Mapping Terrorist Organizations

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Introduction

The purpose of this research project is to identify patterns in the evolution of terrorist organizations, specify their causes and consequences, and analyze the development of Al Qaeda and its cohort in a comprehensive comparative framework.¹ It is funded by the National Science Foundation for a three-year time period (2009-2012). What can be presented at this early stage is a conceptual outline and some tentative hypotheses that I hope to substantiate with empirical data.

My aim is to analyze the organizational structure of families of terrorist organizations and trace their relationships over time. The basis for building theoretical explanations includes a database of terrorist organizations and a series of dynamic maps of the architecture of violent and non-violent opposition groups existing in the same social movement sector or conflict system. I intend to identify common patterns of organizational evolution, as groups form, split, merge, collaborate, compete, shift ideological direction, adopt or renounce terrorism, grow, shrink, and eventually decline over time. The project will select cases where multiple oppositional groups, both terrorist and non-terrorist, interacted with other and the government over an extended period of time. The groups are seen as actors in conflict systems that can range from simple to complex. The project will also identify or develop computer software to assemble, organize, and display information about organizations and their interactions as they change over time.

¹ The term “terrorist organizations” can be controversial. I am referring to non-state actors opposing government authority through the use of terrorism, a form of violence that does not aim to defeat the government’s military or security forces but to influence popular attitudes. My use of the term is not meant to imply that such organizations only use terrorism.
No such study exists in the literature on terrorism or other forms of oppositional violence. There are excellent studies of individual groups or categories of groups (case histories or organizational analyses such as social network theory or the club model) and some comparative studies (e.g., of how terrorism ends or processes of terrorism). A few databases list groups and provide some identifying attributes, but they are not comprehensive, and there is no overarching theory of relationships among groups over time. Evolutionary mapping can enhance our understanding of how terrorist groups develop and interact with each other and with the government, how strategies of violence and non-violence are related, why groups persist or disappear, and how opportunities and constraints in the environment change organizational behavior over time.

Attempts to explain terrorism in terms of macro-level conditions such as poverty, democracy, or foreign military occupation miss the significance of the independent decision-making capacity of sub-state actors. Focusing on terrorist organizations in isolation addresses the issue of agency but misses the significance of interactions. The central problem is to explain the evolution of terrorist organizations as they interact with each other, with other political actors, and with the government. This project will identify patterns in the development of families or clusters of terrorist organizations, ask what explains these patterns of relationships, and ask in turn what these patterns explain.

Research Objectives

I hope to reach findings in the following areas:

(1) **Defining common patterns in the architecture of terrorism.** Identification of patterns will be based on a series of dynamic maps focusing on groups as they evolve over time in
a given setting or constellation. In effect, these models represent genealogies. The
defining characteristics of patterns are number of actors, levels of complexity, and
numbers and types of connections. For example, a system might be characterized by
monopoly or by fragmentation. The actors in a fragmented system might cooperate or
compete. Furthermore, stability cannot be assumed. There will be variation over time. A
consolidated system might fragment or a fragmented system might coalesce as one group
comes to dominate the system and others drop out. For example, one might argue that Al
Qaeda dominated the field of Islamist terrorism before 2001 but that the system is now
fragmented as more autonomous groups have emerged in the absence of central direction.
A dominant organization might decline and cede its place to a challenger, as Fatah did to
Hamas in the Israel-Palestine conflict. Similarly, the Provisional IRA supplanted the
Official IRA in Northern Ireland.

(2) Identifying the major determinants of different patterns or models. Causes of
variation are likely to include government actions (either coercion or conciliation),
increases or decreases in social and/or financial-logistical support, and technological
change (especially in communications and weaponry). For example, in the 1970s the
dependence of various Palestinian groups on outside state support perpetuated
organizational divisions within the overall nationalist movement that the Palestine
Liberation Organization struggled to control. An organization’s internal capacity to adapt
to the environment and to maintain organizational cohesion also contributes to
evolutionary patterns. In turn, leadership is likely to be an important variable in
determining adaptability. Thus groups with strong leadership might be less likely to
splinter because they are more cohesive.
(3) Explaining the consequences of organizational patterns and their change over time.

For example, on the basis of what is known about terrorism, competition among groups in the same social movement sector or conflict system should increase the likelihood of terrorism and facilitate tactical diffusion. Consequently lower rates of violence should accompany monopoly or cooperation. On the other hand, it is not clear that mergers and partnerships do not also increase the destructiveness and geographical reach of terrorism. The effects of different patterns of interactions have not been sufficiently studied to permit conclusions.

(4) Arriving at a standard method of ascertaining organizational continuity and estimating organizational strength. Both concepts are elusive at the moment. This analysis will also make it easier for scholars to compare organizational changes, such as splits, mergers, or transitions between legality and illegality, across groups and across time.

Gathering systematic information about individual terrorist organizations and the genealogy of terrorism across time and space is an essential basis for explanation. Within the conceptual framework outlined above, the study will investigate splits, mergers, collaborations, and rivalries among terrorist groups. It will compare conflicts where one group has a monopoly over anti-government violence to cases of intense competition among multiple groups. It will examine the relationship between violent undergrounds and their non-violent wings, branches, or allies such as political parties, social service providers, charities, criminal organizations, or social movements. It will explore the conditions under which groups abandon terrorism and enter the political process as well as the reverse, when political parties or legal organizations transition to terrorism. It will assess the impact of different government countermeasures on organizational interactions
and behavior. It will ask whether groups in the same conflict system homogenize or differentiate over time. The analysis will further understanding of how organizations function internally and how they interact with their environment, which includes other actors with similar goals (who may be allies or rivals), nongovernmental opponents, and the government they challenge. The analysis in this project will thus integrate the context and the process of terrorism.

Theoretical Background

The analysis extends existing approaches to the study of terrorist groups. Thus far most studies focus on the organization as an independent entity rather than on relationships among groups in a given context over time. In addition to shifting the focus of analysis, this project will address questions raised but not answered by unit-level studies.

It is worth noting that the work summarized below reflects a general scholarly consensus that violent organizations can be analyzed in the same terms as other political or economic organizations (a point I made in 1985, although much less evidence was available at that point). Terrorist groups are not anomalous or unique in every aspect. They have, for example, been compared to transnational activist networks (e.g., by Asal and Rethemeyer 2007).

One body of work focuses on internal structures and dynamics that are common to terrorist groups or to certain types of terrorist groups, such as those motivated by religious beliefs (e.g., Shapiro 2005, Berman and Laitin 2008, Sinno 2008). Much of this research adopts a political economy approach and uses formal models. The findings help
explain why it is difficult for leaders to maintain control over followers and thus, implicitly, why the dissent and splintering that results might in turn lead to proliferation, competition, and escalation of violence. Such lines of inquiry also ask why certain types of groups are more able to demand sacrifice from their members than others (sacrifices involving suicide missions in particular). They suggest that providing social services or public goods enables a group to ask more of its followers. This argument raises the question of how inter-organizational factors also influence terrorist strategies and tactics.

Other studies focus on organizational learning (Kenney 2007 and 2008, Jackson 2005, Jackson et al., 2005). These studies ask how violent underground groups are better able to adapt to environmental changes (through a process of competitive adaptation) than the governments they oppose. How are nimbleness and flexibility related to connections among organizations and their developmental patterns, as opposed to individual characteristics such as flat decentralized structures? For example, do groups in highly competitive environments exhibit more adaptability than groups enjoying monopoly? Does nimbleness increase survival rates? Or is adaptation a reflection of rapid emergence and decline?

There is also work on terrorist decision-making at the group level (McCormick 2003, Hoffman and McCormick 2004). This approach raises the question of how disagreement over strategy, especially selection of targets, affects organizational continuity as well as behavior. It suggests the importance of contagion and innovation. Does innovation spread more often or more rapidly within the same family of terrorist groups?
Another line of inquiry that is prevalent in the literature since the 9/11 attacks applies social network theory to terrorism (Arquilla and Ronfeldt 2001, Krebs 2002, Jackson 2006, Sageman 2004 and 2008, Kenney 2007; for critical views, see Mishal and Maoz 2005 and Kirby 2007). This approach emphasizes the relationship between the individual and the group more than interactions among groups, although relationships among discrete entities can be modeled as networks. As Sinno (2008) notes in his study of Afghanistan, terrorist and insurgent organizations can be hierarchical. Although Sageman (2008) argues that since 2001 Islamist terrorism has become entirely flat and decentralized, other observers disagree (e.g. Clutterbuck 2009). In any case, social network theory can encompass hierarchical forms. However, social network theory is not entirely suited to the evolutionary and developmental approach that this analysis uses. How to treat change over time is problematic. Yet understanding terrorist groups as social networks does raise the question of the importance of informal as well as formal links among organizations. The boundaries among groups may be hard to establish as members shift from one group to another. Thinking in network terms also suggests that it will be difficult to identify the precise date of the establishment or onset of a group. Groups may coalesce gradually rather than emerge with a sharp break or discontinuity. Similarly, groups may erode through the defection of members to other networks or groups rather than end abruptly (e.g., as a collectivity by publicly renouncing terrorism).

Cronin (2006, 2008, and 2009) has investigated how terrorism declines by comparing and classifying groups (cf. Crenshaw 1991 and 1996 for earlier work on this topic). Cronin’s research implies that the mapping project should ask how interactions among groups, rather than individual group characteristics, shape how terrorism ends.
Merger, acquisition, or co-optation might be a cause of apparent demise. A group might splinter into two new groups or merge with another group; the original group would formally “end” but terrorism would not. In other words, the collapse of a group and the end of terrorism are not necessarily the same thing.

As noted earlier, there is little research on relationships among groups or evolutionary patterns over time, although Rapoport (2004) introduced a temporal element by emphasizing successive “waves” of terrorism practiced by likeminded groups in the same historical generation (see also Sedgwick 2007). One approach to relationships is based on the premise that rivalry among groups increases the likelihood of terrorism against the government as oppositional groups attempt to outbid each other in extremism (Crenshaw 1985 and 1987, Bloom 2004 and 2005). Groups may also cooperate, however, and my analysis includes this possibility. Al Qaeda, for example, began as an alliance of groups and continues to stress unity rather than division in the Islamist cause. It has often co-opted or incorporated local groups. In addition, Della Porta (1995) investigated the relationship between underground terrorist organizations and broader social movements in Italy and Germany. From her perspective, terrorist undergrounds develop as spin-offs of a social movement that is losing momentum. Subsequently Kepel (2000) offered a similar interpretation of Al Qaeda. The mapping project will ask whether the formation of terrorist undergrounds is always a sign of the decline of larger enterprises. In some cases, such as Hezbollah in Lebanon, a popular movement, a political party, and an armed wing coexist for long periods. In a related strain of research, Weinberg and Pedahzur (2003) recognize the possibility of coexistence. They have studied the relationship between underground organizations and political parties,
asking when political parties turn to terrorism, when terrorist groups transition to the political process, and when social movements generate both legal and illegal forms of contestation. They find that government institutions are a critical variable. The question of timing remains unanswered: at what points in an evolutionary trajectory do these shifts occur? For example, why did the IRA enter the political process when it did? The institutions of Northern Ireland offered the option of political participation long before the IRA took advantage of it. The move also provoked a split in the organization, when the Real IRA and Continuity IRA broke away from the main group because they rejected the political process. In another line of inquiry, Desouza and Hensgen (2007) have described the links between terrorist and criminal organizations.

A Sample “Map”

This rough map indicates something of what we hope to accomplish (cf. Della Porta 1995). The visual mapping exercise is not only an effective display of highly complex information but also a stimulus for a number of interesting and important observations about organizational evolution that might otherwise be overlooked. These observations in turn generate research questions. In terms of the origins of terrorism, all but one of the terrorist groups in Colombia were offshoots of two political parties, the Communist Party (PCC) and the National Popular Alliance (ANAPO), both of which were minor parties in Colombian politics at the time. The PCC lineage is much more complex than that of ANAPO. The Revolutionary Armed Forces of Colombia (FARC) split first from the PCC. Subsequently the Popular Liberation Army (EPL) was created as the armed wing of a branch of the PCC. The PCC and ANAPO “families” merged in
1985 when the M-19 group (April 19 movement), an offshoot of ANAPO, joined a coalition with the FARC, which was and is by far the largest group active in the system. This “Guerrilla Coordinating Board” (GCB) became the Simón Bolívar Guerrilla Coordinating Board in 1987. It linked the FARC, the Popular Liberation Army (EPL), and M-19 to a group that was independently established, the National Liberation Army (ELN). The formation of this broad political coalition (dominated by the FARC and the ELN) was apparently a response to the government’s conciliatory offers, and in 1990, M-19 abandoned violence and formed a political party, the Democratic Alliance M-19. This transition caused a further split when the Jaime Bateman Cayon Group (JBC) resumed terrorism. The Popular Liberation Army (EPL) followed the M-19’s path to legality. However, the FARC and the remainder of the Guerrilla Coordinating Board resisted entering the political process and continue terrorism to the present. In fact, these actors have expanded violence through links with drug networks. Why did the organizations react differently? What function did the coalition serve? Did the groups in the coalition expect that they could negotiate effectively from a position of strength? Did the government offer a better bargain because it faced a coalition rather than independent groups? The coalition groups continued to employ terrorism while engaged in negotiations with the Colombian government.

This map also shows that over time groups moved back and forth between legal and illegal organizational forms. A political party or labor organization could spin off a terrorist underground, which then moved into the political process, and then in turn spun off another violent group. In other words, shifts to the underground or to legality were not necessarily permanent. The system was quite fluid.
What determines not just when groups decide to abandon terrorism but when groups maintain their commitment to join the political process? What motivates groups to resume violence? The experience of the Union Patriotica (UP) in Colombia offers one answer, which may apply more generally. Although the government formally invited the FARC to sponsor a political party (the UP) and field candidates for office, right-wing paramilitary organizations in collusion with state security services assassinated large numbers of the candidates. Similarly, the leader of M-19’s political party was assassinated while campaigning for office. These developments show that it is essential to include far right groups or paramilitaries (often associated with government security services) in analyzing the conflict system. Maps should be as comprehensive as possible.
(Map drawn by Aila Matanock, Ph.D. graduate student at Stanford, who includes Colombia as a case study in her dissertation on why violent groups become political parties. Cross-hatched lines indicate membership in the organizational umbrella.)
coalition, the Simón Bolívar Guerrilla Coordinating Board. Attacks on Americans were noted as part of another research project led by Crenshaw.)

Methods: Displaying Maps and Compiling Data on Groups

One objective of the project is to locate or develop computer software to manage data on attributes of organizations over time, display maps of terrorist architecture (showing evolutionary change), and link data to the maps. The project may thus require an integrated model and relational database. The challenge is to create a hybrid between a network and a timeline (I am indebted to Michael Atkinson at NPS for this observation). Programs exist for one or the other but not both together.

Researchers are just beginning to assemble and code data on groups. Most databases contain descriptions of incidents (most comprehensive is the GTD at the START Center at the University of Maryland, a Center of Excellence funded by the Department of Homeland Security) and are not easily adapted to the comparative analysis of groups, especially the longitudinal analysis of organizational development. Furthermore, incident databases such as the GTD contain large numbers of unattributed attacks. Researchers can search the GTD by the name of an organization and retrieve the list of events attributed to that group, or browse by type of group. The START website also contains a set of Terrorist Organization Profiles formerly available on the National Memorial Institute for the Prevention of Terrorism’s Terrorism Knowledge Base (MIPT TKB), but the profiles are not updated beyond March, 2008, and their quality is uneven (they were written for MIPT by the consulting firm Detica). The MIPT website itself no longer exists. A list of groups (formatted as an Excel spreadsheet) with some key
identifying variables is maintained at the University of Texas by Professor Ami Pedahzur. Similarly, Victor Asal and Karl Rethemeyer are beginning a project (“BAAD”) that will track group attributes. It covers the period from 1998 to the present and is based on MIPT data (see Asal and Rethemeyer 2008). At the University of Maryland the Minorities at Risk: Organizational Behavior or “MAROB” data currently contain information on 112 organizations representing 22 ethnic groups in 12 countries in the Middle East and North Africa from 1980 to 2004. In addition, information has been collected on groups in the United States (e.g., the American Terrorism Study database created by Professors Brent Smith and Kelly Damphousse; also Professors Joshua Freilich and Steven Chermak are compiling a database of U.S. extremist crime, 1990-2009, as part of the START consortium).

The mapping project will assemble comprehensive, systematic, and comparable data on terrorist actors and organizational relationships, emphasizing primary sources (such as contemporary press accounts, government reports, interviews, and autobiographies) as well as analytical histories and case studies. (As the field of terrorism studies has grown, secondary analyses have become much more extensive than they were in the past.) Its scope will extend beyond the best-known (and thus, admittedly, best documented) cases although it will be restricted to groups of political significance. If time and resources permit, it will extend back in time to include major historical groups (including the classic cases of the Russian revolutionary movement, the IRA and its predecessors, and the anarchist movement in the nineteenth and early twentieth centuries.) The proposed database will be a useful complement to the GTD listing of incidents, and it will also be more comprehensive. The GTD begins in 1970
while the organizational database and evolutionary maps will go back to the second half
of the nineteenth century. It may be possible eventually to link the two databases for the
period after 1970, since START has announced plans to link the GTD to the Terrorist
Organization Profiles (which are narrative descriptions of groups, not in the form of a
spreadsheet or relational database) and to make the raw data in GTD accessible. In
addition, the mapping project combined with the GTD could integrate the genealogy of a
terrorist organization with graphs of its attack patterns over time (at present the GTD
variables include date, type of attack, target, weapon, and casualties) and compare groups
sharing the same zone of contention to each other. Government interventions could also
be added to a dynamic model.

The cases that will be analyzed in this project potentially include the following
conflict systems. Note that some of the cases are connected. There is obvious overlap,
for example, between a number of conflict systems such as those in South and Central
Asia. India, Kashmir, Pakistan, and Afghanistan are linked. Overlaps add to complexity.

--Russian revolutionary organizations, 1860s-1914.

--Anarchist groups in Europe and the United States, 1880s-1914. (Note: although the
anarchist movement is typically regarded as completely unstructured, there was more
organization than an initial survey might suppose, and the transnational dispersion of the
movement is frequently cited as a precedent for Al Qaeda.)

--Ireland and Northern Ireland, 1860s-present.

-- Algeria, 1945-1962 and 1992-present

--Palestinian resistance groups, 1967-present.

--Colombia, 1960s-present.
--El Salvador, 1970s-1990s
--Argentina, 1960s-1980s
--Chile, 1973-1990
--Peru, 1970-1990s
--Brazil, 1967-1971
--Sri Lanka, 1980s-present
--India (Punjab), 1980-present
--Philippines, 1960s-present
--Indonesia, 1998-present
--Italy, 1970s-1990s
--Germany, 1970s-1990s
--France/Belgium, 1980-1990s
--Kashmir, 1988-present
--Pakistan, 1980-present
--United States, 1960s-present (especially far right movement)
--Spain, 1960s-present
--Egypt, 1950s-present
--Turkey, 1960s-present
--Lebanon, 1975-present
--Al Qaeda, 1987-present

Questions and Hypotheses
What follows is a synopsis of the key questions the research will address, with corresponding hypotheses indicating the answers the inquiry expects to find, given the current state of knowledge. These questions and hypotheses constitute the fundamental conceptual framework for analysis and data collection. This project is also intended to generate new research questions and hypotheses, since only a few testable propositions can be derived directly from the existing theoretical literature.

(1) *What are the most common patterns of organizational development?*

Hypothesis: there are distinct genealogies or evolutionary patterns to be discovered in the history of terrorist organizations. For example, a pattern of consolidation and homogenization of groups over time might contrast with a pattern of fragmentation and differentiation.

(2) *What drives organizational evolution?*

Hypothesis: Causes include government actions (either coercion or conciliation), changes in social and/or financial-logistical support, and technological change (especially communications and weaponry). The organization’s internal capacity to adapt to the environment and maintain organizational cohesion is also a critical factor.

(3) *What are the consequences of different organizational patterns?*

Hypothesis: The consequences include (1) shifts in behavior such as level, frequency, and intensity of violence, strategic targeting, and methods (e.g., adoption of suicide tactics) or moves toward compromise with the government and (2) weakening or strengthening of the organization in terms of size, resources, and efficiency.

At this preliminary stage we can offer only tentative sketches of hypothetical models, briefly illustrated and explained below.
Consolidation. A group emerges from a set of competing groups to dominate violent opposition to the government. Example: the evolution of the LTTE in Sri Lanka. Causes: superior organizational cohesion and leadership, willingness to eliminate rivals, initial support from India. Consequences: a tenacious adversary capable of using both terrorist and insurgent tactics and introducing significant innovation, such as the use of suicide tactics to assassinate government leaders. However, by posing a conventional military challenge to the government it provoked military defeat. Other possible examples: the FLN in Algeria, Al Qaeda before 2001.

Fragmentation. The initiating organization fractures into multiple groups. Example: the evolution of the Islamic Salvation Front (FIS) and offshoots during the Algerian civil war in the 1990s. (Was it a civil war?) Causes: government’s intense use of military force, strategy of removing leaders by arrest or killing, followed by amnesties that split off factions of the organization. Consequences: escalation of terrorism (provoking further splintering in successor generations), difficulty in attributing responsibility for incidents, weakening of terrorist organizations, and eventual merger of the surviving faction (Salafist Group for Preaching and Combat, or GSPC) with Al Qaeda to form AQ in the Islamic Maghreb.

Persistent Division. Multiple groups exist throughout a conflict, without effective consolidation. Example: Palestinians from 1967 on. Causes: dependence on multiple sources of external state support, lack of territorial base, divided constituencies, Israeli military pressure. Consequences: unstable power relations among groups, high levels of terrorism including suicide attacks on civilian populations, inability of groups inclined to compromise to negotiate settlement, persistent presence of spoilers.
A fourth hypothetical model, *monopoly or primacy*, might be logically expected. In such a pattern, one group would be dominant at the outset of the conflict and maintain its position over time. However, it is difficult to identify any clear-cut examples. The most likely candidate is Hezbollah in Lebanon. However, Amal might be considered dominant at the outset, which we will date as the beginning of the civil war in 1975-76.

Research Plan

It is obvious that the theoretical, geographical, and historical scope of the project is exceedingly ambitious, indeed daunting. We have constructed preliminary maps not just of Colombia but of Turkey and the Palestinian nationalist movement pre Intifada. A priority now is to analyze areas of contemporary policy concern for the United States. We intend to start by mapping the Iraq conflict theatre after 2003. The next step will be to examine the South-Central Asia regional nexus centered on Afghanistan-Pakistan.

Graduate research assistants with expertise in these highly complex areas have been engaged to work on the project. We will also begin assembling data on groups, starting with a corresponding selection from the list of 209 consequential groups assembled by Bryan Price as a basis for his Ph.D. dissertation at Stanford (2009). We will not be coding discrete variables but constructing narrative accounts that contain the information we will need in the mapping exercise—particularly data on transitions and interactions. We will thus start with the TOPS profiles and verify and update them. Researchers will also provide consistent sources of the information collected on the groups. We will also look for chronologies or other examples of timelines and organizational diagrams. For example, one problem is to ascertain size of a group and how it changes over time (most
descriptions of size are static not dynamic). We plan to examine contemporary press and other reports to estimate size sequentially. Estimates are a rough measure but probably the best we can do. Precision in this field is elusive. We will also compile data on types of relationships among groups, disaggregating different forms of cooperation and competition. For example, we distinguish between ideological or political affinity and operational collaboration, and between persistent and sporadic cooperation or rivalry.
References


Clutterbuck, Lindsay. 2009. *Dynamics of Asymmetrical Conflict.*


