

Organizing for Resistance: How Group Structure Impacts the Character of Violence

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Abstract

What are the effects of a group's structure on its violent activities? In this paper, we argue that the structure of an organization plays a crucial role in determining the lethality and frequency of terrorist attacks. Functional differentiation is a primary characteristic of vertically-structured, or hierarchical organizations. This characteristic implies that groups will have specialized units, each charged with producing some service or good. Conversely, organizations that are flatter are composed of units that do not specialize and usually only deliver one type of good. We argue that hierarchy leads to more destructive, lethal attacks by vertical organizations. Vertical organizations are also more likely to be able to sustain attacks over longer periods. We test these hypotheses with a large-N analysis of over 14,000 attacks. We also explore these ideas in a case study of the Basque separatist group, Euskadi Ta Askatasuna (ETA). In both the case study and large-N analysis, we find evidence that group structure matters for the character of violence perpetrated by terrorist organizations. We end by discussing how this theory has broader applicability to non-violent transnational movements.

1. Introduction

Between the beginning of the al-Aqsa intifada in September 2000 and March 22, 2004, the Israeli Ministry of Foreign Affairs reports that Hamas was responsible for 425 attacks targeting Israeli citizens and their interests.¹ Although these figures are an approximation, it is nonetheless remarkable that an organization would be able to perpetrate a wave of attacks so concentrated that one takes place nearly every four days. Even more remarkable is this wave of attacks resulted in nearly 2500 injured or killed.

How do violent non-state actors coordinate to achieve these sorts of ends? More specifically, what factors make it possible for a group such as Hamas to carry out such a concentrated lethal wave of attacks? Is it simply the nature of the conflict and its participants or are there similarities between the attack patterns of various non-state actors who use violent means to compel policy change from resistant governments? In this paper, we examine how a group's organizational structure impacts the character of violence it produces. While violence can be characterized along a number of dimensions, we focus on the lethality and frequency of attacks.

Our research adds to a small (but growing) line of inquiry about the character of violent conflicts involving non-state actors. Others have examined the tactical profiles of terrorists, substitution between different attack modes, and even lethality (Enders and Sander 1993; 2004, Lacina 2005, Gleditsch and Lacina 2005, and Heger and Salehyan 2007, Clauset, Young, and Gleditsch 2007, and Clauset, Young, Heger, and Gleditsch 2007); none of these studies has examined how a group's organizational structure impacts its violent actions. Considering the

¹ <http://www.mfa.gov.il/MFA/Terrorism-+Obstacle+to+Peace/Terror+Groups/Hamas+terror+attacks+22-Mar-2004.htm> Accessed: 1/22/2007.

worldwide concern of terrorism and other non-state violent groups, understanding why and when groups are more likely to be more lethal, and when they can conduct more attacks over longer periods of time is essential.

We offer a group-centric explanation, focusing on the organizational structure. Hierarchy allows for functional differentiation and specialization of units. Each of these units within the hierarchy are, therefore, more effective at their specific tasks than unspecialized individuals. In the case of violent groups, we claim this has very specific implications on the character of violence. We argue that these structural characteristics imply that vertically-structured groups are more likely to concentrate a series of attacks and conduct more lethal attacks than their flatter, less hierarchical counterparts.

We address these issues in the following sections. The subsequent section develops our theoretical framework and explains how types of organizational structures influence the production of violence. We explain the implications that these differences have for two characteristics of violence: damage/lethality and frequency/duration. The next section evaluates our claims through a cross-sectional analysis of groups in conflicts worldwide from 1968 to 2006. Finally, our last section presents a case study of the Basque nationalist group, Euskadi Ta Askatasuna (ETA). We conclude with a discussion of extensions of the research presented here and applications to other areas of scholarship and to the study of non-state organizations more broadly.

2. A Theory of Group Structure and its Effect on Violence

The organizational structure of violence-producing groups — broadly defined — has become an important explanatory variable in many areas of the intra-state conflict literature. Recent scholarship in this area has focused on the effect of structure in regularized conflict,

looking at its effect on parties' ability to successfully negotiate an end to the conflict, and to maintain peace after negotiation. D. Cunningham (2006) argues that more veto players (i.e., greater group fractionalization) makes conflict termination negotiations more difficult, and therefore increases the duration of conflict. Similarly, Stedman (1997) argues that the more spoilers are involved in a conflict, the more difficult a peace agreement is to reach. Doyle and Sambanis (2000) argue that more factions decrease the likelihood of successful peace-building.

Similarly, factionalization can increase the level and radicalization of violence. Bloom (2004, 2005) argues that competition within factionalized movements leads to an increase in support for radical factions and an escalation of violence. We build on this literature, and place it in a related but relatively unexamined field. The character of violence, including destruction or frequency of attacks over a conflict period, has received little academic attention despite the crucial strategic aspects and obvious policy implications. In the following subsections, we discuss organizational forms more thoroughly and examine the implications these forms have on the character of violence. We begin by defining the typology of group structure within the context of this project. Subsequently, we explore characteristics of each group type and develop our hypotheses.

2.1 Typology

In focusing on the group as the key actor, it is necessary to lay out a typology of group structure. Like firm structure, group structure varies from anarchy, or market-like relations, to hierarchy, or a vertically integrated firm.² This typology builds largely on Lake's (1999) study of

² For discussions on firm structure and integration from economics see: Williamson 1971, 1975, 1981, 1999; Klein, Crawford, and Alchian 1978; Klein 2000; Coase 1937.

interstate security relationships.³ Lake argues that relationships exist on a continuum from least to most hierarchical: anarchic spot-market relations, alliance-like relations, protectorate-like firms, and fully-integrated hierarchies. The analogy of the firm has proven useful in examining interstate relations, and we apply it to non-state actors.

We focus on two forms of organization to examine variation in structure: vertical or hierarchical organizations on one end, and flat or alliance-like organizations on the other.⁴ Reducing the typology of potential group structures was done for analytical clarity in this early project. In doing so, we neglect two important things. First, we do not explain smaller variations in structure and, secondly, we neglect the important fact that many groups tend to take on hybrid forms (Kahler 2007). Unfortunately, we currently lack the data to explore these variants, but we are hopeful that future projects will begin to dissect these issues. In the meantime, however, we do believe that making predictions and testing outcomes on the extremes is both theoretically useful and an appropriate place to start exploring our topic.

Hierarchical organizations are the most vertically-organized. These groups are characterized by centralized decision-making and functional differentiation within the organization. True functional differentiation implies that the hierarchy should generate a variety of goods in addition to violence. Groups capable of functional differentiation are able to produce policy through a political wing or party and provide public goods such as health care or education, in addition to production of violence. Within the language of the firm, these groups can be thought of as “vertically-integrated,” where multiple stages of the production process are internalized to be conducted in-house. A fairly clear example of a hierarchically organized group

³ Lake’s (1999) theory draws on theories of the firm advanced by Williamson (1971, 1975, 1981); Coase 1963; Alchian and Demsetz 1972.

⁴ We neglect the category of “anarchy” from Lake (1999) because we assume some kind of organizational threshold necessary for a group to conduct any attacks.

is the one cited above: Hamas. The group produces violent attacks in addition to providing public goods, such as healthcare and education, and political office, which, according to our typology, makes it hierarchical in structure. Another hierarchical group, the Irish Republican Army (IRA), demonstrated divergence in its strategy through the famous “Armalite and Ballot Box Strategy” which was publicly articulated at its Ard Fheis (annual political conference) in 1981.

Functionally-differentiated groups are able to specialize in a way that less hierarchical groups cannot. At a broad level, this means that hierarchical groups will tend to concentrate efforts into specialized sections, whereby sub-sections focus on the production of one sort of good, such as a political campaign or providing hospitals. But this also implies that at a more micro-level, within certain wings of an organization, individuals execute very specific goals. In violence-producing wings, some individuals may focus on bomb-making, while others on targeted assassinations. For instance, in the late 1970s Gerry Adams shaped the IRA into active-service units that concentrated their efforts toward very specific tactical operations such as sniper attacks or bombings (Moloney 2002). In the language of firms, sub-sections, and individuals within the group, become specialized and focus on their comparative advantages.

The theoretical counterpart to a vertical organization that we highlight is the flat, or alliance-like, organization. The crucial distinctions of these flat organizations are that they tend to lack the functional differentiation and specialization that characterizes vertical organizations, and do not employ centralized decision-making. While the vertical organization can be thought of as approximating a unitary actor, flatter organizations are more likely to be characterized by cell-like structures with varying degrees of connectedness. Cells start to look like organizations that, when summed, do not add up to one unitary actor, but rather a collection of different veto-points that replicate similar actions. Though they are more “organization-like” than an anarchic

situation, flatter organizations tend to demonstrate a lesser degree of coordination because there are multiple decision-makers that do not necessarily have a unified interest. Cells may collaborate on shorter-term, rather than longer-term bases. Sageman (2008) finds, for instance, that al-Qaeda in the post-9/11 world exists linked via the loose strands of the Internet as its central upper and middle-level leadership gets taken apart via capture or death. Though groups claiming al-Qaeda ties or global Islamist terrorism abound, the movement has become a “leaderless jihad,” connected only by a general anti-Western sentiment; each group adopts ad hoc strategies and aims to survive state counter-terror measures.

2.2 Structural Effects on Output: Agenda Setting and Accountability

We argue that differences in internal structure between vertical and flat groups affect how they produce violence. Drawing on insights from organizational theory and network theory (Lake and Wong forthcoming), we argue that these differences can be characterized along two dimensions: differences in agenda setting and differences in accountability.⁵

Organizational structure affects agenda setting along two dimensions: the flow of information within the organization and the directness of command and control. In vertical or hierarchical organizations that have strong agenda-setting capacity, there is a clear point at which the flow of information and the agenda originate, with few additional connections that would distort or challenge the agenda-setting capacity. Additionally, the relationship between the agenda-setter and its subordinate units is clear and unidirectional—there are direct and fairly static lines of command and control in vertical organizations. It is clear which units disseminate information and which units follow. In flatter organizations, these relationships are reversed. Agenda-setting capacity is weak. There is not necessarily a clear point of origin for agenda-

⁵ We should note that these two dimensions are not independent; indeed they are highly related. This said, for analytical purposes, it is useful to draw out the implications of agenda setting and accountability independently.

setting or a focal point from which information flows. Instead these organizations are characterized by lateral flows of information. As such, command and control mechanisms follow far less routinized paths and are largely indirect. This flexibility also makes it possible for multiple actors to act as agenda-setters over the course of a dispute, as well as lessening the impact of losing cells to countermeasures.

The other crucial implication of structural difference is the level of accountability. Here, the ability to punish and reward agents for “faithful” execution of the agenda comes to the fore. In vertical organizations the agenda is clear, and the knowledge that there is an identifiable principal with the capacity to punish and isolate “unfaithful” agents from the rest of the organization, should minimize agency loss. Carelessness or neglectful actions may lead a principal to punish an agent. For example, the IRA leadership created an internal security department in the late 1970s to investigate failed IRA operations for traitors and punish them accordingly. “One estimate suggests that as many as 70 percent of all informers caught by the IRA during the entire Troubles were killed after [the security department’s formation],” (Moloney 2002: 155). In some cases where IRA operations were carelessly planned and poorly carried out, the units responsible would be dismissed (author interview, March 2007). These types of mechanisms provided an incentive structure based on accountability that enabled IRA leadership to punish traitors and create more professionalized operatives.

Conversely, because flat organizations are far more decentralized, the opportunities for agency loss are larger. There is no clear agenda that all members in the organization follow. This opens the door for more innovation and the true preferences of agents to be observed, but the absence of clear, direct punishment and reward mechanisms is an important aspect of characterizing a flat organization. For instance, Al-Qaeda is an organization that claims

worldwide membership. However, its constituent sub-sections have different agendas that may or may not coincide. Al-Qaeda in Iraq has a different agenda from Al-Qaeda in Chechnya. Moreover, various attackers claim ties to Al-Qaeda; many of these claimants may not have actual ties to the Al-Qaeda leadership, but want to be associated with its name and successes. Chart 1 illustrates the differences discussed in this section.

-----Insert Chart 1 Here-----

2.3 Hypotheses

Our interest is in how structure affects the effectiveness of a group. Typically, as we pointed out earlier, the literature focuses on the onset or termination of violence rather than the quantity or quality of violence. In other words, though we know something about the strategic logic driving terrorist attacks (Kydd and Walter 2002, Lake 2002, Pape 2003, Kydd and Walter 2006), we know very little about what the battlefield looks like. How much violence is produced? How often do groups attack? What kinds of violent tactics do they employ? In operationalizing the effectiveness of violent non-state actors, therefore, we account for variation in violence along two dimensions: damage/lethality and temporality.

2.3.1 Damage/Lethality

Violence imposes costs on political leaders (and their supporters) by destroying private property, lives, or public infrastructure. By increasing damage, groups hope to coerce political change from otherwise unwilling leaders. However, quantifying damage is at best tricky and at worst impossible. Not all violent groups kill people; some groups attack unmanned buildings, while many others target public resources like airports or train stations. Comparisons between the economic costs borne from the attacks on 9/11 and the psychological devastation that comes from losing a loved one are impossible. Most datasets track the human toll of attacks, perhaps

because these estimates are frequently reported, but neglect any estimations of the “other” damage caused by attacks. Further compounding this issue is the fact that not all groups intend to inflict large numbers of casualties. In fact many groups take extraordinary steps to lessen the human toll of their attacks.⁶

To account for different types of violence utilized by non-state groups, we believe that accounting for lethality (human toll) as well as destruction to non-human targets is important because damage to either can be extraordinarily costly to a state or regime. While we believe that both non-human and human losses are important indicators of an attack’s effectiveness, we lack data on the former so our large-N tests are constrained to an analysis of only the lethality (deaths plus injuries) of an attack. However, we consider the broader definition in our case analysis. We expect that:

H1a: Hierarchical organizations will cause more damage per attack.

H1b: Flatter organizations will cause less damage per attack.

2.3.2 Frequency and Duration

When studying groups that use violence, we must also identify a pattern between the attacks. Are these events isolated, spread out over a long period of time, or concentrated in short bursts?

The introductory anecdote hints at the organizational structure necessary for carrying out a series of long-term, coordinated attacks. Flatter organizations lack a rigid command and

⁶ To the best of our knowledge, only a small number of groups call in attacks, thereby reducing damage and altering our estimates of the group’s effectiveness. Since few groups do this, we do not anticipate it biasing our results. However, subsequent studies might consider how structure influences are group’s ability to coordinate such calculated attacks.

control structure: information has multiple sources and multiple directions to flow. As a result, coordination between nodes in the group becomes tougher, as there is not a “party line” to follow and many opinions and ideas receive the same level of credence and support. In other words, there is no dominant decision-maker with a monopoly on information. Though this may be an advantage in terms of flexibility in strategy, and helpful in the evasion of government authorities, it is something that hinders coordination between units. Also, a lack of specialization means the greater likelihood for duplication of skills and efforts, which in turn, again, results in problems for coordination, as units do not necessarily have specific tasks to perform. It is less likely that flatter organizations will be able to carry out concentrated attacks over a sustained period.

Conversely, hierarchical groups are well-organized in the sense that there is a central core determining the directives for the rest of the group. As the al-Aqsa intifada example demonstrates, the leadership of Hamas was able to coordinate 425 attacks over a period of four years. Pulling together the necessary resources and personnel for such a long series of attacks implies not only highly effective leadership, but a clear chain of command that eliminates competing ideas, as well as unit specialization. Though a group like Hamas is less likely to be flexible both in terms of internal directives and how plans are executed, hierarchical groups can support coordinated attacks, both over the long-term, as illustrated in our example, and have the ability to concentrate attacks in violent bursts.

Given these coordination considerations, we expect a series of attacks characterized by tight temporal clustering is more likely to have been perpetrated by a hierarchical group. Organizational structure will also affect the group’s likelihood of waging long-term campaigns.

H2a: Hierarchical groups will be more likely to sustain long-term campaigns, capable of coordinating multiple attacks in “clusters.”

H2b: Flatter groups will be less likely to sustain long-term campaigns, relying instead on isolated, single attacks.

3. Data and Methods

To test our claims, we use a mixed method approach, including both a large-N analysis and a case study. We believe this approach is superior for several reasons. We also present a large-N analysis to test the broad applicability of our theories and to examine larger trends amongst violent groups. A detailed case analysis enables us, through process-tracing, to identify and verify the causal relationships suggested by the statistical analysis. It also allows for greater nuance, and given the problematic nature of accounting for a more holistic indicator of damage that expands beyond lethality of attacks, enables us to tease out some of the structural factors behind attacks not directed at persons.

In our large-N analysis we examine our hypotheses relating to lethality of attacks. Unfortunately at this time, data limitations restrict our ability to test the hypotheses 2a and 2b. However, we do find support for 1a and 1b that suggests attacks tend to be more lethal if they are perpetrated by vertical groups. We also find that lethality is significantly related to several other interesting variables.

We examine ETA in our case study. This group is particularly attractive for analysis because its group structure has changed over time, allowing for variation in our key independent variable. Another approach would have been comparing vertical and flatter groups. However,

we felt that this type of comparison was inferior because of conflict, country, and group specific attributes that are likely to shape our dependent variables and for which it would be impossible to completely control. Moreover, the case of ETA allows us to understand the long, drawn-out process by which clandestine groups form, splinter, and re-form, and how these metamorphoses impact the group's violent activity. We believe this understanding is extremely important as internal dissent and a lack of ideological cohesion is characteristic of most organizations, violence-producing or not.

Using historical analysis, we identify changes in ETA's structure. We subsequently divide our discussion of this case into the time periods corresponding with structural changes. Our discussion focuses specifically on four time periods since 1959. In our analysis, we focus on how changes in ETA's structure impacted the frequency and damage of ETA attacks.

3.1. Large-N Analysis: Data and Methods

To review, H1a and H1b predict that vertically-structured organizations will likely conduct more lethal attacks compared to flatter, more networked groups. Our dependent variable, lethality of attacks, is measured using data on attacks from the MIPT Rand Terrorism Knowledge Base (TKB) dataset.⁷ The data that we examine cover attacks around the world from 1968-2006. The unit of observation is a single terrorist attack.⁸ For each attack, the TKB database estimates the number of deaths and injuries. We generate our lethality measure by summing the number of deaths and injuries per attack.⁹ In some cases, TKB lists the number of deaths or injuries as unknown. When this occurs, because we have no way of estimating the unknown values, we code the value as missing and lethality is equal to the known values. For

⁷ See <http://www.tkb.org/>. Accessed 2/10/2007.

⁸ The TKB dataset defines a terrorist act as: "Violence, or the threat of violence, calculated to create an atmosphere of fear and alarm. These acts are designed to coerce others into actions they would not otherwise undertake, or refrain from actions they desired to take" (see <http://www.tkb.org/Glossary.jsp>, for a more detailed discussion).

⁹ Descriptive statistics of all measures can be found in appendix one.

instance, on March 20, 1998, the Abu Sayyaf Group (ASG) used firearms to carry out a kidnapping. The attack resulted in 8 injuries and an unknown number of deaths, therefore the lethality variable for this attack equals 8.

The most challenging aspect of examining our claims is finding a way to operationalize group structure, our main independent variable. To the best of our knowledge, no cross-national data on this variable exists. Instead, we use two proxy measures. The first measure indicates whether the group pursues nationalist or separatist goals. While this is certainly a rough approximation, we believe that on average nationalist and separatist groups, such as al-Fatah and Hamas in Palestine, the Basque Movement in Spain, and the Irish Republican Army in Northern Ireland, are more likely to be hierarchical. Because they advocate the separation from or overthrow of the status quo regime, these groups have an incentive to present themselves as alternatives to the current state structure. Thus, they usually have clearly identifiable leaders, as well as a hierarchy of command and control. If they choose to engage in violence, they will most likely have different, identifiable wings that pursue the various political, military, and other goals that the group may have. We assume that given these incentives, these groups will, on average, be more vertically-structured and functionally differentiated than their non-nationalist counterparts.

To construct this measure, we used group classification data from the MIPT TKB dataset. Groups in TKB are classified as anarchist, anti-globalization, communist/socialist, environmental, leftist, nationalist/separatist, racist, religious, right-wing conservative, right-wing reactionary, and amalgams of these types. We divided the organizations into two groups: nationalist and non-nationalist. All groups identified as purely nationalist/separatist as well as groups identified as some combination including the nationalist/separatist designation take on a

value of 1. All other groups take on the value of zero for the group type variable. We expect nationalist groups (i.e. those with a value of 1) will, on average, conduct more lethal attacks compared to with non-nationalist groups. Tables 1a and 1b show the average number of deaths for each group type.¹⁰

-----Insert Tables 1a and 1b Here-----

As a secondary test, we run our models using a second proxy indicating whether a group is nationalist *and* provides public goods and services.¹¹ Currently the data is collected for only the 40 primary groups designated as terrorist groups by the United States government. Collection efforts are underway for all other groups, including most of those listed in the TKB. We believe that this proxy is a better measure than our first, although it severely limits our sample size. Groups that provide goods and services are functionally differentiated and, we argue, are most likely to have specialized units focused on their comparative advantages. In other words, group members who excel at community service are most likely administering the provision of the group's goods/services, while other members who excel in the provision of violence most likely work in units dedicated to the group's violent activities.

We also include a number of control variables. First, we include a variable to control for the target being attacked. We expect that attacks against private citizens may be more deadly than attacks on other targets, such as government officials, because large groups of private civilians are easier to attack as they more regularly congregate in public places like markets and

¹⁰ The difference between these tables is the inclusion of three extreme lethality observations. These three observations combined would account for more than 88% of the deaths and injuries from attacks. See the methods discussion for further clarification.

¹¹ Data on public goods and service provision is preliminary and is being collected in conjunction with research done by Eli Berman at UCSD.

transportation depots. Additionally, there are arguably more civilians than there are of other target types, which should increase the number of civilian casualties comparatively. In other words, it is likely easier to kill X number of civilians than X number of another target. Data on target choice comes from the TKB dataset.¹² We created a dummy variable that equals one when the attack targeted private civilians; otherwise, it takes on a value of zero. We also control for the tactical choice of attackers. We expect that suicide bombing is more lethal because the aim of this tactic is to maximize the damage that can be done (Pape 2005).

We include dummy variables for attacks that occur in Israel and the West Bank/Gaza. In a study of the MIPT dataset, Bogen and Jones (2006) found systematic evidence that Israel experienced very different mortality and morbidity rates than all other regions combined. However, coupled with Berman and Laitin's (2006) argument that as targets get harder, groups are more likely to use suicide attacks, we anticipate that only the coefficient on the Israel dummy will have a more significant and positive relationship with lethality. Because targets within Israel are better protected (hardened), groups use tactics (like suicide bombing) that maximize lethality. We include the dummy for the West Bank/Gaza to be sure that Bogen and Jones' results are driven by Israel and not the Occupied Territories.

We also added a variable for regime type using the latest version of the polity data (Marshall and Jaggers 2002). This data is a composite index of democratic characteristics and ranges from -10 to 10, whereby -10 specifies an extremely authoritarian regime. Previous studies have found that regime type has a significant effect on the number of battle deaths in civil wars, as well as on the target choice of violent groups (Heger and Salehyan 2007 and Heger 2006). For

¹² The targets categories identified by the TKB dataset include abortion related, airports and airlines, businesses, diplomatic, educational institutions, food or water supply, government, journalists and media, maritime, military, NGO, other, police, private citizens and property, religious figures and institutions, telecommunications, terrorists, tourists, transportation, unknown, and utilities.

these reasons, we decided to include this variable, although our expectations about its influence are not as clear. Democracies may have a mediating effect on lethality because of the access that groups have to the political system through non-violent means. However, democracies may also accentuate the violence because of the civil liberties they protect, making violent operative's movements and actions easier.

Finally, we include a control variable for the group's history. This variable indicates whether the group's last attack was lethal or not. We expect groups that have been previously lethal are more likely to perpetrate lethal attacks in the future. Thus, we expect this variable to be positively related to lethality.

The TKB dataset can be divided into roughly two series: international attacks and domestic attacks. However, the domestic data were not added until 1998. A further complication is the fact that TKB does not provide an easily identifiable way to differentiate international attacks from domestic attacks. Some may argue that groups attacking in the domestic arena may be less apt to carry out extremely lethal attacks for fear of losing necessary support. We, however, have no such expectation and believe that there are likely no significant differences between domestic and international attacks. To be certain, we run a second model including a control for all events that take place after 1998 (variable labeled "domestic"). Although this is only an approximation for the dataset's inclusion of domestic attacks, it is appropriate to ensure the data do not differ significantly after the change in data collection.

Because lethality is bounded at 0, we use a count model to estimate the relationships between these variables and lethality. We use a negative binomial regression because we believe that the lethality measure exhibits some amount of positive contagion. In other words, the events in our data are likely not independent. If a group attacks and kills (or injures) some individuals,

we believe it is more likely to attack and kill more individuals than if nobody had died in the first place.¹³

One issue we confronted is the effect of group-specific characteristics. Some groups may be more (or less) prone to conduct lethal attacks due to the nature of their leadership, ideological mandate, or the way in which they maintain public support. For these reasons, we ran our model with robust standard errors clustering on each unique group. Additionally, to control for some country-specific effects, we took out all observations for countries in which attacks came from either only nationalist groups or only non-nationalist groups. In other words, our data are limited to only attacks where both non-nationalist and nationalist groups have attacked in the same country.

Our model is sensitive to three outliers in the lethality data. Of the 28,446 observations, these three notorious observations constitute over 88% of the sum of all the lethality numbers. These incidents include: the al-Qaeda attack on September 11, 2001 in the US, the al-Qaeda attack on August 7, 1998 against US embassy in Kenya, and the Aum Shinrikyo nerve gas attack on March 20, 1995 on the Japanese subway system. Each one of these attacks resulted in more than 5,000 dead or injured. Because these events make up such a disproportionate amount of the data, we exclude them from our model. Results for our models can be found in Table 2.

3.1.1 Large-N Test: Results and Discussion

The data in table 1a suggest that our initial intuition is correct. On average nationalist groups tend to carry out more lethal attacks. In fact, the average attack by a nationalist group is 100% more lethal than that carried out by a non-nationalist group. Attacks by non-nationalist

¹³ To double check, we also ran all of our models with Poisson regressions. The chi-square value for the goodness of fit tests for each regression (all of which >44,000) indicated Poisson is not the appropriate form.

groups kill or injure an average of 3.18 people, while attacks by nationalist groups kill or injure 6.88 people.

-----Insert Tables 2 and 3 Here-----

Table 2 shows our regression results. Models 1 and 2 were run using the first proxy, nationalist groups, and models 3 and 4 were run using the second proxy, nationalist and public goods/services providing groups. The difference between models 1 and 3 compared to models 2 and 4 is the inclusion of the “domestic” control variable. The inclusion of this domestic variable does not significantly alter the model, nor is it significantly related to lethality.

Turning to the results, we find support for our variable of interest. Results for our key variable, nationalist, indicates support for our hypotheses. Nationalist groups, which we argue are more hierarchical, are significantly and positively correlated with more lethal attacks. This finding is nearly significant at the 0.10 level in models 1 and 2. The incident rate ratios given in table 3 indicate that, *ceteris paribus*, if a group went from non-nationalist to nationalist, lethality increases by a factor of approximately 1.7.

The findings for our second proxy, nationalist public goods providers, indicate an even stronger relationship to the lethality of attacks. In models 3 and 4, this variable is nearly significant at a 0.05 level. If our suspicions are correct and this proxy is a more accurate representation of vertical, functionally-differentiated groups, then the results seem to indicate that the relationship between lethality and group structure is stronger than indicated by models 1 and 2. The incident rate ratios for this measure are similar to those above, indicating an increase in lethality by a factor of approximately 1.7 when the perpetrating group is nationalist.

All other independent variables are significant and generally in the expected directions. Attacks on private civilians are positively related to more lethal attacks. The incident rate ratios indicate attacks against private civilians compared to other attacks (holding all else constant) are associated with a factor increase in lethality from between 1.43 to 2.13. The findings are very strong for suicide attacks, showing that an extremely significant relationship between use of this tactic and an increase in lethality. In fact, the incident rate ratio for this variable in model 1 indicates a lethality rate 11.38 times greater for attacks caused by suicide bombings compared with other types of attacks. Polity scores had a significant and slightly negative relationship to lethality, meaning that the more democratic the country in which the attack occurs, the less lethal is likely to be. As expected, the lagged variable indicating whether the group's previous attack was lethal was positive and significant.

The findings for the Israel and West Bank/Gaza variables are interesting. Both are significant across all models, but the signs on their coefficients are different. When attacks occur in Israel, there seems to be an increase in lethality, but in the West Bank and Gaza attacks are negatively related to lethality. The incident rate ratios show that, holding all else constant, attacks in Israel would be expected to increase lethality by a factor somewhere between 1.52 and 2.31. In the West Bank and Gaza, however, attacks are expected to decrease in lethality by a factor of approximately 0.36. We believe this finding supports Berman and Laitin's (2006) earlier arguments. For Palestinian groups, targets within Israel are hardened, more prone to suicide bombing, and should be associated with higher lethality numbers. This also confirms Bogen and Jones' (2006) findings that attacks in this conflict tend to be inordinately dangerous, but perhaps refines the argument to apply to attacks in Israel and not in the Occupied Territories.

While we consider the findings presented here as preliminary, we believe these findings provide initial support for our theory and specifically hypotheses 1a and 1b. It is encouraging that both of our indicators of group structure seem to support our hypotheses on attack lethality. Furthermore, it is a positive that the measure of public goods and services exhibits a significant relationship with lethality. As our research progresses, we plan on gathering more data on public goods distribution so that we can apply this measure to a larger set of cases.

3.2.1 Case Study: Organizational Structure and the Effect on ETA's Violence

In this section we take an in-depth look at ETA, the main Basque separatist group, and how changes in its structure have impacted the lethality and pattern of its attacks. The Basque movement has, as some have put it, a “labyrinthine history ... its fortunes waxed and waned in the early years as it experienced schisms between the hardliners ... and the more moderate regionalists” (Douglass and Zulaika 1990: 243). Though they are referring to the earliest days of the movement, which began in the late 1800s, this characterization can be used for much of the modern story of struggle for Basque nationality. We focus on perhaps its most notorious component, ETA, which was founded in the 1950s.

The case study of ETA is ideal in many ways. Organizational structure has varied over the years, and various schisms between Basque nationalists have led to multiple factions and versions of ETA. Its base of support within the Basque community has also changed as the Spanish political environment transitioned from Franco to democratic leadership, and ETA has in turn altered its strategy by participating in electoral politics directly. We trace the effects of organizational structure on the lethality of violence and the temporal patterns in attacks. Consistent with our earlier arguments, we claim that when ETA is more hierarchical (that is, with a clearer sense of organizational coherence, functional differentiation, and coordination), its

attacks are more lethal and clustered temporally. When ETA is flatter, by contrast, we expect to see less lethal attacks and also attacks that are spread farther apart, to indicate a lack of coordination and contested leadership.

The story of ETA’s organization — and its forays into violence — is one of organizational chaos, debate over goals, and factionalization. This section looks closely at the link between organizational structure and violence perpetrated by ETA from its founding through the 1990s.¹⁴ First, we examine periods in which ETA was flatter, demonstrating that a lack of command and control leads to lower levels of agenda setting and accountability. Second, we look at times of greater hierarchy in ETA’s history, and show how increased levels of centralization of power within the organization allows members to coordinate their activities, following clearly-defined leadership. Chart 2 shows the relevant time periods and associated structures in ETA’s history. We find general support for Hypotheses 1 and 2- the more hierarchical the group, the more lethal its attacks and the better it can sustain long-term campaigns.

-----Insert Chart 2 Here-----

Flat Resistance: ETA’s Lack of Hierarchy, Lack of Results

ETA was created in resistance to the status quo of Basque nationalist representation. As one observer put it, ETA spent “the first ten years of its existence struggling to define itself” (Irvin 1999: 68). The PNV, from its founding in 1898, had served as the flagship Basque nationalist organization, at least electorally. In 1952, a group of university students, disgruntled with the direction of PNV, formed EKIN, which was a revolutionary group that advocated the

¹⁴ The end date of analysis was chosen primarily because of information availability. We hope to extend and deepen this case study in subsequent drafts.

adoption of socialism. EKIN advocated nationalist policies as well: the use of Basque language and Basque autonomy. However, it believed that in order to achieve its policy goals, it would have to challenge Madrid directly. EKIN was supported initially by the youth movement of PNV. A split in 1959 among the youth formed ETA.

ETA was founded in the spirit of resistance to the Franco regime, but beyond that, there was very little consensus about the organization's purpose. Splintering occurred along ideological and strategic lines. Different factions of ETA supporters – workers, Third Worldists, Basque culturalists, and militarists – jockeyed for dominance throughout the earlier periods of the group's history, blurring lines of command and control and creating multiple lines of accountability and information. Disagreements over the use of violence, for example, or who best represented the interests of ETA marred relationships between members.

The period between 1962 and 1973 is organizationally characterized by infighting about the nature and goals of the organization. These schisms were causing disputes that stymied any effective external activity beyond involvement in labor disputes of the Basque region. Labor supporters gained support and eventually broke away from the main ETA organization to form ETA-berri (or New ETA) in 1966. One of the main splits was between the ETA-V and ETA-VI assemblies between 1968 and 1970. This was a period of “great turmoil and upheaval and [ETA's] organizational structure underwent wrenching changes” (Clark 1984: 208). As its internal struggles hampered any action — violent or political, support for ETA waned throughout the 1960s. Ultimately, the Burgos trial of 1970 – which Franco saw as an opportunity to crush Basque resistance through a series of show trials – reinvigorated the movement, now split along two distinct lines: militant (ETA-V) and labor (ETA-VI) (Irvin 1999: 75).

Until ETA-V became the dominant force in ETA in 1972, the era was characterized by isolated and limited incidents of violence, as would be expected given the fragmented nature of the resistance and continued in-fighting between factions. ETA-V's victory was brief. The biggest ETA split came in 1974, with the formation of ETA(m) (military) and ETA(pm) (political-military). The division between those who wanted a separate unit to focus exclusively on clandestine violence and those who felt that violence had to be integrated with political participation became the main cleavage. ETA(pm), which advocated the latter, became the stronger of the two, and structured its political program around three things: an independent and reunified Basque Country; establish *Euskara* as official language; and establish socialism in Basque Country. However, the imminent death of Franco emboldened the Basque population, which swung its support behind ETA(pm) in 1975. ETA(m) began garnering adherents rather quickly, and increased the violence against Spanish authorities in spite of Franco's repeated declarations of "states of exception" in different Basque provinces (Irvin 1999). After ETA(m) emerged as the winner in the struggle for power, the group was able to consolidate leadership, and more importantly, centralize resources for more lethal and sustained violence.

Organizational discord and disorganization seems to have resulted in few, ineffective attacks. Indeed, much of the internal struggle about the nature and ideology of the movement as a whole led to inaction, or at best, ineffective action. The high degree of internal discord reveals the flatness of the structure: there were multiple agenda-setters, and therefore different lines of accountability within the organization as factions mutually expelled one another and assumed power. Furthermore, when ETA did attack, its ranks were decimated by the state's reaction, disabling subsequent actions.

The problems posed by a flat organizational structure are illustrated in its attempts at violence, which hurt ETA members more than the targets of its attacks. Its first violent (and unsuccessfully so) action was July 18, 1961, when a group of ETA activists tried to derail a train of Franco supporters. The action backfired, as Franco reacted swiftly, with a vengeance. Over 100 ETA members were subsequently arrested, tortured, and handed 15 year prison sentences. Another 100 were exiled to France. Franco's crackdown on ETA forced the organization to think more strategically and systematically about its structure, which had previously been loosely-connected, individual cells, i.e. a flat network of sparse participants (Clark 1984, Zirakzadeh 1991). Within ETA, the attack was seen as a unilateral action by one cell, and the need to solidify the aims and strategies of the organization was paramount (Zirakzadeh 1991). The lines of command and control within ETA were sufficiently unclear and decentralized to allow one cell to commit an attack that "surprised" the others. Coordination failures and vulnerability marked many of ETA's early actions. In another example, the members of ETA — *etarras* — robbed a bank in 1965, but two days later were recognized and arrested after being involved in a car accident. As a result of the ultimate failure of the attack, many members fled into exile (Clark 1984: 41). None of the attacks in this period led to fatalities, but many attenuated an already weak, decentralized organization that was struggling within its ranks to define itself.

The flatness of the organization, along with disputes over the use of violence, certainly contributed its sporadic use. The first lethal success was in 1968, when a civil guard was killed. Other attacks such as the kidnapping of Basque industrialist Lorenzo Zabala in 1972, and the assassination of Carrero Blanco, the Spanish Prime Minister and successor to Franco in late 1973 demonstrated ETA's increasing organizational capacity. One event that was particularly crucial for ETA came when 16 members of ETA were tried for conspiring and killing Meliton

Manzanas, a police commissioner well-known for his use of torture (the aforementioned Burgos trial). As leverage, ETA kidnapped West German consul Eugen Beihl, which forced the Franco regime's hand. Only six were condemned to death, and these were later commuted to 30 years in prison. Under ETA-V's leadership, the organization was able to sustain isolated attacks, but had not reached the heightened level of violence that was to come. Violence became more sustained, particularly the 1973 campaign resulting in the Blanco assassination. Under ETA(m)'s leadership, violence escalated. More attacks and a greater level of lethality—between 9 and 17 killings per year—characterized these years (Clark 1984: 133). Though many attacks were attributed to a larger “ETA” organization, over the course of the split, ETA(m) launched far more attacks than did ETA(pm) (Clark 1984: 128). ETA(m) had a clearly defined division of labor (Clark 1984) and was more clearly hierarchical. ETA(m)'s command structure included separate offices for functions including international operations, finances, intelligence, legal commandos, and illegal commandos, and border operations (Clark 1984: 213). Across the two organizations during the split, ETA(m) was a clearly hierarchically organized organization. Relatively little is known about the inner structure of ETA(pm), although we know that in 1976, the faction split again between those who wanted to participate in the Spanish political system and those who did not (Medrano 1995: 149).

Throughout the early period, factions and power struggles characterized ETA. Repeated disputes over the use of violence to achieve Basque nationalist ends, or to resist the Franco regime could not be quashed because no dominant actor existed. There were multiple agenda setters, none of which had a monopoly on information. Until ETA(m) capitalized upon Franco's departure, there was non consensus over the direction of ETA, and no one faction could establish command and control. Without a hierarchical system in place, violence, if used, was sporadic,

and often ineffective. As ETA's membership became increasingly homogenous, particularly concerning the use of violence in later periods, ETA's leadership was able to exert power over the rest of the organization, and coordinate activities between various parts of the group for more lethal and sustained violence.

Centralization of Power and Politics: ETA's Growing Hierarchy

After ETA(m) established its dominance in ETA (ETA(pm) would not formally disappear until 1982), it turned towards a more radical approach to Basque nationalism. The turn towards more extreme Basque politics was also reflected at the ballot box as the moderate PNV eventually lost its support base to Herri Batasuna (HB), founded in 1978. HB served as the focal point for the Basque Left, and at least in name, was independent from ETA. However, HB has been linked directly to the activities of ETA, allowing military goals to dictate political activity (Clark 1990), which has perhaps helped it at the polls. It replaced PNV as "the Basque party" in 1987, but as we argue, became an extension of ETA's resistance movement, rather than a separate political entity. Throughout the 1980s and 1990s ETA crystallized its role as the primary organization of the Basque movement. HB further reinforced ETA's influence by replacing PNV as the most popular Basque party in the 1987 European Parliament elections.

The dominance of the ETA(m) faction and development of its political wing (HB) indicate a functionally differentiated organization and gives us reason to believe that this was one of the most hierarchical eras of ETA. Not only does having separate military and political wings indicate functional differentiation, HB and ETA coordinated on various campaigns. ETA(m)'s consolidation of leadership in the organization led to a significant escalation in violence. 1978 was the deadliest year yet in the conflict, resulting in more fatalities than all the preceding years combined. The era is also characterized by greater coordination of attacks. For example, in 1979

ETA attacked the Madrid airport and two rail stations simultaneously, resulting in six deaths and 130 injuries.¹⁵ This highly coordinated effort is an example of the type of event clustering we argue is possible only in hierarchical organizations. Similarly, in 1980, ETA detonated seven bombs within a week on Spanish beaches. These attacks were seen as direct assaults on the Spanish tourism industry. Estimates conclude that a 20-30 percent decline in tourism can be attributed to fears about ETA. Though the attacks caused little physical damage, and no casualties, the end result of inflicting substantial costs on the Spanish government is clear (Dowell 1980).

As the level of hierarchy increased in the 1980s, through the 1990s, ETA regularly conducted multiple attacks clustered within a single month.¹⁶ Additionally, some campaigns were shown to be highly coordinated, conducted within hours of each other or simultaneously. For example, a judge was shot fewer than 24 hours after a Madrid car bomb in 2001.¹⁷ Also consistent with our predictions, increased hierarchy leads to functional differentiation and more damaging effects. This period was marked by a “two-track” campaign, in which “violence would be synchronized with meetings and demonstrations” indicating a very high level of coordination, which we argue is the result of a hierarchically organized group.¹⁸ ETA used violence and political action to demand policy change, actions that are not possible when there are multiple agenda setters dictating directives for the group.

Additionally, ETA’s attack profile during this period demonstrates that its goal was to inflict damaging attacks rather than lethal attacks. The organization would routinely call in bomb threats to locations where bombs were planted. Given that damage, not lethality is the goal

¹⁵ <http://www.guardian.co.uk/spain/article/0,,1004575,00.html>

¹⁶ <http://www.cidcm.umd.edu/inscr/mar/assessment.asp?groupId=23001> Accessed February 16, 2007

¹⁷ <http://news.bbc.co.uk/2/hi/europe/545452.stm> Accessed February 16, 2007

¹⁸ Ellman, Paul “Basque bomb kills three as rebel war intensifies” October 27, 1986 *The Guardian*.

of these attacks, it is not appropriate to proxy damage with lethality figures. Attacks against transportation hubs and infrastructure in these cases are designed to cause damage but not fatalities. Hotel bombings that are announced ahead of time typically resulted in damage only. The change in using violence to destroy infrastructure, rather than kill individuals, is also demonstrative of the coordination by centralized power. The ability of ETA's leadership to control attacks such that persons are not hurt and are notified with enough forewarning to get to safety is a manifestation of command and control within the group. Clearly, the leadership can hold members accountable for their actions.

In the discussion above we have shown further support Hypotheses 1 and 2. The ETA case identified critical organizational changes over time and their correlation with the coordination of attacks. Figure 1 below, from the TKB data, shows international incidents conducted by ETA over time. We emphasize the early organizational struggles through the founding of HB in 1978. Prior to this time, we argue that while structure is becoming more and more hierarchical, is still fairly flat in the earliest period, and at a "middling" level between the two extremes in the period prior to HB. Note the jump in incidents immediately after HB's founding, a drop, and another escalation in the number of attacks. We attribute the major escalation to the solidification of ETA under ETA(m), and the disappearance of ETA(pm) in 1982. The case study offers promising support of our intuition.

-----Insert Figure 1 Here-----

4. Conclusions

We have argued that organizational structure affects a group's violent character. Those groups that are more hierarchical in structure are more likely to commit attacks that kill and injure higher numbers of individuals. Our quantitative analysis showed support for our hypotheses about the relationship between lethality and group structure. And although we understand the inherent problems with using a measure of group type to proxy for the structure of an organization, we have reason to suspect that our proxies are reasonable alternatives.

Another hypothesis advanced here is that vertical groups are more likely to execute longer, more frequent campaigns of violence. The case of ETA exemplifies how structure affects the frequency of violence, its success, and its destructive capacity. ETA has ebbed and flowed between a vertical and a flat structure, and these changes have led to variation in tactics they employ in their politics, and also the degree to which they can coordinate their attacks. We see that as ETA solidifies as a hierarchical organization with clear lines of command and control and agenda-setting powers, their attacks become more damaging and coordinated. As the organization parses out its different functions into different wings (i.e. the rise of HB as an important political player in Basque politics), it becomes a larger political force in Spanish politics, gaining constitutional concessions in 1978.

This study makes several important contributions. First, we contribute to scholarship studying the effects of group structure on conflict outcomes. We find that structure, not ideology, drives lethality, frequency, and duration. Second, it highlights the policy importance of structure in the study of non-state, violent organizations. Factions, splintering, and alternations in leadership likely play a large role in the type of violence the group is able to carry out. But the reverse holds as well. Given the clandestine nature of many of these groups, those designing countermeasures against terrorism or violence, may learn a great deal about the organization

from analyzing the character of its violence. Third, this analysis could be easily adapted for those studying other non-violent political actors like transnational organizations or grass-roots movements. In work on Amnesty International and human rights networks, Wong (2008) has already highlighted how network structure influences the group's success at setting the normative human rights agenda. With a universal variable like group structure, we can better understand the nature and effect of non-state politics and how this changes our understanding of global politics and governance.

Tables and Figures

	Vertical	Flat
Agenda Setting	Single, clear agenda setter. Clear flow of information, few lateral links	Indirect, changeable agenda setter. Lateral flow of information.
Accountability	Tighter, less agency loss	Looser accountability. Often unclear principal.

Chart 1: Differences between vertical and flat organizations

	Group Type	
	Non-Nationalist	Nationalist
Average Lethality	3.18	6.88
Standard Deviation	26.75	28.39
<i>N</i>	12,526	2,470

Table 1a: These numbers exclude three outlying observations: 9/11, al-Qaeda attacks against the US embassy in Kenya, and Aum Shinri Kyo attacks in Japan with sarin nerve gas. See methods discussion for clarification.

	Group Type	
	Non-Nationalist	Nationalist
Average Lethality	4.39	6.88
Standard Deviation	82.97	28.39
<i>N</i>	12,529	2,470

Table 1b: These numbers include all observations.

Variable	Model 1 Coefficient (<i>standard error</i>)	Model 2	Model 3	Model 4
Nationalist	0.518* (0.323)	0.540 (0.364)		
Nationalist and Goods Providing			0.536* (0.283)	0.528* (0.276)
Private Civilian	0.510*** (0.107)	0.363** (0.127)	0.680** (0.338)	0.756** (0.348)
Suicide	2.432*** (0.230)	2.283*** (0.244)	2.111*** (0.414)	2.208*** (0.424)
Polity	-0.052*** (0.010)	-0.050*** (0.011)	-0.059** (0.024)	-0.056** (0.022)
Previous Attack Lethal	0.527*** (0.113)	0.486*** (0.105)	0.927*** (0.191)	0.949*** (0.214)
Israel	0.422* (0.224)	0.555** (0.191)	0.839** (0.307)	0.754** (0.258)
West Bank/Gaza	-0.990** (0.324)	-1.030** (0.348)	-1.038*** (0.275)	-0.982*** (0.276)
Domestic	-0.391 (0.271)		0.237 (0.268)	
Constant	1.245	1.057	1.798	1.801
N	14,996	14,996	2,219	2,219

Table 2: Negative binomial regression, clustering on organization. Standard errors (robust) are in parentheses. ***significant at 0.01, **significant at 0.05, *significant at 0.10

Variable	Incident Rate Ratio Model 1 <i>(standard error)</i>	Incident Rate Ratio Model 2	Incident Rate Ratio Model 3	Incident Rate Ratio Model 4
Nationalist	1.68* (0.54)	1.71 (0.62)		
Nationalist and Goods Providing			1.71* (0.48)	1.69* (0.46)
Private Civilian	1.66*** (0.17)	1.43** (0.18)	1.97** (0.66)	2.13** (0.74)
Suicide	11.38*** (2.61)	9.08*** (2.40)	8.26*** (3.42)	9.10*** (3.86)
Polity	0.94*** (0.00)	0.95*** (0.01)	0.94** (0.02)	0.94** (0.02)
Previous Attack Lethal	1.69*** (0.19)	1.62*** (0.17)	2.52*** (0.48)	2.58*** (0.55)
Israel	1.52* (0.34)	1.74** (0.33)	2.31** (0.71)	2.12** (0.54)
West Bank/Gaza	0.37** (0.12)	0.35** (0.12)	0.35*** (0.09)	0.37*** (0.10)
Domestic	0.67 (0.18)		1.26 (0.34)	
N	14,996	14,996	2,219	2,219

Table 3: Negative binomial regression incident rate ratios. Standard errors (robust) are in parentheses. ***significant at 0.01, **significant at 0.05, *significant at 0.10

Period	Flat/vertical structure	Splinters and Factions
1959-1967 (founding)	Flat → Vertical → Flat	Cuturalists, Workers (ETA-Berri), Third-Worldists
1968-1973 (first wave of widespread violence)	Flat → Vertical	ETA-V, ETA-VI
1974-1977	ETA(m): vertical ETA(pm): vertical(?)	ETA(m), ETA(pm)
1978-1981 (ETA-HB)	Vertical	HB
1982-present (cease-fires)	Vertical	n/a

Chart 2: ETA's Structural History 1959-2007

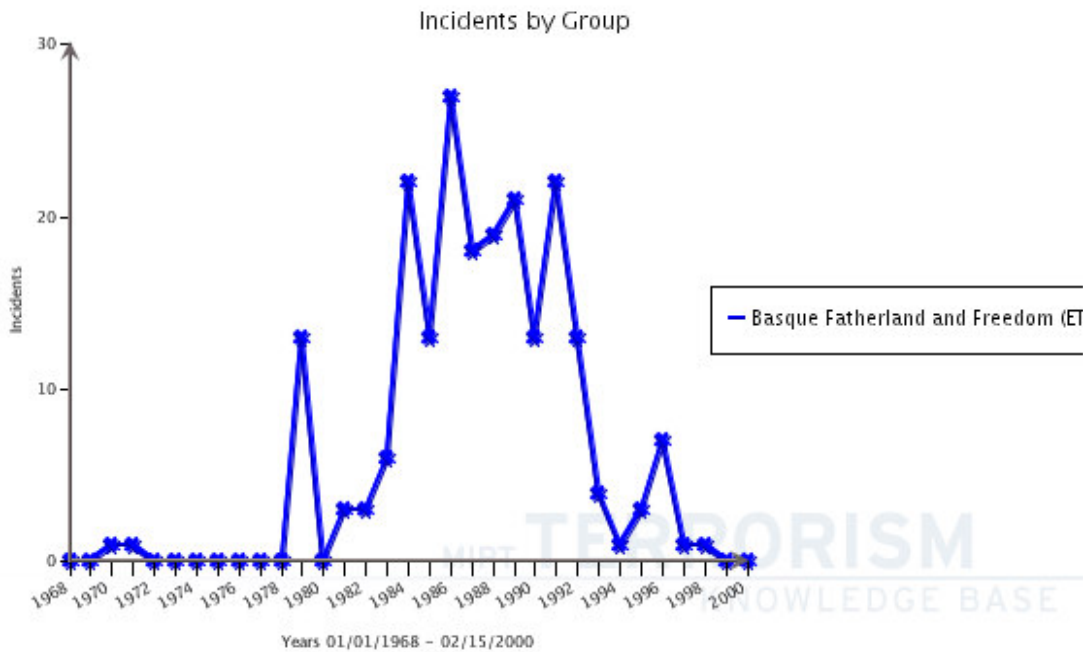


Figure 1: ETA incidents over time. Source: MIPT Terrorism Knowledge Base

Appendix 1: Descriptive Statistics for Variables

The descriptive statistics for these variables are calculated using the population from models 1 and 2 (N=14,996).

Variable	Mean	Median	Min	Max	Std. Deviation
Lethality (DV)	3.79	0	0	1517	27.06
Nationalist	0.16	0	0	1	0.37
Private Citizen	0.18	0	0	1	0.39
Suicide	0.01	0	0	1	0.11
Polity	5.95	8	-10	10	5.85
Previous Attack	0.34	0	0	1	0.47
Israel	0.05	0	0	1	0.21
West Bank	0.07	0	0	1	0.26
Domestic	0.58	1	0	1	0.49

The descriptive statistics for these variables are calculated using the population from models 3 and 4 (N=2,219).

Variable	Mean	Median	Min	Max	Std. Deviation
Lethality (DV)	6.63	0	0	502	27.8
Nationalist Public Goods Provider	0.17	0	0	1	0.38
Private Citizen	0.12	0	0	1	0.33
Suicide	0.04	0	0	1	0.20
Polity	6.94	8	-10	10	4.42
Previous Attack	0.39	0	0	1	0.48
Israel	0.06	0	0	1	0.25
West Bank	0.04	0	0	1	0.21
Domestic	0.54	1	0	1	0.49

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