attention of law enforcers. To do so, the hypothetical insurgent would need to speak English with at least some proficiency, and have knowledge of local conditions, including where to acquire the necessary materials. At the very least, the Iraqi bomb-maker would require local partners with the necessary *mētis* and contacts that could house him in a safe location, while he prepared the bombs. These local conspirators, however, would still need to draw on their contextual knowledge of local conditions to obtain the essential explosive materials, without tipping off the police.

While it would not necessarily be impossible for the Iraqi bomb-maker and his partners to execute a roadside bombing under this scenario, it would be extremely challenging, particularly in today's hostile counter-terrorism environment. "I guarantee you that if you try today to do that in the city you live in, that within probably a week the

²⁸⁵ Fred Burton, "Beware of 'Kramer': Tradecraft and the New Jihadists," *Stratfor Weekly* (January 18, 2006), http://www.stratfor.com/products/premium/read_article.php?id=261022 [Accessed February 7, 2006].

FBI would have you in custody,” explains a former counter-terrorism official. “It is very difficult today to get your hands on, especially in the United States... these precursors for explosives to construct an IED, unless you are looking at a rudimentary pipe bomb.”²⁸⁶ Of course, a rudimentary pipe bomb, of the sort used by restless American youths to blow up mailboxes, does not cause the same destruction and psychological impact of a shaped charge IED or an explosively formed penetrator.

There is no need to limit this discussion to hypothetical examples. The 9/11 hijackers, Nawaf al Hazmi and Khalid al Mihdhar were veteran jihadists who had been trained in Afghanistan and fought in Bosnia. For all their training and combat experience, both militants, referred to by some American officials as “dumb and dumber,” were largely clueless when it came to performing their assigned tasks in a foreign country they had never lived in, nor even visited. Even renting an apartment in southern California proved to be a daunting task, requiring the assistance of English-speaking local Muslims who knew the area, let alone mastering the language and successfully completing pilot training. The suicide pilots recruited to replace the hapless duo, including Mohammed Atta, Marwan al Shehhi, and Ziad Jarrah, were all fluent English speakers with considerable experience living in the West. These pilot-hijackers drew on their experience, infused with *mētis*, as well as their training in Afghanistan, to perform adequate, if far from flawless, tradecraft in the planes operation.

Unlike Hazmi and Mihdhar, Mohammed Siddique Khan and his co-conspirators in the 7/7 bombings grew up in the country they attacked. Their local knowledge of Britain and their natural command of English were instrumental in helping them plan and

²⁸⁶ PI telephone interview with former counter-terrorism official, U.S. State Department (August 13, 2008).

execute the attacks. Although two of the bombers, Khan and Tanweer, may have received some training in Pakistan, any *techné* they acquired there merely complimented the *mētis* they already possessed from living in Britain for so many years. It was their *mētis* in clandestine tradecraft, which gave them the ability to move around and obtain the necessary explosive materials in Britain without attracting the unwanted attention of law enforcers, that made them well-suited for the attacks. The militants in Pakistan that recruited them for the attacks undoubtedly recognized this, which may be why they directed them to return home to perform their martyrdom operations, where they could combine their rudimentary expertise in bomb-making with their more profound knowledge of British culture and society.

Similarly, the Madrid bombers drew on their own *mētis*, acquired from living in Spain, to prepare for and execute their attacks. While numerous conspirators, such as Jamal Ahmidan and Serhane ben Abdelmajid, were originally from North Africa, they had lived in Madrid for several years and were fluent in Spanish, critical skills they exploited as they moved about the Spanish capital and its environs, acquiring the materials they needed for the operation. Other key participants, including Emilio Suárez Trashorras, the former miner who negotiated the critical exchange of hashish for explosives, were natural born Spanish citizens that had lived in the country for many years. In addition to their Spanish fluency and residency, some of the Madrid bombers possessed another critical source of *mētis*: criminal experience in drug trafficking. Ahmidan was an experienced trafficker in hashish and Ecstasy who had previously killed a man in Morocco, apparently over a botched drug transaction. Rafa Zouhier was also an experienced drug dealer who provided Ahmidan the critical connection to Suárez

Trashorras. The latter himself had a history of hashish trafficking. These criminals drew on their contacts and practical knowledge of drug trafficking and explosives to play essential roles in the Madrid bombings. Zouhier and Suárez Trashorras were also police informants who drew on their cunning intelligence to manipulate their government handlers while actively participating in the Madrid conspiracy.

As in the United States after 9/11, in Spain and Britain it has become increasingly difficult for would-be terrorists to learn-by-doing, in part because counter-terrorism agencies in both countries have cracked down on militants following the Madrid and London bombings and other incidents. In hostile counter-terrorism environments, militants confront a double-edged sword: to develop the *mētis* that is essential to executing effective attacks, they must practice building bombs, discharging firearms, conducting surveillance, and performing other terrorism-related activities, but in doing so they expose themselves to potential disruption by police officials.²⁸⁷

Acquiring mission-critical experience becomes even more problematic when the mission itself leads to the death of its perpetrators. This is particularly true when militants conducting martyrdom operations, as in the London Tube and bus bombings, are not compartmented into distinct working groups or cells, where different people perform different functions, such as gathering reconnaissance, building bombs, and executing attacks. In the London attacks the same people that assembled the bombs also performed reconnaissance and carried out the attacks, killing themselves in the process. As far as we know, there was no one, such as a master bomb-maker, that survived the

²⁸⁷ PI telephone interview with former counter-terrorism official, U.S. State Department (August 13, 2008).

attacks in order to apply his practical experience to future operations, thus learning-by-doing and gradually accumulating critical expertise.

This is true of the Madrid bombings as well. Although 3/11 was intended to be the opening salvo of an extended terrorist campaign, Jamal Ahmidan and his colleagues were unable to elude law enforcers long enough to conduct a successful follow-up attack. And while it is noteworthy that Ahmidan and Serhane ben Abdelmajid, waited out the Madrid bombings at the safehouse in Chinchón, in an apparently sensible effort to shield the two leaders from the most dangerous part of the operation, they were unable to effectively exploit their leadership and knowledge for additional attacks, in part because of the perpetrators' poor tradecraft and bomb-making skills.

When a terrorist group executes only one successful attack, learning from experience is difficult. Effective lesson drawing, as practiced by the IRA in their decades-long conflict with the British authorities, requires a sustained campaign of operations, whereby violent practitioners draw on their bloody experience to improve their attacks and avoid repeating earlier mistakes. Spain and the United Kingdom today do not provide receptive environments for such lesson-drawing. "Today, for the Islamists, lessons learned probably takes place more in Pakistan, not here. Here their learning process is somewhat limited," explains a former counter-terrorism official with the London Metropolitan police. "The attacks are isolated, rather than an IRA-like campaign, so they don't learn from previous attacks. There is planning, guidance, and control, much of it coming out of Pakistan, this is where you'd see more attempts to apply lessons learned."²⁸⁸ Indeed, during their 2004 trip to Pakistan, Mohammed

²⁸⁸ PI interview with former Metropolitan police official, Specialist Operations, July 26, 2007.

Siddique Khan and Shehzad Tanweer reportedly met with Abd al-Hadi, an experienced Al Qaeda operative who realized that their British citizenship, knowledge of Britain, and fluency in English made them ideal candidates for carrying out an attack in London. Following their training in Pakistan, which is believed to have included some instruction in bomb-making, the duo were sent back home to carry out their suicide mission.²⁸⁹

Environmental hostility also makes it more difficult for terrorists to plan complex operations and coordinate their activities with fellow militants. Law enforcement pressure reduces the amount of time militants have to prepare for attacks, while making it harder for them to communicate with co-conspirators, without committing errors in tradecraft. While individuals may take months or even years to undergo the process of radicalization, once militants decide to conduct an attack, the preparation and planning cycle often unfolds rapidly, to reduce their exposure to surveillance. “Now they don’t spend lots and lots of time carefully planning attacks,” explains a counter-terrorism official in the Spanish Civil Guard. “In M-11 it was only a matter of a few months from when they first started thinking about doing something to starting to get the materials they needed. Then once they had the explosives, it was only a matter of days before they put together their rudimentary explosive devices and carried out the attack.”²⁹⁰

Another problem militants in hostile counter-terrorism environments face is that their communications are vulnerable to interception and monitoring. As discussed earlier, some terrorist groups adapt to such pressure by changing their communications practices and using code words. While this can help militants avoid unwanted

²⁸⁹ Sean O’Neill, Tim Reid and Michael Evans, “7/7 ‘mastermind’ is seized in Iraq,” *The Times* (April 28, 2007), <http://www.timesonline.co.uk/tol/news/world/iraq/article1717571.ece> [June 30, 2008].

²⁹⁰ PI interview with Lieutenant Colonel, Unidad Central Operativa, Direccion General de la Policia y de la Guardia Civil, Madrid, Spain, June 12, 2007.

surveillance, it can also lead to miscommunication—and mistakes. “Sometimes tradecraft gets too complex and they make a mistake,” explains an FBI intelligence analyst, “or when communicating in code they forget what code words to use. They get tired, sloppy. There are breakdowns in tradecraft inside the cell.”²⁹¹ Some terrorist groups exacerbate their communications problems by compartmenting information, telling conspirators only what they need to know to perform their activities. “The leaders don’t share all the operational details” with their colleagues, notes the FBI intelligence analyst.²⁹² While this practice may protect the conspiracy from government informants, it does so at the cost of maintaining robust information flows among participants, reducing their ability to draw on their own experience to the potential benefit of the operation.

Finally, some militants face another obstacle in learning from experience: ideological or religious certitude. “We don’t need to take that many precautions,” a former leader of Al Muhajiroun explains. “We don’t need to adapt and change that much, because we believe Allah’s will is there to protect us.”²⁹³

If my destiny is to go prison... there’s nothing anyone can do about it... We believe in taking precautions. We don’t believe that any amount of precaution is going to save you from the test that Allah has destined upon you. So in our case, going underground, changing the policy, changing the structure, we do not need to change that much. We continue as usual. Obviously, we change a thing here and there, individuals... organizations... But the propagation of Islam will never change, will never stop... That is the area which you cannot tap into. That is the area between me and my Lord... So that is the thing which makes them stronger, that is the thing which should make them even more firm, what should make them

²⁹¹ PI interview with intelligence analyst, Federal Bureau of Investigation, US Embassy, London, United Kingdom, October 29, 2007.

²⁹² *Ibid.*

²⁹³ Author’s interview with former head of Al-Muhajiroun in the United Kingdom, London, September 22, 2007.

propagate even more, what makes someone strap a bomb to themselves and fly into a building.²⁹⁴

The British branch of Al-Muhajiroun (The Emigrants) to which this informant belonged has changed its structure on several occasions in response to external pressure from government authorities. Originally created by Omar Bakri Mohammed upon his arrival in Britain in 1986, Al-Muhajiroun formally disbanded in 2004 under threat of a government ban. Shortly afterwards, Bakri and other Al-Muhajiroun leaders created two new organizations, Al Ghurabaa (The Strangers) and the Saved Sect, which contained many former members from Al-Muhajiroun. When both splinter groups faced the prospect of being outlawed by British officials, Bakri and his followers created the Ahlus Sunnah wal Jamaah, an invitation-only Internet discussion forum.

These simple, but effective, adaptations have allowed former Al-Muhajiroun members to circumvent the British government's banning efforts and to continue their activities in Britain. However, as the informant stresses, these adaptations are circumscribed by militants' belief in the certainty of their cause. Militants view themselves as soldiers of Allah, warriors in a cosmic struggle whose ultimate winners are determined by God, not men. Because they are equally convinced that they fight on side of righteousness, militants believe they do not need to adapt too much. Whether they succeed in avoiding jail or carrying out violent attacks, has less to do with their own skills and adaptations and more to do with God's predetermined fate for them.

²⁹⁴ *Ibid.*

Conclusion

If the analysis presented in this report can be boiled down to a single, pithy phrase, it is this: Islamic militants learn—but not particularly well. Like other illicit non-state actors, militants gather information about potential targets and government counter-terrorism activities from watching television news casts, reading online press reports, and by talking with other militants and trusted acquaintances in their social networks. They share information by meeting with fellow travelers and telling stories, watching videos, listening to taped sermons, playing sports, or just hanging out, often for hours at a stretch. And they apply information by adapting their day-to-day activities in simple yet effective ways, changing their communications practices or shifting their attacks to easier targets.

As these examples suggest, learning by Islamic militants involves fairly routine changes in behavior, often in response to perceived counter-terrorism efforts. The militants described in this report are security conscious and their adaptations are often geared towards maintaining the physical integrity of their activities. When militants believe law enforcers have compromised their operations, they move to different safe houses and change their code words and aliases. When militants discover that intelligence agencies can intercept cell phone calls, they minimize their use of this technology and switch to what they believe are more secure forms of communication, including the Internet and face-to-face interactions. When militants learn that government counter-terrorism efforts have “hardened” one target or class of targets, they shift to other targets they believe are easier to attack or, less frequently, they figure out ways to circumvent the new security procedures.

But there are significant limitations to the learning capabilities of Islamic militants. Many militants are capable of engaging in simple, cybernetic changes in response to feedback, what organization scholars call single-loop learning or adaptation. They are less capable of engaging in more fundamental changes in beliefs and values that guide collective behavior or changes in organizational strategies and goals. Militants, as one intelligence official remarks, are “not that adaptable... They have a plan to execute and they work on building the skills around it.”²⁹⁵

To be sure, building skills to perform specific operations is not easy, particularly when those skills depend on the sort of tactile, intuitive knowledge characteristic of *mētis*. Even the simplest terrorist actions require some practical expertise and cunning intelligence, more so when the activity in question, such as manufacturing explosives or clandestine tradecraft, is more complicated, requiring additional action and knowledge of local conditions. Would-be terrorists may learn the *techné* involved in shooting pistols, building explosives, or going undercover by studying manuals or receiving formal instruction. However, to develop proficiency in these activities, a budding militant must eventually put the book down and practice. Practice may not make perfect, in any case perfection is not required to execute a “successful” attack, but it does build competence. To become a competent bomb-maker, shooter, or undercover operative one must practice building bombs, shooting weapons, or casing potential targets, as the case may be. “You still have to go to the range,” observes one former counter-terrorism official.²⁹⁶ Or the bomb-making lab or stakeout, he could have added. Militants develop their practical

²⁹⁵ PI interview with American official, London, United Kingdom, October 24, 2007.

²⁹⁶ PI telephone interview with former counter-terrorism official, U.S. State Department (August 13, 2008).

bomb-making, shooting, and tradecraft skills, in a word their *mētis*, by doing, by engaging in the activity in specific contexts in local environments.

It is no accident that the most devastating terrorist attacks in recent years—9/11, 3/11, 7/7—were led by militants with the *mētis* necessary to carry out complicated logistical operations in the areas where they operated. While the veteran jihadists Nawaf al Hazmi and Khalid al Mihdhar were ill-suited for their original stateside roles in the planes operation, the suicide pilots that replaced them, Mohammed Atta, Marwan al Shehhi, and Ziad Jarrah, did have the Western experience and language skills to perform the tradecraft needed to carry out the attacks. Key participants in the Madrid bombings, Jamal Ahmidan, Serhane ben Abdelmajid, and Emilio Suárez Trashorras, and the London bombings, Mohammed Siddique Khan, Shehzad Tanweer, and Germain Lindsay, were even more experienced in their areas of operation, allowing them to draw on their cunning intelligence and knowledge of local conditions to prepare for and execute their attacks. What these operations teach us is that the local, practical knowledge of *mētis* is often more consequential for terrorism than the *techne* militants acquire by attending training camps and reading online documents.

This finding suggests that the counter-terrorism community's narrow focus on web sites as exclusive sources of terrorist knowledge is misplaced. Even when the information contained in these knowledge-based artifacts is accurate, which often times it is not, militants ultimately learn terrorism by doing terrorism. Web sites containing bomb-making recipes and other documents may provide counter-terrorism analysts with convenient sources of data, information they have often “analyze” with a remarkably uncritical eye, but they do not necessarily provide terrorists with the knowledge they need

to carry out attacks. There is no substitute for contextual knowledge of local circumstances and practical, hands-on experience in bomb-making, weapons handling, covert tradecraft, and a host of other terrorism-related activities.

This is good news for counter-terrorism practitioners. In Spain and Britain, as in the United States after 9/11, it has become increasingly difficult for would-be terrorists to learn-by-doing, in part because law enforcement and intelligence agencies in both countries have cracked down on militants following the Madrid and London bombings and other incidents. In hostile counter-terrorism environments, militants confront a quandary: to develop the *mētis* that is essential for effective attacks they must practice, but in practicing to build bombs, fire weapons, conduct surveillance, and perform similar activities, they expose themselves to unwanted disruption from law enforcers. To remain below the radar of police officials and their neighbors, “training camps” in hostile environments like Great Britain and Spain are forced to adopt security-enhancing procedures, like waiting until the final day of training before trainees can fire their weapons. Such precautions may be sensible for maintaining operational security, but they are not conducive to fostering the *mētis* militants need to become competent terrorists.

This finding also suggest that there is real counter-terrorism value in locating and destroying live training camps, particularly those that feature professional-quality instruction, as in some of the camps found in Afghanistan and Pakistan. Training camps are repositories of terrorist *techne* and incubators of terrorist *mētis*. They also provide militants with valuable opportunities to extend their social networks and build communities of practice based on shared identities and values. Rather than focusing

resources on identifying and disrupting “Islamist” web sites, counter-terrorism policy makers should direct greater attention to locating and destroying training camps that allow militants to practice their tradecraft.

However, even the best trained terrorists have a limited capacity to learn, as we discover when we open the black box of actual operations. Many terrorist conspiracies are compartmented, to prevent law enforcers from unraveling the plot by rolling up only part of the operation. What is good for operational security is often bad for learning. Compartmentation makes learning difficult by impeding the free flow of information between different parts of the enterprise. Operatives are told only what they need to know to carry out their activities, not what they should know to avoid repeating the mistakes of their peers and predecessors. Non-compartmented conspiracies are not necessarily good at learning either. Some non-compartmented operations are hindered from learning because the same people that survey potential targets and build bombs also carry out the attacks. Suicide bombings, in particular, have a way of short-circuiting the learning process. Still other operations, including relatively successful ones like the Madrid bombings, are characterized by such sloppy tradecraft that investigators quickly put together the conspiracy, preventing additional attacks and limiting militants’ ability to learn from experience.

Indeed, mistakes and poor tradecraft are common in terrorist operations. One of the most significant findings to emerge from this research regards Islamic terrorists’ propensity towards the poor tradecraft and operational errors. In the cases examined in this study operatives committed a range of basic mistakes. Militants forgot code words and aliases, resulting in miscommunication with their colleagues. They foolishly tried to

run away from law enforcement officers or became visibly upset when questioned. They received speeding tickets and other traffic citations when operating undercover in “enemy territory. They provided incriminating hints of their looming attacks to people outside their conspiracies. They took advanced aviation classes and expressed their desire to only learn how to steer, not land, large commercial aircraft. They traveled together, not separately, when assembling for attacks. They dressed and acted in ways that made them stand out more, not less. They used matches instead of lighters to ignite bomb fuses. They didn’t change their cell phones and SIM cards, even when under immense counter-terrorism pressure. The list goes on.

These mistakes are not limited to the Richard Reids of the world. The most “successful” operations in recent years all contained basic errors in tradecraft and execution. The perpetrators that carried out these attacks were determined, adaptable (if only in a limited, tactical sense)—and surprisingly careless. Even Khalid Sheikh Mohammed, the vaunted “criminal mastermind” behind 9/11 was eventually apprehended in Pakistan, in part, because he failed to change the SIM card on his cell phone. Zacarias Moussaoui, Nawaf al Hazmi, Khalid al Mihdhar, Jamal Ahmidan, Jamal Zougam, Shehzad Tanweer, to take a few examples from the 9/11, 3/11, and 7/7 attacks, all engaged in sloppy tradecraft that exposed their impending operations and made it easier for criminal investigators to piece together their terrorist conspiracies. A number of factors help account for the poor tradecraft practiced by these terrorists: *mētis* in guerrilla warfare that does not translate particularly well to urban terrorism, the difficulty of acquiring mission-critical experience when the attack or counter-terrorism response leads to the death of the perpetrators, a hostile counter-terrorism environment that makes it

hard to plan and coordinate attacks or develop adequate training facilities, and perpetrators' ideological or religious certitude that they don't need to be too careful because their fate is already determined by Allah.

To the extent that such ideological certitude is widely shared among militants, it provides a useful clue for understanding the terrorist mindset. If the Madrid bombers believed their divine duty was to carry out the railway attacks on 3/11, two-and-one-half years to the day after 9/11, and that no amount of human preparation and planning could change the outcome of their attack because it was already preordained by God, they may have not cared a great deal whether wearing Islamic skull caps and scarves would expose the operation by drawing unnecessary attention to their activities. If Shehzad Tanweer believed that in a matter of hours he was destined to die in a martyrdom operation in central London, he may not have cared or even considered whether arguing with a cashier at a petrol station had the potential to derail the operation. What external observers may see as avoidable failures of tradecraft, mistakes that could have easily been averted with a little more caution and foresight, these dedicated soldiers of Allah may view as unnecessary and irrelevant. In such dedication lies both an admonition and an opportunity: terrorists may not be easily deterred by counter-terrorism policies, and they are likely to continue their violent cause, but their unwavering devotion can be exploited by law enforcers, first responders, and other counter-terrorism officials that are attuned to the sloppiness of their tradecraft.

Recognizing the carelessness of terrorists is no excuse for underestimating the threat they represent. Some terrorists may be "dumb" but they are still dangerous. Even "goofy" Richard Reid came perilously close to killing two hundred people onboard

American Airlines Flight 63 several weeks after aviation security procedures were upgraded in the wake of 9/11.²⁹⁷ Where Richard Reid failed, Mohammed Siddique Khan and Jamal Ahmidan succeeded, killing dozens, even hundreds of people in their respective attacks in London and Madrid. The fact that the London and Madrid bombers succeeded in spite of their basic errors in tradecraft is both sobering and instructive. Sobering because it demonstrates that one need not be a “criminal mastermind” to carry out such devastating attacks; instructive because it reminds us that terrorist “masterminds” are rare creatures indeed. The threat we face comes less from hyper-sophisticated “super terrorists” that are impervious to human fallibilities than from steadfast militants whose own dedication to the cause may undermine the cunning intelligence and fluid adaptability they need to survive.

²⁹⁷ Fred Burton, “Beware of ‘Kramer’: Tradecraft and the New Jihadists,” *Stratfor Weekly* (January 18, 2006), http://www.stratfor.com/products/premium/read_article.php?id=261022 [Accessed February 7, 2006].

Appendix: Research Methods

A major shortcoming with many existing studies on terrorism is that analysts, even those who take the trouble to conduct field interviews, often treat research methods cursorily, if at all.²⁹⁸ Whether this reflects a lack of methodological training or disinterest among students of terrorism, the result is the same: a proliferation of “evidence-based” studies that cherry pick facts in support of the author’s pre-existing views and make sweeping generalizations that extend far beyond the scope of the study’s purported sample.

To be sure, all samples, no matter how carefully drawn, contain certain biases. These biases should be acknowledged upfront by the researcher. Moreover, when dealing with data collected through nonprobability sampling methods, as in this study, the researcher should limit his inferences to the original sample, or risk making invalid generalizations that exceed the scope of the study. In accepting these basic scientific principles, the PI provides a full and transparent accounting of his research methods in this appendix, so that scholars, analysts, and policy makers can independently assess the impact his methodical choices had on the study’s findings. In the follow pages, the PI expands his discussion on methodology from the body of the report by describing his research methods in greater detail, including how he constructed his informant sample, how he located and interviewed respondents, how he analyzed the interview data, and some of the challenges he faced along the way.

²⁹⁸ For a recent exception, see Marc Sageman, *Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia: University of Pennsylvania Press, 2008), Chapter One.

Accessing Informants

The PI used a variety of nonprobability sampling methods to identify and locate research informants. Drawing on his own field work and documentary research, as well as assistance from key informants, the PI identified potential respondents that demonstrated substantial knowledge in the topics under investigation (purposive sampling), were referred to the PI by other informants (snowball sampling), or whom the PI located himself during ethnographic field work (convenience sampling).²⁹⁹ Such sampling methods are appropriate for this research, which seeks to increase our understanding of group-level processes within distinct sub-cultures by interviewing knowledgeable, yet hard-to-reach, informants. Informants were sought for the expertise they brought to bear on this research, rather than their “representativeness” of larger collectives. Like all studies based on nonprobability sampling, the findings from these interviews cannot reliably be generalized beyond the informant sample. Moreover, the informant sample may contain potential biases the PI, and his readers, need to consider.³⁰⁰

Researchers that use snowball sampling, for example, confront the danger of over-sampling respondents with homogenous views when informants systematically refer them to respondents, such as friends and family members, that share similar beliefs and attitudes.³⁰¹ This becomes problematic when the researcher fails to recognize that the “consensus” expressed by his informants is a methodological artifact of his sample, without considering that other knowledgeable respondents may hold equally plausible

²⁹⁹ For additional discussion of these sampling methods, see H. Russell Bernard, *Research Methods in Anthropology: Qualitative and Quantitative Approaches*, 4th edition (Lanham, Md.: Altamira Press, 2006).

³⁰⁰ Bernard, *Research Methods in Anthropology*: pp. 146-47, 187.

³⁰¹ Wiktorowicz, *Radical Islam Rising*: p. 33.

alternative views. In his field work, the PI relied on three key informants—one in Madrid, one in London, and one in Ceuta—to gain access to other respondents. The first two key informants had extensive contacts in law enforcement and intelligence agencies, the third was well-connected member of the Príncipe Alfonso neighborhood of Ceuta. All three informants were knowledgeable about their respective communities and generously shared their expertise and contacts with the PI. They also served as “gatekeepers,” vouching for the PI to their contacts, allowing him to “snowball” his sample to additional respondents and providing access into cosseted social worlds that otherwise would have remained closed.³⁰²

The PI has no reason to doubt the integrity and good character of his key informants, but he was not able to systematically control for homogenization biases that accompany snowball sampling. The PI was, however, aware of this challenge and sought to counter it by diversifying his sample to include other respondents not mentioned by key informants, and by remaining attentive to homogenization biases, lessening their impact on his findings. In Príncipe Alfonso, for example, the PI interviewed numerous informants who denied that Islamist militancy was a problem in their community, in spite of a recent law enforcement operation against a group of local young men that were allegedly planning to carry out acts of political violence in Spain. In their earnest desire to counter their community’s reputation as a hotbed of militancy, some of these informants may have downplayed, or even disregarded, evidence of “extremism” in their

³⁰² For more on the importance of key informants in ethnographic research, see Bernard, *Research Methods in Anthropology*: 196-200, and Martha S. Feldman, Jeannine Bell, and Michele Tracy Berger, *Gaining Access: A Practical and Theoretical Guide for Qualitative Researchers* (Walnut Creek, Calif.: Altamira Press, 2003).

community.³⁰³ The PI recognizes the importance of openly acknowledging these potential biases so that readers can infer for themselves whether, and to what degree, they may skew this study's findings.

However, the PI does not wish to overstate the impact of homogenization bias on his findings: in each field site, including Príncipe Alfonso, he was able to locate informants, through purposive sampling, convenience sampling, even snowball sampling, that contradicted the “consensus” expressed by others. Through a combination of perseverance, assistance from his informants, and luck, the PI was able to construct a diverse sample of knowledgeable informants from each research site. In Ceuta, for example, the PI interviewed informants from Príncipe Alfonso and other neighborhoods, including imams and administrative leaders at several different mosques and religious associations, local government authorities, community activists, police inspectors, journalists, neighborhood workers, and community members. He also spent time “soaking and poking” in Príncipe Alfonso and Ceuta, visiting different locales, observing participants' interactions with others, and engaging locals in informal conversations in their “natural” settings.

Once the PI obtained contact information for prospective respondents, he contacted them through email, telephone calls, or in person. In these initial communications, the PI identified himself as a Pennsylvania State University professor conducting research, explained the purpose of his research and the issues of interest, and

³⁰³ The PI himself likely contributed to this homogenization bias by encouraging informants to respond to Príncipe Alfonso's perceived status as “terrorist incubator,” allegations that the informants, as long-standing members of the community, often found offensive. While the PI can be criticized for “injecting bias” into his interview data in this fashion, he found such questioning to be essential in establishing rapport with wary community members and encouraging them to open up to a non-Muslim observer from outside the community. Such confidence building strategies aside, the PI was aware of this and other potential homogenization biases stemming from his sampling strategy and line of questioning.

discussed the informed consent procedures he planned to follow to protect each respondent's privacy. Given the sensitive nature of this research and the background of his respondents, the PI believed that the only ethical and efficacious method of presenting himself was as an "overt, known researcher."³⁰⁴ At no point during his field work did he make any attempt to hide his institutional affiliation or the source of his funding.³⁰⁵ Numerous individuals declined to participate, either by explicitly denying the PI's request or remaining unresponsive after several emails and telephone calls. When respondents agreed to participate, the PI made arrangements to meet them at a time and location of their choosing. Before each interview, the PI reiterated the purpose of his research and stressed his desire to learn from the informant.

Several dozen respondents agreed to participate in this study. In Britain, the PI interviewed fifty-seven separate informants, including: twenty-one "Islamic activists," six active or former "Islamists," six active or former "militants," eighteen government officials, and six journalists, academics, and think tank researchers. In Spain and Ceuta, the PI interviewed thirty-one informants, including eleven Islamic activists, eleven government officials, and ten academics, journalists, and think tank researchers. The PI's government respondents included American, British, and Spanish law enforcement and intelligence officials. Most of these officials were employed at the time of the interview, but several were retired. The PI interviewed journalists from prominent daily publications, such as the *New York Times*, *The Observer*, and *El País*, policy analysts with prominent think tanks, such as the RAND Corporation (London office), the Real

³⁰⁴ Arthur J. Jipson and Chad E. Litton, "Body, Career and Community: The implications of researching dangerous groups," in *Danger in the Field: Risks and Ethics in Social Research*, edited by Geraldine Lee-Treweek and Stephanie Linkogle (New York: Routledge, 2000): p. 153.

³⁰⁵ When questioned about the source of his funding, the PI explained that his research was funded by the U.S. National Institute of Justice, which he characterized as the research shop of the Department of Justice.

Instituto Elcano de Estudios Internacionales y Estratégicos in Madrid, and the Royal United Services Institute for Defense and Security Studies in London, and counter-terrorism scholars from different universities, including the University of Granada in Spain and the Autonomous University of Madrid.

This respondent list does not include people the PI talked with during field site visits but did not formally interview, nor does it include multiple interviews and discussions the PI held with some key informants, which are just counted once. Consequently, the tally undercounts the number of informants the PI relied upon and the number of interviews he conducted. The PI recorded his impressions of all these informal discussions and follow-up interviews in his field notes, which he subsequently coded and analyzed, along with his other interview notes and transcripts (more on this below).

Of the informant classifications discussed here, “Islamic activists,” “Islamists,” and “militants” or “jihadists” are the most problematic and require further elaboration. The PI’s sample of Islamic activists includes a broad cross-section of Salafi religious reformers, Tabligh Jemaat followers, local imams and religious figures, and Muslim community activists. Most of these individuals categorically reject political violence against civilian non-combatants. They are, moreover, working actively to prevent young men in their neighborhoods from engaging in political violence. The PI’s sample of “Islamists” includes active and former members of the Muslim Brotherhood and Hizb ut-Tahrir, two Islamic parties that are active in numerous countries, where they work to

spread their political and religious ideas. Both organizations reject the use of violence and terrorism in present-day England.³⁰⁶

The PI's sample of militants or jihadists contain respondents that either participated in and/or actively support what they themselves describe as a defensive *military* struggle against Western powers they believe are attacking their religion, including the United States. These informants include former Guantánamo Bay detainees that were captured by security forces in Pakistan and elsewhere, along with several members of the Al-Muhajiroun (The Emigrants) group in Britain.³⁰⁷ While ideologically similar to Hizb ut-Tahrir, Al-Muhajiroun calls on its members to establish an Islamic state wherever they reside, including Britain, and to support jihad, whether or not it has been sanctioned by an Islamic state.³⁰⁸ While these informants adopt a more expansive

³⁰⁶ Hizb ut-Tahrir ("The Islamic Liberation Party"), which was founded in the West Bank, then under Jordanian authority, in 1952 has also eschewed the use of violence throughout most of its existence. However, in the late 1960s and early 1970s, party members were implicated in coup attempts in Jordan, Iraq, Egypt and Syria. More recently, some observers suggest that Hizb ut-Tahrir's vision of re-establishing the Islamic Caliphate in the Muslim world tacitly implies the use of political violence, in the form of a military coup against existing Muslim rulers, whom they view as apostates. However, in interviews with the PI, party members insist that such a transformation can be brought about peacefully, by controlling the military from within and gradually taking over the state. Once the Caliphate is established, party literature calls for adopting what amounts to an expansionist foreign policy that seeks to spread the Hizb-led Caliphate to the rest of the Muslim world, and then to non-Muslim areas, by force if necessary. See Taqiuddin an-Nabhani (founder of Hizb ut-Tahrir), *The Islamic State* (London: Al-Khilafah Publications, n.d.): 147-150; Suha Taji-Farouki, *A Fundamental Quest: Hizb al-Tahrir and the Search for the Islamic Caliphate* (London: Grey Seal, 1996): 27-28; Amnon Cohen, *Political Parties in the West Bank under the Jordanian Regime, 1949-1967* (Ithaca: Cornell University Press, 1980): 209-229; John L. Esposito, ed., *Oxford Dictionary of Islam*. (Oxford, UK: Oxford University Press, 2003); PI interview with former Hizb ut-Tahrir member, London, October 20, 2007; PI interview with Hizb ut-Tahrir executive committee member, London, August 20, 2007; PI interview with Hizb ut-Tahrir member, Bedford, England, August 13, 2007.

³⁰⁷ Al-Muhajiroun was a militant group formed by Omar Bakri Mohammed, the former leader of the Hizb ut-Tahrir in Britain, following his resignation from Hizb ut-Tahrir in 1996. Al-Muhajiroun was active in Britain until it disbanded in 2004. See Jamestown Foundation, "Al-Muhajiroun in the UK: an Interview with Sheikh Omar Bakri Mohammed," http://www.jamestown.org/news_details.php?news_id=38 [November 24, 2007]; and Quintan Wiktorowicz, *Radical Islam Rising: Muslim Extremism in the West* (Lanham, MD: Rowman and Littlefield, 2005): p. 10.

³⁰⁸ These militants dispute the Salafi position that jihad cannot be waged against existing regimes in Muslim countries and that only established clerical authorities can legitimately sanction defensive jihad based on their reading of Islamic scripture. Instead, they rely on their own scholars, many of whom are not formally trained *ulama*, who sanction jihad on their own authority against non-Muslim states and Muslim

view of jihad than other Islamists or Salafis, they reject the use of political violence against civilian non-combatants in England, either because they view it as counter-productive or illegitimate, according to their interpretation of the Koran and the *Hadith*.

Notwithstanding his best attempts to identify and locate informants, the PI experienced significant variability in his ability to access certain groups of potential respondents. In Spain, for example, the PI was not able to interview Islamists or jihadists, while in London he interviewed several of each. In Madrid, the PI interviewed numerous officials from law enforcement and counter-terrorism agencies, but no jihadists, even after carrying out numerous field visits to Lavapies, the working-class neighborhood in central Madrid that several March 11th bombers frequented when preparing for their attacks. In Ceuta, the PI interviewed Islamic activists in Principe Alfonso, but was unable to gain access to any Islamists or jihadists. Consequently, all of the Islamists and militants or jihadists in the PI's sample comes from interviews he conducted in Britain.

Interviewing Informants

What explains the PI's ability to interview Islamists and jihadists in one site and not others? Two factors help account for the discrepancy. In London, through happenstance, the PI established contact with a key informant who generously provided him with access to several Islamists. This key informant, a long-time counter-terrorism law enforcement official for the Metropolitan Police, worked closely with numerous Islamic activists in the London area on counter-radicalization for several years, earning

countries they consider to be ruled by apostates. Quintan Wiktorowicz, *The Management of Islamic Activism: Salafis, the Muslim Brotherhood, and State Power in Jordan* (Albany: SUNY Press, 2001): 123-128.

their admiration and trust over time. This official generously allowed the PI to “shadow” him for several days, during which he introduced the PI to numerous Islamists and Salafi activists who, most likely, would not have talked with him otherwise.

The PI also benefitted from Britain’s relatively open and robust civic culture, where at least some militants were more than willing to exercise their freedom of speech by talking with the PI. Working through local non-governmental organizations, religious organizations, and other contacts, the PI established contact with several out-spoken militants who agreed to participate in this research. While often complaining of American and British foreign policy and racism suffered by South Asians in Britain, these informants spoke at length with the PI about their views on Islam, jihad, and the war on terrorism, which they viewed as a war on Islam.

However, when the discussion turned to the research propositions in this study, some respondents became less loquacious, claiming that they did not have direct knowledge of such matters or returning to other topics they felt more comfortable discussing. This was true, the PI discovered, of both militants and government counter-terrorism officials. In fact, some government officials were only willing to discuss the research questions in the most general terms, arguing that state classification procedures prevented them from being more forthcoming.

All of the PI’s interviews were framed within a semi-structured format that contained a standard set of questions related to the research hypotheses, while allowing the PI to explore other issues that arose during the course of the discussion. Semi-structured interviews are useful for single-session interviews with busy respondents that

expect the researcher to make proficient use of their time.³⁰⁹ They also allow the researcher to steer the informant through what appears to be an ordinary “conversation” rather than a stylized interview containing a rigid set of queries.³¹⁰ The PI sought to let the conversation flow as naturally as possible and to avoid topics that made informants visibly uncomfortable and less forthcoming. No two interviews were identical, and the PI felt his way through each discussion, determining, often on the fly, which topics were most relevant to the informant’s expertise, and that he was willing to discuss candidly. Before meeting with some of his informants, the PI conducted background research on them, reading documents they had written or news reports about them. This allowed the PI to pursue relevant leads during the interview that otherwise he would not have identified.³¹¹

Prior to each interview, the PI asked respondents for their permission to record the discussion using a digital audio recorder. Given the sensitivity of the research, numerous law enforcement and intelligence officials declined to be recorded. However, to the PI’s surprise, several Islamists and militants allowed him to record their interviews. During interviews, the PI used a variety of probes and conversational techniques to establish rapport and elicit additional information from respondents.³¹² He also sought build trust with informants by avoiding judgmental terminology or disparaging body language that

³⁰⁹ For more on semi-structured interviewing, see Bernard, *Research Methods in Anthropology*: 212.

³¹⁰ Quintan Wiktorowicz makes use of a similar conversational technique in his interviews with militants in Britain. See Wiktorowicz, *Radical Islam Rising*: 31.

³¹¹ Before interviewing one former Guantánamo Bay detainee, for example, the PI read his prison memoir, along with numerous news reports about this eloquent, if controversial, individual. This background research allowed the PI to ask the informant several questions related to learning among militants.

³¹² For discussion of probes favored by the PI, including silent probes, echo probes, and long question probes, see Bernard, *Research Methods in Anthropology*: 217-220. For discussion of similar techniques in interviews with IRA militants, see John Horgan, “Interviewing Terrorists: A Case for Primary Research,” in *Terrorism Informatics: Knowledge Management and Data Mining for Homeland Security*, edited by H. Chen, E. Reid, J. Sinai, A. Silke, and B. Ganor (Springer, in press): pp. 69-95.

might offend them, refraining from criticizing their beliefs and ideas, and generally presenting himself as a neutral, even sympathetic listener to whom they could safely share their thoughts.³¹³ For example, the PI often began interviews with Islamic activists and militants by asking whether the United States, and the “West” more generally, harbored misperceptions of Islam and Muslim communities. This question frequently triggered a torrential response, as informants described a litany of grievances against American foreign policy in the Muslim world. After observing that the PI remained neutral during these diatribes, informants often continued to express themselves candidly for the remainder of the interview.

The PI took hand-written notes during each interview, whether or not the respondent consented to audio-recording. The PI transcribed these notes into electronic format following the interview, usually on the same day. For audio-recorded interviews, the PI hired independent professionals to create verbatim transcriptions of the conversations. The PI then checked the accuracy of each transcript by listening to the audio-file while reading along in the transcript, stopping to transcribe inaudible comments and fix mistakes. This two-staged transcription work was time-consuming but essential to ensure the reliability and integrity of these critical primary source data.

In reporting data from his interview notes and transcripts, the PI provides verbatim quotes of informants’ remarks, whenever they are available. When verbatim quotes are not available, the PI paraphrases what was said in the discussion. As is customary in reporting ethnographic research, the PI edits verbatim quotes by removing

³¹³ For a discussion of similar considerations in interviews with members of the white supremacist movement in the United States, see Arthur J. Jipson and Chad E. Litton, “Body, Career and Community: The implications of researching dangerous groups,” in *Danger in the Field: Risks and Ethics in Social Research*, edited by Geraldine Lee-Treweek and Stephanie Linkogle (New York: Routledge, 2000): p. 154.

respondents' false starts and filler syllables (“uh, uh,” “yeah”) and streamlining respondents' pauses, run-ons, and verbal fragments. This makes the report easier to read, without changing the content of what was said during interviews.³¹⁴

Coding and Data Analysis

The PI coded and analyzed his interview notes, interview transcripts, and field notes using *NVivo*, a qualitative data analysis software program designed to handle large amounts of text. Coding the interview data involved several steps.³¹⁵ First, the PI read each informant's interview notes and/or transcript to familiarize himself with the analytic categories, or themes, discussed in the interview. There were two sets of themes in this research: those that the PI previously identified, based on his research hypotheses, and those that emerged “in vivo” from the data through the cognitive tasks of coding and analysis.³¹⁶ Following his initial reading, the PI imported interview notes and transcripts to the *NVivo* platform. Using *NVivo* he then carefully re-read each set of notes/transcript line-by-line, inductively coding the document according to themes and concepts, both those he had already identified and those that emerged from the data. Gradually, the PI constructed a large index containing forty-nine categories and four hundred and nineteen sub-categories based on pre-established and newly emergent themes in the interview data.

³¹⁴ For discussion of the common practice “fixing up” informants' unexpurgated speech for data reporting, see Bernard, *Research Methods in Anthropology*: p. 505.

³¹⁵ For more on qualitative data coding and analysis, see Bernard, *Research Methods in Anthropology*: 492-495, 499-500; John W. Cresswell, *Qualitative Inquiry and Research Design*, 2nd edition (Thousand Oaks, Calif.: Sage, 2007); Juliet Corbin and Anselm Strauss, *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, 3rd edition (Thousand Oaks, Calif.: Sage, 2008), and QSR International, *NVivo*, version 7.

³¹⁶ Although the PI began this research with a set of hypotheses and corresponding analytic categories in mind, the reluctance of some informants to discuss these hypotheses, and the semi-structured nature of the interview format, encouraged him to gather data about additional, related topics. In this report, the PI focuses on topics that correspond to the original research hypotheses.

While coding, the PI also wrote notes documenting his thoughts on themes and methodological issues, a process qualitative researchers refer to as “memoing.” Drawing on insights from his coding and memoing, the PI explored the analytic categories further by comparing and making connections among different themes, a first step towards building these themes into a coherent theoretical narrative. In the process of writing this report, the PI analyzed his data yet again, returning to coded themes to extract representative statements from his informants, a process that involved additional reflection on what his respondents said and how their recorded thoughts related to the research propositions under study. While the PI was attentive to data that supported his research hypotheses, he actively sought evidence that disconfirmed his propositions or suggested new connections among themes. In this manner, the PI immersed himself in the data, deepening his understanding of research themes through repeated analysis, reflection and writing, a process that remains very much ongoing.