National Science Foundation
September 15, 2009
Award No.
BCS-0905082
Proposal No.
BCS-0905082

Project Title: <u>Mapping Terrorist Organizations</u>

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PROJECT SUMMARY

The purpose of the 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.

The project analyzes the organizational structure of families of terrorist organizations and traces their relationships over time. As a basis for building theoretical explanations, the project will produce 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. The project will then 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. Models based on comparisons of historical terrorist genealogies will be applied to the case of Al Qaeda and its Islamist or jihadist affiliates and associates, including the Taliban in Afghanistan and Pakistan. Theories generated from the study will thus shed light on an important national security threat. The project will also identify or develop computer software to assemble, organize, and display information about organizations and their interactions over time.

The historical scope of the project is comprehensive, covering modern political terrorism from its origins in the late nineteenth century to the present. 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.

Intellectual merit: No such study exists in the literature on terrorism. 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). A few databases list groups with 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. The approach will be interdisciplinary, applying research in economics, sociology, business, and biology, in addition to political science and history.

Broader impact: Analysis that links levels of terrorist violence to changes in organizational structures and explains the complex relationships among actors in protracted conflicts will break new ground. Understanding the evolutionary aspect of terrorism is essential for effective public policy. The database and maps will be available online in accessible format and will thus furnish an important resource for students of terrorism at all levels.

PROJECT DESCRIPTION

1. Statement of Problem

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. The 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.

The project is expected to reach significant findings in the following areas:

a. It will define common patterns in the architecture of terrorism by building a series of dynamic maps of terrorist groups as they evolve over time. In effect, these models will represent terrorist 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. 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.

b. The research project will identify 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.

c. The proposed project will explain 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 with monopoly or cooperation there should be lower rates of violence. 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.

d. In the process of building these explanations, the project will arrive at a standard method of ascertaining organizational continuity and estimating organizational strength, both concepts that are elusive at the moment. It 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 or branches such as political parties, social service providers, 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 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.

2. Theoretical Background

The project will extend 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 changing the

major focus of analysis, this project will address questions raised but not answered by these unit-level studies. It is worth noting that the work summarized below demonstrates empirically that violent organizations can be analyzed in the same terms as other political or economic organizations (a point that the PI on this project made in 1985, although much less evidence was available at that point). Terrorist groups are not anomalous or unique. In fact, they can be compared to transnational activist networks (e.g., 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 makes it possible for 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, Jackson 2005, Jackson et al., 2005). They ask how underground groups are better able to adapt to environmental changes (through a process of competitive adaptation) than the governments they oppose. How is such nimbleness and flexibility related to connections among organizations and their developmental patterns, as opposed to individual characteristics such as flat decentralized structures? 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 also alludes to 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 has become prevalent in the literature since 9/11 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 Islamist terrorism has become entirely flat and decentralized, social network theory can encompass hierarchical forms. However, social network theory is not entirely suited to the evolutionary and developmental approach that this project uses. How to treat change over time is problematic. However, 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 discontinuity. Similarly, they may erode through the defection of members to other networks rather than end abruptly.

Cronin (2006) has investigated how terrorism declines by comparing and classifying groups (cf. Crenshaw 1991 and 1996 for earlier work on this topic). Cronin's research indicates that the mapping project should ask how interactions among groups, rather than individual group characteristics, determine 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. 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 the proposed NSF project 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. 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. 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 project being proposed for NSF support stresses the issue of timing: 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. In another line of inquiry, Desouza and Hensgen (2007) have described the links between terrorist and criminal organizations.

3. Preliminary Research

Several projects in which the PI has participated help lay the groundwork for the proposal's research design and contribute to the overall effort.
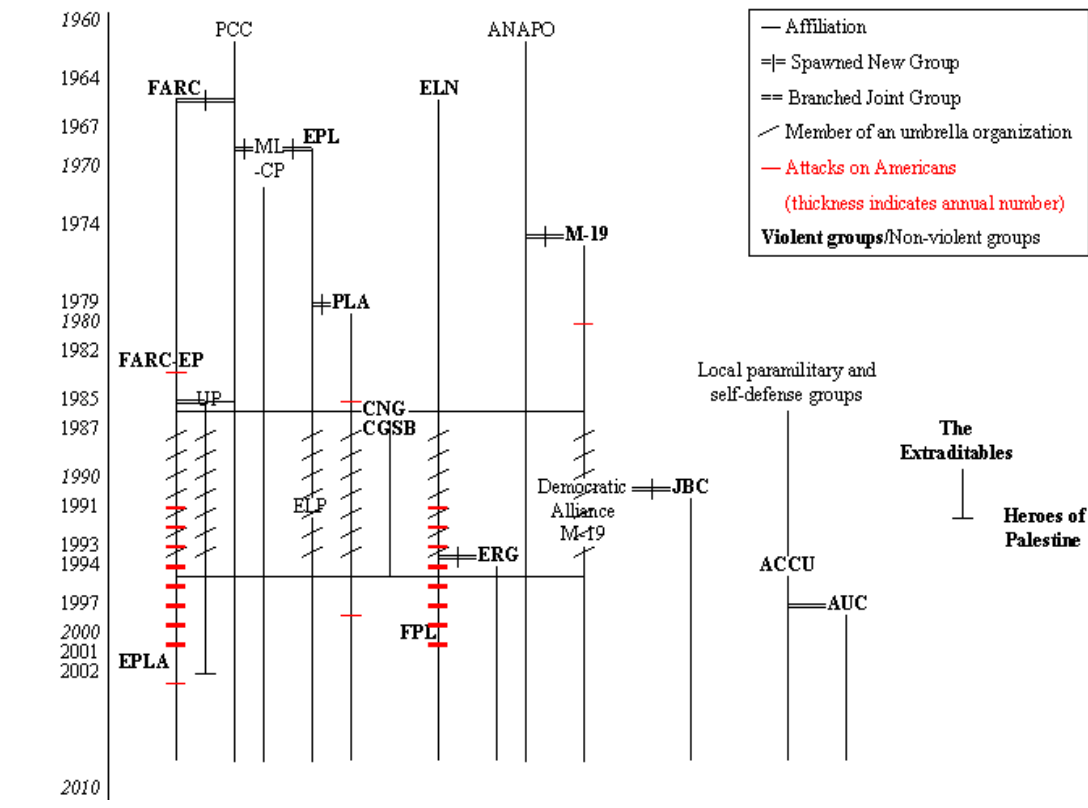
As a Lead Investigator with START, the Consortium for the Study of Terrorism and the Response to Terrorism located at the University of Maryland, a Center of Excellence funded by the Department of Homeland Security since 2005, Crenshaw directed a project examining why the United States has been targeted by terrorism since the 1960s. She identified the most significant groups responsible for attacks on the United States and its interests abroad and linked them to incidents recorded in the Global Terrorism Database (GTD, accessible at www.start.umd.edu/data/gtd/) from 1970 to 2004. The GTD originated with and is maintained by START. It includes both domestic and international incidents and is the most comprehensive database available to researchers. The "why the US" project found that groups that target the U.S. constitute a minority of total groups and that they are much more likely to attack local targets at home than to engage in transnational terrorism. The project also found that groups active in the same conflict arena behaved differently (e.g., in the Philippines). All organizations experienced common conditions, such as an American military presence, but not all pursued terrorism against the United States. The research indicates that country-level aggregate studies cannot explain why or when the United States is targeted.

As part of the "why America" research project, Crenshaw's graduate research assistant constructed the following map of terrorism in Colombia, which provides a preliminary example of the type of evolutionary diagram intended in the NSF proposal. (The original idea for this evolutionary chart came from the della Porta's chapter on Italy in *Terrorism in Context* [1995]). This rough map, with its supporting data, is an example of what the project plans to develop for other cases. The model will then be applied to Al Qaeda and the Taliban in Afghanistan and Pakistan (note: the PI participated in a project conducted by the Rand Corporation on the early organizational development of Al Qaeda, which used Harmony documents as primary sources). Preliminary work has been started on explicating the extremely complex case of anti-American terrorism in Pakistan although it has not yet reached the mapping stage.

The visual mapping exercise is not only an effective display of highly complex information. It also suggests 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 coalition was 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. 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 the far right groups in analyzing the conflict system.

Mapping Terrorism in Colombia

ACCU – Self-Defense Groups of Cordoba and Uraba
AUC – United Self-Defense Forces of Colombia
CGSB – Coordinadora Guerrillera Simon Bolivar
ELN – National Liberation Front
EPL – Popular Liberation Movement
ERG – Guevarist Revolutionary Army
FARC – Revolutionary Armed Forces of Colombia
FPL – People's Liberation Forces
JBC – Jaime Bateman Cayon Group
M-19 – Movimiento 19 de Abril
PLA – Pedro Leon Arboleda Movement

(Map drawn by Aila Matanock. Cross-hatched lines indicate membership in the organizational umbrella coalition, the Simón Bolívar Guerrilla Coordinating Board.)

In addition, Crenshaw has been funded for another research project in the second three-year grant term of START (June, 2008-June, 2011). This project investigates the effectiveness of counterterrorism policies in liberal democracies. The work is at the beginning stages (literature review and development of a conceptual framework outlining the options available to democratic governments and the feasibility of their implementation). The proposed NSF project on mapping the architecture of terrorism is complementary to the study of policy effectiveness, since understanding the evolutionary

development of terrorist organizations is essential to formulating an appropriate response. Timing of a government policy initiative may be as important as its substance.

Crenshaw is also a participant in a research consortium that has applied for support under the DOD Minerva initiative (PI Gary LaFree, University of Maryland, institution proposal number 09040762). Her section of the collaborative project, which if funded will run from December, 2008, through December, 2013, focuses on the role of leadership in terrorist organizations. So far analysts do not have comparable or comprehensive data on leaders, much less a theory of leadership. Government policies of "decapitation" are predicated on the assumption that removing a leader will trigger group decline, but this premise is disputed. Should the consortium be funded, the research Crenshaw will undertake on leadership will strengthen the analysis of the architecture of terrorism. Leadership and change in leadership over time will be attributes in the general database on terrorist organizations. The NSF project will also address the debate over whether or not removing a leader interrupts the long-term development of an organization. Some organizational structures recover more rapidly than others but scholars do not know why they are more resilient.

Two Stanford Ph.D. candidates in political science working with Crenshaw have agreed to collaborate on building a dataset of organizations. They will code the data for different factors, including a measure of whether or not the group is politically consequential. The working group will establish an appropriate threshold of significance, select the organizational attributes to include, and decide how they should be coded. The students plan to use this dataset for their respective Ph.D. thesis research projects. It should also be a valuable asset for other students working in the field of terrorism studies. It will be supported by the proposed NSF project, if funded.

In addition, Crenshaw is currently supervising an undergraduate thesis in the Center for International Security and Cooperation's senior honors program that focuses on mergers of previously autonomous organizations into Al Qaeda (e.g., Egyptian Islamic Jihad and the Algerian Salafist Group for Preaching and Combat, or GSPC). The student project is surveying the business literature on mergers and acquisitions among business firms and identifying cases of mergers and partnerships in Al Qaeda.

An important objective of the NSF proposal 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 thus requires an integrated model and relational database, which will be made publicly available on a project website. Crenshaw has discussed the issue with representatives of Palantir Technologies (a firm in Palo Alto that has done extensive work for the Combating Terrorism Center at West Point). MySQL is a possibility for relational database management, and Palantir's work is built on this system. Monterey Bay Technologies, which has assisted with the development of the GTD at START, also relies on MySQL. Other programs that are easier to use but perhaps not as well suited to the specific project are Access and FileMakerPro. It is possible that programs developed to model social networks (UCINet or Pajek) could be adapted to the mapping purpose, but

this task would probably require extensive programming and would not produce the visual and interactive capabilities that this project aspires to. The University of Maryland Human-Computer Interaction Lab has produced some relevant programs, such as the interactive exploratory tool Social Action that links visualization to statistical analysis of social networks, and TreePlus, an interactive graph visualization system based on a tree-style layout. However, as a Stanford graduate student in computational mathematics, who is working with Crenshaw, observed, the challenge is to create a hybrid between a network and a timeline. Programs exist for one or the other but not both together. It may be possible with time and appropriate expertise to construct one's own application (e.g. with MIT's Simile program, a timeline template) although this option has not been tested except in an exploratory fashion, and a drawback is that it does not handle a hierarchical structure.

4. Data

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) and are not easily adapted to the comparative analysis of groups, especially the longitudinal analysis of organizational development. Researchers can search the GTD by the name of a terrorist 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. 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).

Going well beyond these data sources, the "Mapping Terrorist Organizations" project will assemble comprehensive, systematic, and comparable data on terrorist actors and organizational relationships, emphasizing primary sources (such as contemporary press accounts, 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 prevalent than they were in the past.) Rather than relying on data collected and coded by others, it will build its own database using original language sources whenever possible (as noted above, two Stanford graduate students plan to work on this aspect of the project as part of their Ph.D. programs). Its scope will extend beyond the

best-known (and thus, admittedly, best documented) cases. 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.) To study contemporary terrorist organizations, particularly Al Qaeda and its allies, associates, and affiliates, researchers will access U.S. government documents to be released through the proposed Conflict Records Research Center at the National Defense University. Analyzing many of these documents will require the services of a translator. The project will also use the resources of the Open Source Center of the Director of National Intelligence (formerly FBIS). In fact, there is a wealth of information in the public domain on Al Qaeda, affiliates, and associates that can be exploited (e.g., the documents translated and posted on the website of the West Point Combating Terrorism Center or the Terrorist Perspectives Project described in Stout, et. al. 2008).

The proposed database on organizations and their relationships 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 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 include the following conflict systems. Note that some of the cases are connected. There is obvious overlap, for example, between Kashmir and Pakistan as conflict systems. In the first instance, the project is concerned with the constellation of groups fighting India for an independent Kashmir or incorporation into Pakistan. In the second case, the project focuses on Pakistani groups opposing the government, usually from an Islamist perspective. As a transnational phenomenon, Al Qaeda encompasses a number of local conflicts. Pakistani jihadist groups and the Taliban interact with Al Qaeda in Afghanistan and Pakistan. These links will be incorporated in the mapping design.

--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

5. Research Questions

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.

a. *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. Models developed from historical comparisons can be applied to the threat of Al Qaeda and "family" as it has developed since its establishment in the late 1980s. They can also be applied to the evolution of the Taliban in Pakistan and Afghanistan.

b. *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.

c. *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.

Sketches of hypothetical models, briefly illustrated and explained. The discussion is meant to propose preliminary ideas, not definitive conclusions.

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. 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. 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.

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, 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. However, at this time it is difficult to identify any clear-cut examples. The most likely candidate is Hezbollah in Lebanon.

6. Schedule

Work on the project will extend over three years, preferably from June 15, 2009, to June 14, 2012. It will be conducted primarily by the PI and Stanford graduate and undergraduate research assistants, aided by consultants for computer programming (who will likely be graduate students).

Period 1:

Identify terrorist organizations and clusters or families to be included in the analysis (historical survey) and begin mapping
Locate sources of information, compile bibliographies, and assemble documents (all important unpublished documents the project acquires will be made available on the project website)
Select or develop appropriate software to manage a relational database of organizations (e.g. Access or MySQL)
Decide which attributes to include in the database (based on the research team's analysis as well as discussions with scholars maintaining their own databases or knowledgeable about the analysis of groups)

Period 2:

Complete construction of a comprehensive set of maps that display evolution over time
Define set of evolutionary models showing patterns and their causes and consequences
Apply the models to Al Qaeda, the Taliban, and affiliated groups
Identify and apply software to display the maps or timelines graphically and interactively, and link them to data
Continue refinement of database of organizations and collection of group- and cluster-level information
Place database and mapping exercise on a project website

Period 3:

Complete analysis to answer questions and test hypotheses outlined above. The project will produce articles in peer-reviewed journals and possibly a book on "mapping terrorist organizations." In addition, in periods 1 and 2 the PI and graduate students will present papers at scholarly and government-organized conferences and workshops in order to communicate the project's progress and its aspirations. For example, the PI is a regular participant in conferences of the American Political Science Association, the International Studies Association, and the International Society of Political Psychology. The PI also expects that there will be widespread interest in the mapping project and that talks to general audiences will be an important component of outreach activities.

7. Broader Impact

Understanding the organization and evolution of terrorism in multiple contexts is essential to developing effective government policy and clarifying public perceptions of the threat. In order to craft effective counter-terrorist strategies, governments need to know not only what type of adversary they are confronting but its stage of organizational development and relationship to other groups.

The project will also place the current terrorist challenge in comparative and historical perspective. It will contribute to understanding how threats to American security evolve over time. Terrorist attacks on the United States and its interests and allies abroad often appear to come without warning, but they are the result of a long process of organizational development. Terrorist organizations do not operate in isolation from a wider social environment. Without understand processes of development and interaction, governments may miss signals along the way and be vulnerable to surprise attack. They may also respond ineffectively because they cannot anticipate the consequences of their actions.

This project combines the systematic collection of original information about the attributes of organizations, the management of the data in a user-friendly database, and the visualization of the information in order to trace the development of clusters or families of organizations over time. It will identify systematic variations in evolutionary patterns. These research products, which will be accessible online, will be a valuable resource for students, scholars, journalists, and interested members of the public. They fill an important need in the study of terrorism.

The project will produce innovative analysis of the genealogy of terrorism, relating structural change to behavior. In sum, it aims to find patterns in the evolution of terrorism and to explain the causes and consequences of these long-term patterns. The project is committed to disseminating results in forms that are clear and comprehensible as well as intellectually stimulating. Its findings will be relevant for policy makers as well as scholars and general as well as specialized public audiences. For example, the director of the Stanford Program on International and Cross-Cultural Education (SPICE), which is a part of the Freeman Spogli Institute, is interested in developing material on terrorism for high school teachers and students. The organizational database and the mapping project could provide an important vehicle for this outreach effort.

At Stanford the project has an important educational dimension, since graduate and undergraduate students will be key components of the research team, working as research assistants under the direct supervision of the PI.

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