Social Structures of Revolution: Networks, Overlap, and the Choice of Violent Versus Nonviolent Strategies in Conflict

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Abstract
This paper examines the role of social ties in a revolutionary movement’s decision to adopt a strategy of nonviolent civil resistance versus armed insurgency. While a growing body of literature is investigating the choice between violent and nonviolent repertoires of contention, extant work has largely focused on state-level macroeconomic variables. However, the theories of nonviolent action suggest that it is social structure more than economic structure that should matter for movements considering this strategy. Using transnational data of violent and nonviolent campaigns between 1946 and 2006, I show that movements seeking maximalist political goals are significantly more likely to embrace a strategy of nonviolent civil resistance when they are connected to the regime and to larger segments of society by ethnic or religious ties. I argue that this is because movements with what I term "social overlap" are better able to activate key mechanisms of nonviolent success: they mobilize more participants, win over defectors from the regime, and are less likely to face brutal repression. By contrast, revolutionary movements that lack these crucial social ties are more pessimistic about the viability of a nonviolent strategy and consequently more likely to take up arms.

Two Paths to Revolution

In the late 1980’s, social movements in Poland, East Germany, Czechoslovakia, Hungary, and Estonia all used a strategy of nonviolent civil resistance to topple Soviet-backed regimes. However, in Romania, what started as a similar nonviolent protest devolved into armed conflict that killed more than 1,100 people. More recently, revolutionary movements in the Arab world from Tunisia to Bahrain took to the streets to demand political change. But
while movements in Tunisia and Egypt engaged in protests, marches, strikes, and sit-ins, in Libya, revolutionaries took up arms from the outset. Syria, like Romania, started as a nonviolent campaign but transitioned into a civil war that has resulted in over 200,000 deaths.

Cases of movements with the same revolutionary goals using different strategies in adjacent states, such as seen in Eastern Europe and the Arab Spring suggest that nonviolence and violence are plausible alternatives in pursuit of regime change and that political movements seeking to topple the state therefore face a choice in what strategy they wish to pursue. So how do such movements come to embrace one strategy over the other?

Despite the obvious real-world importance of both armed insurgencies and civil resistance campaigns and despite their relationship as alternative strategies to the similar end of revolutionary change, scholarly analysis has only recently begun to address them in tandem. The academic literatures on civil war and civil resistance have evolved largely separately, thus leaving some important questions unaddressed. As Veronique Dudouet describes, “scholars and practitioners or activists in the fields of social movements, nonviolent action, political violence and conflict resolution seem to be largely evolving in parallel, often in relative isolation from each other. For instance, most security studies and conflict resolution experts are unfamiliar with the rich scholarship and empirics on civil resistance, given their narrow focus on armed conflicts and their termination through military means or negotiated settlements. In turn, most nonviolent scholars tend to hold oversimplified views on the dynamics and nature of armed struggle and warfare.”

The literature on civil wars has focused on variables affecting the onset of civil vi-

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violence, conflict duration, and prospects for resolution. More recent scholarship has sought to explain relative degrees of violence within civil conflict, focusing on variables such as territorial control, movement cohesion or fragmentation, and the balance of power amongst rebel factions. However, all of these studies contrast the presence of violence with either its absence or restraint in its use. In doing so, they overlook the employment of nonviolent strategies as both an important geopolitical phenomenon in its own right, as well as a potential alternative to armed insurgency that informs where and when we see violence used.

A new wave of empirical work on civil resistance has begun to analyze violent and nonviolent modes of contention in tandem. Most notably, Chenoweth and Stephan compare the effectiveness of violent versus nonviolent campaigns, finding that nonviolent campaigns are dramatically more successful than their violent counterparts.

The strength of this empirical finding has brought new attention to the question of how movements come to embrace nonviolence versus violence in the first place. After all,

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if nonviolence really is more effective, why would any group choose to take up arms?

But empirical research on the determinants of movement strategy has produced few strong findings. Echoing the civil war literature, Chenoweth and Lewis (2013) find that armed campaigns are more likely when environmental conditions make fighting easier. But their findings are less clear when it comes to what affects the onset of civil resistance. In their analysis of a revised dataset of violent and nonviolent campaigns, “the only significant correlates of nonviolent campaigns are flat terrain and older, more durable, authoritarian regimes.”\(^9\) They cite this as evidence of the robustness of civil resistance as a strategy, but offer little theory as to why these correlations exist.

Butcher and Svensson (2014) propose a modernization theory approach, arguing that processes of industrialization create structural conditions more conducive to nonviolent mass mobilization.\(^10\) They report strong positive correlations between manufacturing as a share of a state’s GDP and the likelihood of a nonviolent campaign onset. However, it is difficult to understand exactly what mechanisms are at play from such a broad, state-level macroeconomic variable.

Cunningham (2013) examines the subset of self-determination movements.\(^11\) Unlike previous studies, she moves beyond state-level macro variables and uses group-level data on the size and concentration of ethnic groups. She finds that groups are more likely to rebel using either strategy when they are politically excluded, but that armed insurgency is more likely the larger and more concentrated the group while smaller more diffuse groups are more likely to opt for nonviolence. This result runs contrary to Cunningham’s own

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theoretical predictions and the intuitive logic that a larger group size would make a movement more likely to embrace nonviolence given that strategy’s reliance on mass support. More research is therefore necessary on the relationship between movement support and strategy.

Finally, Wendy Pearlman (2011) draws upon qualitative evidence from the case of Palestinian resistance to illustrate the role of organizational cohesion in conditioning the strategic options and incentives available to a movement. It is likely true that a certain level of organizational discipline is necessary for a nonviolent movement to even get off the ground. However, this amounts to a necessary but not sufficient condition for civil resistance: plenty of violent insurgent movements are highly disciplined, organized, and cohesive.

These studies have all pushed forward the scholarly analysis of nonviolence with increased rigor and empirical analysis. However, they offer only partial explanations for why and how movements come to embrace either armed insurgency or civil resistance. Furthermore, in the cases of Cunningham and Pearlman, they focus specifically on struggles for secession, setting aside those movements seeking total state capture. This study seeks to fill these gaps.

I assume that revolutionary movements must choose between two fundamentally different strategies in pursuit of their goals. Civil resistance describes a strategy based on the primarily nonviolent use of social, psychological, economic, and/or political pressure in order to exert coercive power on an adversary. It is different from spontaneous demon-

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stration in that it is employed in the form of a campaign by a movement with identifiable leaders and an organizational structure.\textsuperscript{15} It is also different from institutionalized protest in that it occurs outside the channels of normal political activity, and often outside of the law.\textsuperscript{16} In short, it is the most intensive and coercive form of political contention short of taking up arms.

\textit{Armed insurgency}, by contrast, is a strategy of confronting the security apparatus of the state directly with armed force. This encompasses both strategies that seek to capture and control territory, as well as strategies that employ violence to break the political will of an adversary. Armed insurgency may include the use of nonviolent tactics, but the actors are dependent upon the use of violence in order to achieve their goals.

I treat these concepts as “ideal types” of strategy that are mutually exclusive and collectively exhaustive. This assumption may be problematic: certainly some groups engage in behavior that encompasses a spectrum of violent and nonviolent forms of contention. However, this binary classification, while simplistic, is nevertheless sufficiently realistic to be useful for theoretical and empirical analysis. Even when violent groups engage in some of the tactics of civil resistance, the primary logic of their strategy still follows that of armed insurgency in that it relies on directly confronting the state’s security forces on the battlefield. By contrast, scholars of civil resistance have gone to great lengths to point out that


when a group attempting civil resistance engages in even a low level of violent activity, it undermines the strategy and the conflict quickly takes on the dynamic of insurgency. While the decisions of revolutionary movements are likely affected by numerous factors, both rational and non-rational, I argue that the nature of a movement’s network of supporters often has a decisive impact on its behavior. The strategic logic of civil resistance and armed insurgency are different and each has unique requisites of success. For civil resistance, mass popular support is paramount. For armed insurgency, it is less so; access to arms and resources are the more decisive variables. In particular, if a movement’s base of support is circumscribed to a particular identity group, it can expect difficulty in activating the mechanisms that are crucial for nonviolence to be effective. These identity barriers can act as a limit on gross mobilization potential, make encouraging loyalty shifts from the regime more difficult, and may allow for state security forces to engage more easily in brutal repression, even of nonviolent demonstrators. Such a movement will be more pessimistic in its assessment of the potential effectiveness of civil resistance and consequently more likely to embrace a strategy of armed insurgency.
SOCIAL BASES OF REVOLUTION

The differing requisites of success for civil resistance versus armed insurgency provide a basis for assessing the comparative efficacy the two strategies in a given context. One of the strongest findings in the literature on civil resistance is the importance of mass popular support to the effectiveness of campaigns. The logic behind this is straightforward: more people engaging in nonviolent anti-regime mobilizations—from street protests to strikes to boycotts—increases the effectiveness of those tactics, raises the costs imposed on the regime, and heightens the threat to regime power.

Simply put, the more people that are involved in carrying out the nonviolent repertoire of tactics, the greater the disruption those tactics cause and the greater the coercive leverage upon the regime. Nearly all nonviolent tactics benefit from greater participation, whether they be acts of commission such as protests and demonstrations or acts of omission such as strikes and boycotts. In fact, as DeNardo points out, “it is nearly impossible to imagine political circumstances where the disruptiveness of dissident activity would diminish as its scope increased.”

While popular support can be helpful for armed insurgency, it is not as central a requirement of success as in the strategy of nonviolence. Research on insurgency has shown how small groups of rebels can defeat the most powerful regime adversaries and that the number of participants is far less important in predicting the outcome of violent campaigns.

As Fearon and Laitin write, “Given the right environmental conditions, insurgencies

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can thrive on the basis of small numbers of rebels without strong, widespread, popular support.”

Instead, scholars of insurgency have emphasized other factors, such as access to natural resources, foreign sponsors, the availability of arms, and the select use of asymmetric tactics as the keys to rebel victory. Movements committed to revolution who have limited initial capability to generate mass mobilization are more likely to arrive at the conclusion that armed insurgency offers a pathway to victory that civil resistance does not.

The dynamics of popular support go beyond numbers: who participates may be as important as how many participate. Some scholars have noted the importance of breadth or diversity in a movement’s base of popular support. For example, Chenoweth and Stephan write that movements are more effective “when participants reflect diverse members of society.” But the qualitative nature of movement support has yet to be rigorously examined, perhaps because of the difficulty in conceptualizing and measuring movement “breadth.” What kinds of diversity are necessary for a movement and why is it important?

I argue that it is not diversity for diversity’s sake that shapes a movement’s strategic calculus as much as a movement’s degree of what I term “social overlap”—ties of kinship, caste, religion, ethnicity, class, or association—both with other sections of society as well as the regime.

Scholars of political party formation and democratization have long argued that the alignment of political attitudinal and institutional division along pre-existing social structures, such as religion, ethnicity, region, and class, increases the risk of conflict within a

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society. 23 Harry Eckstein defines a “segmental cleavage” as existing “where political divisions follow very closely, and especially concern lines of objective social differentiation, especially those particularly salient within a society.” 24

These cleavages have been linked to both rational as well as socio-psychological pathways to violence. Rabushka and Shepsle demonstrate through formal models how congruent political and social cleavages create an incentive structure that encourages political actors to appeal to the extremes rather than a moderate center, inciting a cycle of outbidding that leads to instability and often violence. 25 Gurr, by contrast, argues that economic disparities that parallel social divisions, what scholars have since termed “horizontal inequalities,” generate group-level frustrations which in turn trigger collective violence. 26 Horowitz, in a way, combines the two, to illustrate how social-psychological concepts such as collective self-esteem and group worth can create the kind of extreme preferences that lead to increasingly polarized politics and eventually violence. 27

However, the existence and alignment of social, economic, and political cleavages is rarely clear. Scholars have gradually rejected the concept of identity groups as being fixed, rigid, and primordial, instead arguing that they are fluid, fragmented, multidimensional,

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and often partly shaped by political institutions and processes.\textsuperscript{28} Furthermore, as Arend Lijphart notes, societies can have multiple cleavages with varying degrees of fragmentation, those cleavages can be congruent or cross-cutting, they can be of varying degrees of intensity, and they can be moderated by over-arching or intergroup ties.\textsuperscript{29}

Embracing this complexity, scholars have identified mechanisms through which different configurational relationships between salient identities, social groups, and the state affect dynamics of political behavior ranging from partisan polarity to economic development, and from public goods provision to civil conflict.\textsuperscript{30} Applied to the question of violent versus nonviolent strategies, the nature of a movement’s social relationships within a society may affect the comparative advantages of civil resistance: mobilization, defection, dynamics of repression, and popular support.

First, the shape of a movement’s social network informs its potential size. "Horizontal" ties with other segments of society is in most cases a likely antecedent to mass mobilization. Interpersonal connections provide pathways for the diffusion of ideas. In the case of revolutionary movements, they provide channels through which grievances are shared, frames are aligned,\textsuperscript{31} and sympathizers are turned into mobilizers. Butler et al. describe revolutionary mobilization as a process of linking together groups with shared grievances.\textsuperscript{32} Overlapping


\textsuperscript{31}Doug McAdam, Sidney Tarrow, and Charles Tilly, \textit{Dynamics of Contention} (New York: Cambridge University Press, Sept. 2001), 16.

Figure 2: “High Overlap” Model: If even a small movement (yellow) has many social ties with other segments of society (red) and especially the regime (green), it has a greater potential to spread its message, win loyalty shifts, and avoid repression. This should make the movement more likely to embrace a strategy of civil resistance. Above image of a theoretical model of a homophilic network from Feng Fu et al., “The Evolution of Homophily,” Scientific Reports 2 (Nov. 2012).

Figure 3: “Low Overlap” Model: A movement (yellow) that has few common ties of ethnicity, kin, religion, class, or other forms of association with other segments of society (red) and the regime (green) will likely struggle to activate the mechanisms that make nonviolent strategies successful. They may be more inclined to turn to arms. Above image of a theoretical model of a heterophilic network from Feng Fu et al., “The Evolution of Homophily,” Scientific Reports 2 (Nov. 2012).
ties between social groups are the mechanism through which this linking occurs. A movement whose initial supporters have numerous bridging connections with other segments of society will be better able to grow their movement. But a movement whose base of supporters have few of these heterophilic ties will struggle to grow. In this case, the size of the movement’s immediate social cluster presents a ceiling to potential mobilization.

But social overlap impacts movement strategy beyond simply informing the size of potential popular support. The same social ties that activate mobilization are important in activating another dynamic central to the strategy of civil resistance: defection. Scholars of nonviolence have cited winning over defections from the regime, particularly from the security forces, as an important correlate of movement success. Greater social overlap means a higher number of direct kinship, professional, associational, or other social ties between members of the regime and participants in the challenging movement. These overlapping social networks provide pathways for spreading the movement’s message and increase the moral obstacles to violent repression of the movement. Scholars of nonviolent action have highlighted the importance of direct personal ties with movement members in encouraging regime members to change sides from Ukraine to Lebanon.

Conversely, even when a movement has a large base of supporters, if there is little “vertical” social overlap between that base of support and members of the regime, that is if members of the regime are less likely to have friends, family members, and associates involved in the movement, the less likely they are to defect. Movements that see little chance in winning over defectors will be discouraged from embracing civil resistance and

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more likely to take up arms.

Social overlap between movement and regime also influences a regime’s ability to employ repression. Even if social ties between the movement and regime are not sufficient to convince a regime member to all-out defect, members of regime security forces will be less willing to stomach opening fire on a crowd that includes friends and family. The greater the number of bridging ties, the more difficult it will be for the regime to compel its security forces to engage in brutal and indiscriminate repression.

Social psychology suggests that this connection between movement and regime may not need to be literal. Simply seeing movement members as more socially proximate is sufficient to raise inhibitions against repression even if the security force member does not have a direct connection with the target. For example, in numerous follow-ups to Milgram’s infamous shock experiments,\textsuperscript{35} scholars have consistently found human subjects to be more reticent to harm another individual when that individual is more socially different in terms of race, clothing, and linguistic dialect or accent.\textsuperscript{36} In the context of actual protests, Davenport et al. found that police officers in the United States were more likely to make arrests in demonstrations in which a majority of participants were black than ones in which the participants were of the same race.\textsuperscript{37}

Social overlap is a characteristic of a movement’s base of support that theoretically should affect a movement’s calculations about the relative viability of a violent versus non-

\textsuperscript{35}In these experiments, subjects were pressured to push a button that they were told would inflict an electric shock on a human in an adjacent room. While the shock recipients were in fact actors faking sounds of pain, the subjects believed the situation to be real and were willing to apply the electric shock. Milgram himself pointed out the study’s implications for loyalty and command in the context of state repression. See Stanley Milgram, \textit{Obedience to Authority: An Experimental View} (New York: Harper / Row, 1974).


violent strategy. A group with little "horizontal" social overlap is more likely to struggle to generate large popular support to begin with due to its lack of bridging connections with other elements of society. But even if it succeeds in overcoming the hurdle of mass mobilization, a group with little "vertical" overlap with the regime will struggle to achieve some of the other key strategic mechanisms of civil resistance: winning over defections will be difficult, and the regime may be more willing to engage in brutal repression. In such situations, we should expect a revolutionary movement to be more likely to consider violence.

**Empirical Strategy**

To conduct cross-national statistical tests, I draw from Chenoweth and Lewis’ Nonviolent and Violent Campaign Outcomes 2.0 (NA VCO 2.0) dataset. The NA VCO dataset collects campaign-year data on both nonviolent and violent campaigns targeting the state with maximalist political goals (defined as regime-change, secession, or anti-occupation). From NA VCO, I collect each unique campaign, defined by the name and political goal of the opposition movement, as a unit of analysis. A set of 23 anti-colonial cases is omitted, as is common in the civil war literature, for theoretical and practical reasons: anti-colonial cases may have a unique strategic logic differentiating them from uprisings targeting a local regime, and collecting appropriate data for relevant covariates is extremely difficult in these cases. The resulting dataset includes 254 cases of revolutionary campaigns with the stated political goal of regime change or secession.

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The dependent variable, also taken from NAVCO, is the primary resistance method in the onset year of the campaign. This captures the initial strategic decision of the revolutionary movement.\(^3\) Consistent with the conceptualization described earlier, this strategic choice is coded dichotomously, either as violent (armed insurgency) or nonviolent (civil resistance). Of the 254 campaigns, 110 employed civil resistance as their initial strategy, while 144 adopted armed insurgency.

Geographically, the ratio of violent to nonviolent campaigns is roughly consistent across the Americas, East and South Asia, and Sub-saharan Africa. The Middle East and North Africa stand out for a particularly high ratio of violent to nonviolent campaigns, while Europe is the one region where civil resistance campaigns outnumber insurgencies.

Temporally, the ratio of civil resistance campaigns increases over time, peaking in the period from 1986 to 1995 largely due to the Eastern European movements of 1989, before returning to levels in the 1996–2006 period that reflect a more moderate overall rate of increase.

To operationalize the concept of social overlap, along both vertical and horizontal dimensions, I collected data on the ethnic and religious composition of the participants in the NAVCO campaigns.

Information about the ethnic groups participating in a campaign was drawn from NAVCO 2.0 codings of campaign diversity, the ACD2EPR dataset of ethnic group participation in armed conflict,\(^4\) and secondary sources. I gather data on ethnic groups’ relational position within the state from Wimmer, Cederman and Min’s Ethnic Power Relations (EPR) dataset.\(^5\) The EPR dataset uses country-expert surveys to provide global

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\(^3\) Obviously some error is introduced here if a movement begins with one strategy, but then changes during that first year to the extent that NAVCO codes that second strategy as the primary strategy.


time-series data on the size of politically relevant ethnic groups as well as their "access to power," defined by their inclusion in the legislative, executive, and military branches of the state.

My measure of "Ethnic Overlap" with the regime is a dichotomous coding and takes a value of "1" when any ethnic group participating in the movement has access to power. If no ethnic groups included in the movement have access to power, the variable takes value "0". This variable is intended to measure the concept of "vertical overlap" along the dimension of ethnic identity. In my dataset, 182 movements are coded as having ethnic overlap, while 70 have no overlap, with three cases of missing data. My theory predicts that movements with Ethnic Overlap with the regime will be more likely to choose civil resistance over armed insurgency as these vertical ties increase the prospects for regime defections as well as the costs of asking security forces to engage in repression.

**H1**: Ethnic Overlap with the regime will be positively correlated with a strategy of civil resistance.

I operationalize "horizontal overlap" by taking the sum of the size of the participating ethnic groups as a percentage of the total population. This "Ethnic Percent" variable seeks to capture the potential popular base of support for the movement, assuming that co-ethnicity may form the basis of social ties that serve as pathways for popular mobilization. In the dataset, ethnic percent ranges from nearly "0" (.001 for the Mizo Revolt in India) to "1" (a movement in an ethnically homogenous state) with a mean value of .51. The theory predicts that movements with larger co-ethnic populations will be more optimistic about their ability to generate mass mobilization and consequently more likely to embrace non-violent civil resistance.
**H2: Ethnic Percent will be positively correlated with a strategy of civil resistance.**

"Religious Overlap" is coded similarly to Ethnic Overlap, however information is drawn from alternative sources to capture the representation of religious groups in both movements and the state. In addition to NAVCO’s measure of religious diversity, I consult Isak Svensson’s (2007) data on the religious composition of regimes and opposition movements in conflict dyads.42 Again, movements are coded as having religious overlap when members of the movement practice the same faith as do members of the regime. This measure is correlated with, but not entirely subsidiary to Ethnic Overlap. As such, they are not included in the same model. There are 190 cases of religious overlap and 58 with no overlap.

**H3: Religious Overlap with the regime will be positively correlated with a strategy of civil resistance.**

Paralleling Ethnic Percent, "Religious Percent" is the percentage of the country’s population that practices the same religion or religions as the participants in the movement. Time-series data on religious adherence by state is taken from the Correlates of War project’s World Religions Dataset.43 The variable ranges from .005 to 1 with a mean of .65. Again the theory predicts that movements who share religious ties with a larger percentage of the society will be more likely to believe that they can use those ties to generate the mobilization needed for nonviolent success.

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**H4: Religious Percent will be positively correlated with a strategy of civil resistance.**

Finally, I use the state-level "Excluded Percent" variable from EPR as an alternative proxy measure of ethnic overlap. I predict that in states where a greater percentage of the population is excluded, opposition movements will be less likely to have Ethnic Overlap (that is, they will be less likely to include members of the groups in power). This measure is a less precise operationalization of the concept as certainly some movements draw support from the group in power even in highly exclusive societies. However, the variable of the measure has the advantage of being clearly measurable prior to campaign onset, reducing the risk that campaign strategy endogenously conditions measurements of the social composition of the movement.

**H5: Excluded Percent will be negatively correlated with a strategy of civil resistance.**

| Table 1: Descriptive Statistics of Covariates in Models 1-7 |
|-----------------|---------|--------|-------|-------|-------|
| Statistic       | N       | Mean   | St. Dev. | Min | Max  |
| Ethnic Overlap  | 219     | 0.653  | 0.477   | 0   | 1    |
| Ethnic Percent  | 214     | 0.514  | 0.370   | 0.001 | 1.000 |
| Religious Overlap | 216  | 0.787  | 0.410   | 0   | 1    |
| Religious Percent | 217   | 0.652  | 0.306   | 0.005 | 1.000 |
| Excluded Percent | 215   | 0.210  | 0.234   | 0.000 | 0.970 |
| GDP per capita (ln, t-1) | 218 | 3.603  | 3.521   | 0.029 | 15.443 |
| Oil per capita (ln, t-1) | 218 | 0.669  | 2.409   | 0.000 | 22.049 |
| Mountainous Terrain (ln) | 219 | 2.486  | 1.256   | 0.000 | 4.407 |
| Polity2 (t-1) | 221     | -2.941 | 5.748   | -10  | 10   |
| CR Onsets in Year  | 224     | 3.143  | 4.155   | 0    | 16   |
| AI Onsets in Year  | 224     | 2.357  | 1.945   | 0    | 9    |
I control for a number of variables that could be correlated with movement strategy as well as the social structure within a state. I begin with a logged measure of a country’s population, lagged one year, that is consistently correlated with both violent and nonviolent onsets in country-year studies. The theoretical justification is less strong in a design such as this that only includes cases where a campaign actually occurs. However, population size may affect whether a campaign initially enters the dataset by reaching the key thresholds of 1,000 participants or battle-related deaths. Relatedly, it may affect a movement’s ability to generate the mass mobilization required for nonviolent campaigns to be successful, as well as the likelihood of there being socially isolated groups within the state that are not represented in government.

Next, I include a set of covariates that come from robust findings in the civil war literature regarding the onset of violent conflict. I use per capita Gross Domestic Product figures published in the Penn World Tables to measure state strength in terms of overall economic productivity. GDP is also likely correlated to modernization, which Butcher and Svensson suggest produces stronger social networks. The per capita GDP data is lagged one year and the natural log is used. A measure of oil production per capita from Wimmer and Min (2006) controls for the resources oil can provide to an armed insurgency as well as the way natural resource wealth can alter the state’s patterns of institutional inclusion and exclusion, as theorized by Collier and Hoeffler (2004), Buhaug (2006), and others. Finally, a

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logged measure of mountainous terrain from Fearon and Laitin (2003) is used as mountains can create both greater social fragmentation as well as a topography favorable to guerrilla warfare.48

To measure characteristics of the regime type, I include Polity2 scores from the Polity IV project.49 State-based theories of insurgent mobilization predict that movements are more likely to opt for violence against autocratic regimes that provide fewer channels for nonviolent dissent and that have historically responded to protest with repression.50 Furthermore, regime type is also likely correlated with the degree to which a state’s institutions are inclusive of diverse populations.

I also include numeric counts for the number of other civil resistance campaign and armed insurgency campaign onsets in the given year.51 This is intended to control for the diffusion and imitation effects that revolutionary campaigns are known to inspire.52

Finally, following Carter and Signorino (2010), I add cubic polynomials for the number of years since the last armed insurgency campaign and the number of years since the last civil resistance campaign in the country to control for repetition of repertoires, enduring campaign infrastructure, and other potential factors that may be time dependent.53 Coefficients of these variables are not reported in the tables presented.

I assess the relationship between these covariates and movement strategy using logistic

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50See, for example, Jeff Goodwin, No Other Way Out: States and Revolutionary Movements, 1945-1991 (Cambridge, UK: Cambridge University Press, 2001).
51I remove the relevant campaign from that year’s count.
regression. The measures of social overlap are used independently in four different models with the common set of control variables described above. Ethnic exclusion is used in a fifth model. These models are displayed in Table 2. All models employ robust standard errors clustered by country.

In addition, I conduct three sets of robustness tests on the models. The first battery of models includes regional and decade fixed effects. A second set truncates the data to include only those campaigns where the goal is regime change, excluding those with territorial goals. This addresses the possibility that campaigns for secession or regional autonomy may be more likely to come from excluded groups as well as more likely to employ armed insurgency for geographic or other tactical reasons. In a final group of models, I draw upon Butcher and Svensson (2014) to include various measures of "modernization." Data availability necessitates truncating the dataset for these models to those campaigns that began since 1960. These models are presented in an appendix.

**Results**

The analysis shows a strong positive relationship between both measures of "vertical" social overlap and the likelihood of the movement adopting civil resistance over armed insurgency. Substantively, the model predicts that when all other variables are held at their means, the marginal effect of ethnic overlap with the regime is .46: the probability of a movement embracing civil resistance is only .17 when it does not have ethnic overlap with the regime, but rises to .63 when it does (Model 1). Similarly, religious overlap with the

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Table 2: Ethnic Ties and Revolutionary Strategy, 1946-2006

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>1 = Civil Resistance</th>
<th>0 = Armed Insurgency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
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<tr>
<td>Ethnic Overlap</td>
<td>2.890***</td>
<td>2.890***</td>
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<td>(0.568)</td>
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<td>Ethnic Percent</td>
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<td>3.333***</td>
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<td></td>
<td>(0.686)</td>
<td>(0.686)</td>
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<td>Religious Overlap</td>
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<td>1.476**</td>
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<tr>
<td></td>
<td></td>
<td>(0.517)</td>
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<tr>
<td>Religious Percent</td>
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<tr>
<td>Excluded Percent</td>
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<tr>
<td>Population</td>
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<td>0.596***</td>
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<td></td>
<td>(0.149)</td>
<td>(0.153)</td>
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<td>GDP per capita</td>
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<td>0.255**</td>
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<td></td>
<td>(0.077)</td>
<td>(0.084)</td>
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<td>Oil per capita</td>
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<td>−0.026</td>
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<td></td>
<td>(0.044)</td>
<td>(0.050)</td>
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<td>Mountainous Terrain</td>
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<td>−0.313</td>
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<td></td>
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</table>

Note: *p<0.05; **p<0.01; ***p<0.001
regime increases the likelihood of a movement choosing nonviolent civil resistance from .22 to .55 (Model 3).

The findings are also supportive of the hypotheses that horizontal ties, in the form of large co-ethnic and co-religious populations, increase the likelihood of a movement embracing civil resistance. As Ethnic Percent varies from nearly zero to 1, the predicted probability of civil resistance increases from .25 to .65 (Model 2). As Religious Percent varies across approximately the same range, the predicted probability of nonviolence similarly rises from .17 to .63 (Model 4).

This evidence supports the theoretical argument that both vertical and horizontal social ties inform movements’ strategic behavior.

Figure 4: Estimated marginal effects of “Ethnic Overlap” and “Ethnic Percent” on predicted probability of civil resistance with all covariates held at their means (Models 1 and 2).

A potential alternative explanation for the findings put forth in the above analysis is that a movement’s choice of strategy could in fact condition its ability to draw diverse membership. In other words, it may be because certain movements choose violence that they are unable garner support from across social cleavages. However, research on the organizational structures of rebel movements suggests that social support structures are relatively fixed and difficult to change in the short to medium-term. As Paul Staniland
writes. “Social bases tend to be contingently and historically determined, and not subject to rapid or easy change...Militants go to war with the networks they have.”

It should therefore be relatively unlikely that a movement would be able to fundamentally change its social composition in the first year of a campaign.

Furthermore, two elements of the measures used in this study guard against this. While no dataset exists of the ethnic composition of revolutionary movements prior to the onset of a campaign, data on the social composition of the ethnic movement are taken from the first year of the campaign. This presents data from the earliest point available in the conflict. Secondly, the composition of the movement is compared to that of the regime, for which data is available prior to campaign onset. Therefore, a coding of “no overlap” requires the state to have been excluding an ethnic group from access to political power before members of that group initiated a revolutionary campaign.

Finally, Model 5 includes EPR’s state-level "Excluded Percent" measure as an alternative proxy that can be measured at a point clearly prior to campaign onset. Consistent with the

prediction that movements will be less likely to have overlap with the regime in state’s with large excluded populations and consequently less likely to choose civil resistance, Model 5 shows a statistically significant negative relationship with civil resistance.

Beyond social overlap, the models reveal additional patterns that are largely consistent with extant findings from country-year analyses. GDP and mountainous terrain are negatively correlated with civil resistance, though only GDP consistently passes conventional levels of significance across models. This suggests that in addition to social ties, other structural factors still do play a role. In some cases, weak state capacity or extremely favorable terrain may make armed insurgency relatively easy, and consequently more likely. Somewhat surprisingly, population yields a statistically significant result across most models, despite this not being country-year data. This could mean that in more populous countries, civil resistance is more likely because it is easier to pack a square full of people when there is a larger population of potential sympathizers to draw from.

Another interesting and unanticipated finding is a negative relationship between a state’s polity score and the likelihood that a revolutionary movement in that state adopts a strategy of civil resistance. This is not to say that insurgencies are more likely in democracies: it may well be that revolutionary movements generally are rarer in democracies because of the existence of institutionalized mechanisms for dissent. But perhaps counter-intuitively, when a movement does seek regime change in a democracy, it is more likely to feel compelled to take up arms to do so. This could be the result of outbidding dynamics, as has been theorized in the literature on democracy and terrorism.56

The number of civil resistance and armed insurgency onsets in a given year also show the predicted correlation with the likelihood that a movement emulates the strategy employed by other campaigns. Future work might investigate the pathways and boundaries

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such diffusion.

As Tables 3-5 in the Appendix show, the relationship between social overlap and revolutionary strategy is largely robust to alternative specifications of the model. All four of the primary variables under examination remain statistically significant when regional and decade fixed effects are included in the models (See Table 3 in the Appendix). Both measures of religious ties fall before traditional levels of statistical significance when only regime-change campaigns are included, however their signs remain positive as expected. This may simply be the result of less statistical power in the truncated dataset (See Table 4). Similarly, Religious Percent drops below significance but retains its positive sign in the alternative modernization model (Table 5).

**CONCLUSION**

From the Eastern European movements that brought about the end of the Cold War to the ongoing aftermath of the Arab Spring, revolutionary movements have important global security and humanitarian consequences. Furthermore, the strategy employed by a movement in its effort to achieve revolutionary goals has profound short and long-term consequences. Not only does insurgency result in greater loss of life and destruction during the course of a campaign, but it has devastating long-term effects that hinder economic development, impede democratization, and increase the likelihood of a return to conflict. Global actors will therefore have a normative interest (and in most cases a rational self-interest as well) in encouraging revolutionary movements to choose civil resistance over insurgency where possible.

As demonstrated in this paper, an analysis of a revolutionary movement’s network of
popular support enables us to better anticipate which conflict actors are more likely to be able to embrace and sustain a strategy of civil resistance and which are more likely to escalate to civil war. This theory therefore also sheds some doubt on the optimistic view within the civil resistance literature that any movement can choose nonviolent action to achieve its objectives. In fact, a movement’s network of support places strong constraints on the viability of civil resistance.

This paper also suggests avenues for further research. Social networks are certainly more complex than the dichotomous and percentage measures used to try to capture them in this study and fall along many more dimensions than ethnicity and religion alone. More sophisticated measures may yield even more interesting, and perhaps nuanced findings.

It may also be useful to examine the ways in which social overlap could mediate other dynamics relevant to conflict. For example, does the effect of repression depend on whether that repression is occurring within or between social groups? Is diffusion more likely to occur between groups with common social ties?

Finally, the initial conceptualization of the discrete revolutionary movement and the dichotomous categorization of civil resistance versus armed insurgency is to some degree a simplification. Revolutionary demands sometimes evolve out of more spontaneous protests with "movements" being formed on the fly. Meanwhile the distinction between armed insurgency and civil resistance is sometimes blurry as violence breaks out in the midst of ostensibly nonviolent demonstrations, as unarmed groups partner with "radical flanks," or as insurgent movements sponsor strikes, rallies, and borrow other tactics from the nonviolent repertoire.

This being said, the distinction between violent and nonviolent conflict should not be entirely greywashed: the strategic logic of armed insurgency and civil resistance are unique and there are tremendous differences in the dynamics and consequences of the two
strategies. Nevertheless, this is an intriguing area for future research. The composition of a movement’s networks of support and its relationships with the regime and other elements of society are likely to inform the use and effectiveness of such mixed strategies.

REFERENCES


Beissinger, Mark R. “Structure and Example in Modular Political Phenomena: The Diffusion of Bulldozer/Rose/Orange/Tulip Revolutions.” *Perspectives on Politics* 5, no. 02 (May 2007).


Table 3: Regional and Decade Fixed Effects

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<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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1940s
1950s
1960s
1970s
1980s
1990s
2000s
Africa
Americas
Asia
Europe
Middle East
Observations

Note: *p<0.05; **p<0.01; ***p<0.001
Table 4: Regime Change Campaigns Only

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Note: *p<0.05; **p<0.01; ***p<0.001
Table 5: Modernization Covariates

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*Note:*

*p<0.05; **p<0.01; ***p<0.001