Striking it free? Organized labor and the outcomes of civil resistance

Charles Butcher[1], John Laidlaw Gray, Liesel Mitchell[2]

Abstract

This study takes an organizational approach to understanding the outcomes of civil resistance campaigns. We argue that organizations embedded in extensive interpersonal networks upon which the state partially depends bring 'leverage' to civil resistance campaigns and increase the likelihood of major government concessions in the short term. Organizations with strong local ties and a confederal 'national' structure bring resilience and reduce the probability of short term failure. Campaigns can shape institutions in the post-conflict period when this leverage and resilience is durable. We argue that, in general, 'National Trade Unions' approximate these organizational features. Using new data on the participation of NTUs in civil resistance campaigns, our results suggest that NTU participation increases the likelihood of short term success, decreases the chances of short term failure and improves the prospects of post-conflict democratization. In contrast, campaign size is robustly associated with short term success but big campaigns do not significantly reduce the probability of failure or significantly improve the prospects of post-conflict democratization. Our research suggests that an 'organizational' turn is a productive step towards understanding the short and long-term outcomes of nonviolent campaigns.

Word Count: 11,995

[1] Corresponding author, Norwegian University of Science and Technology

[2] University of Otago, University of Otago

1. Introduction

Why do some civil resistance movements succeed, while others fail? Why was there an Egyptian revolution in 2011 but no Syrian revolution in the same year? This is an important question practically and theoretically. Civil resistance may be more effective at regime overthrow than violent insurgency and raise the probability of democratic transitions (Ackerman and Karatnycky 2005; Celestino and Gleditsch 2013; Chenoweth and Stephan 2011; Johnstad 2010), but roughly half of civil resistance movements fail and more than half are not democracies five years later (Chenoweth and Stephan 2011; Chenoweth 2016). Moreover, civil wars in Guatemala, El Salvador, Colombia and Syria emerged in the wake of civil resistance and ineffective protest may precede ethnic rebellion (Öberg 2002; Pierskalla 2010).

A growing body of research has examined why civil resistance movements start and why dissidents choose nonviolent or violent tactics (Asal et al. 2013; Butcher and Svensson 2016; Chenoweth and Lewis 2013a; Chenoweth and Ulfelder 2017; K. G. Cunningham 2013; Gleditsch and Rivera 2017; Nepstad 2011; Pearlman 2011), success rates and democratization in comparison to violent insurgency (Ackerman and Karatnycky 2005; Celestino and Gleditsch 2013; Chenoweth and Stephan 2011; Johnstad 2010; Ulfelder 2005) and variance in the success of civil resistance in particular (Ackerman and DuVall 2000; Bartkowski 2013; Marchant and Puddington 2008; Nepstad 2011; Schock 2005; Sharp 2005; Svensson and Lindgren 2011). Most quantitative studies (and many case-based studies), however, do not disaggregate, theoretically or empirically, the types of organizations that participate in civil resistance campaigns (Chenoweth and Stephan 2011). Yet, civil resistance campaigns are often composed of complex coalitions of organizations from trade unions to political parties, umbrella protest groups, religious organizations, student unions, youth organizations, human rights organizations and women's organizations. For example, the 'Jasmine Revolution' that toppled President Ben Ali in Tunisia in 2011 consisted of (at least) a trade union (UGTT: Tunisian General Labor Union), political parties (PCOT: Tunisian Workers Communist Party; Ennahda) and the Tunisian Bar Association (Goldstone 2011; Roberts et al. 2016). The UGTT and Bar Association received a Nobel Peace Prize in 2015 for their role in the Tunisian

revolution and democratic transition. How the participation of these varying organizations affects the outcomes of civil resistance campaigns remains, to a large extent, unexplored.

We develop new theory linking organization-level features to the outcomes of civil resistance campaigns by synthesising literature on nonviolent action with organizational studies of civil war outcomes and social movements. Studies of civil war outcomes find that armed insurgent groups draw upon pre-existing social organizations such as student groups and ethno-religious organizations to mobilize for war against the state (D. E. Cunningham et al. 2009; Parkinson 2013; Petersen 2001; Staniland 2014; Weinstein 2007). Pre-existing organizations lower the costs of creating and sustaining an armed insurgency and consequently, shape whether the rebels survive repression and extract concessions, whether civilians are targeted, and how rebels govern occupied territories. Wartime organization also conditions the prospects for post-conflict democratization (Huang 2016). Studies of 'social movements' also identify that linkages to pre-existing social networks or organizations provide valuable resources (Davis et al. 2005; Gamson 1990; Giugni 1998; McAdam et al. 2001: 43-48; McAdam 2010; Oberschall 1973; Tarrow 2011: 130-36; Tilly and Tarrow 2015: 151-54). Existing work, however, has not examined how *variations* in these 'mobilization infrastructures' affect the outcomes of resistance campaigns, outside of the social movement literature's focus on reformist movements in democracies (Amenta et al. 2010; Gamson 1990). We move beyond existing theory by linking variation in the 'mobilization infrastructures' that inhere in pre-existing organizations to the 'technology' of civil resistance in particular (Dahl et al. 2017). The resource mobilization demands of nonviolent conflict are different to those of violent conflict (Butcher and Svensson 2016; K. G. Cunningham 2013; Dahl et al. 2017) and how organizations might be re-purposed for 'unarmed insurgency' has received less attention than adaptation for violent insurgency (Schock 2005). This is also the first study, to the best of our knowledge, that disaggregates civil resistance campaigns into their organizational components (albeit of just one type) and examines the effects of organizational participation on the outcomes of these campaigns in a large-N, cross-national framework.

We argue that organizations embedded in extensive interpersonal networks upon which the state partially depends bring 'leverage' to civil resistance campaigns and increase the likelihood of major government concessions in the short term. Organizations with strong local ties and a confederal 'national' structure bring resilience and reduce the probability of short term failure. Durable leverage and resilience afford campaigns the capacity to punish (or credibly threaten to punish) attempts at re-autocratization by transitional regimes. 'National Trade Unions' (NTUs) are, in general, an example of such an organization. We predict that when an NTU participates in civil resistance, the campaign is: (1) more likely to succeed in a given year, (2) less likely to fail, and, (3) more likely to create democratic institutions in the post-conflict period. The following section discusses the 'technology' of civil resistance and how organizational-level features make it more or less likely that campaigns can mobilize this technology.

2. Organizations and the outcomes of civil resistance campaigns

We examine 'maximalist' civil resistance campaigns defined as the sustained, coordinated and purposive use of primarily nonviolent tactics (such as strikes, demonstrations and boycotts) by non-state actors to coerce a regime to grant concessions of leadership change, democratization or territorial secession/independence (Chenoweth and Stephan 2011). We use 'civil resistance campaign' and 'nonviolent campaign' interchangeably. Short-term outcomes are defined as the opposition obtaining concessions in line with its demands ('success'), ending nonviolent resistance without being granted these concessions (including switching to primarily violent tactics, 'failure'), or continuing nonviolent resistance in a given period without succeeding or failing ('continuation'). Long term outcomes refer to institutional changes towards or away from democracy (Ackerman and Karatnycky 2005).

Campaigns are successful when they marshal the resources for effective nonviolent action (Davis et al. 2005; McCarthy and Zald 1977). To succeed in the short term, resistance campaigns must: (1) make the status quo costly for the regime and (2) continue

mobilizing under repressive government counter measures [3] Kurt Schock calls these features 'leverage' and 'resilience' respectively (Schock 2005). High leverage campaigns should succeed in the short term and high resilience campaigns should be less likely to fail. Aggregate opposition preferences are translated into durable institutional changes when the opposition can punish regime attempts to renege in the post-conflict period (Acemoglu and Robinson 2005; Bueno de Mesquita et al. 2005; Collier and Mahoney 1997; Collier 1999; Haggard and Kaufman 2016; Huang 2016; Walter 2001, 2009; Weingast 1997; Wood 2001).

Organizations are structures for aggregating individual efforts to obtain the benefits of collective action (Arrow 1974). They are not typically designed with resisting repressive or authoritarian regimes in mind (Staniland 2014: 18) but can be adapted or co-opted for this purpose (Gould 1993; McAdam 2010; Staniland 2014; Weinstein 2007). Pre-existing organizations (or social groups) are useful for dissent because they have a pre-fabricated 'mobilization infrastructure' that can include resources contained in social networks such as interpersonal trust, norms of reciprocity and channels for diffusing information (Parkinson 2013; Staniland 2012; 2014: 7; Weinstein 2007) and formal structures for extracting resources or coordinating actions such as leadership and lines of authority (McAdam 2010; Oberschall 1973). A rough line can be drawn between the 'social bases' of organizations, consisting resources contained in interpersonal social networks and 'formal' organizational structures such as rules for decision-making, resource allocation and leadership selection (Staniland 2014; Tarrow 2011). Mobilization infrastructures vary across organizations, however. Some are concentrated in minority groups, while others are spread across cities, some are rooted in workplace relations while others are built on shared political preferences or kinship. These variations make some pre-existing organizations more or less suitable for (or adaptable to) acts of violent dissent and others for nonviolent dissent. In the next section, we connect organizations with extensive social networks that are interdependent with the state to 'leverage' and organizations with strong local ties embedded in a confederal national structure to resilience. We also argue

---

[3] Most maximalist campaigns experience some government repression (Davenport 2007; Chenoweth and Stephan 2011).

that organizations built on durable mobilization infrastructures increase the capacity of a campaign to shape post-conflict institutions.

2.1 Leverage

Armed insurgent groups make the status quo costly by physically attacking government soldiers, ambushing installations and infrastructure and undermining confidence in public security (Weinstein 2007: 7). In contrast, nonviolent tactics impose costs by severing dependency relationships between the regime and the social groups or organizations upon whose cooperation the regime depends for survival. This non-cooperation is signaled through demonstrations, strikes, stay-aways and boycotts, among other tactics (Schock 2005, 2015; Slater 2010).

Organizations that the regime depends upon have higher leverage, usually because the individuals mobilized by these organizations produce economic, social or symbolic resources that the regime needs (Sharp and Finkelstein 1973). For example, Nigeria's dependence on oil exports affords the Nigeria Union of Petroleum and Natural Gas Workers (NUPENG) more leverage than the National Union of Textile, Garment and Tailoring Workers of Nigeria (NUTGTWN).[4] Thus, organizations that are *interdependent* with the regime socially or economically are most useful for nonviolent forms of dissent.

Leverage has a close relationship with mass mobilization (DeNardo 1985). A campaign with a million participants will likely involve more people that the regime depends on than a campaign with 10,000 participants. Generating leverage in the short term is, therefore, often a matter of mass-mobilizing (DeNardo 1985; Kuran 1989). Social networks are critical for motivating acts of high-risk activism in general (McAdam 1986; Opp and Gern 1993; Parkinson 2013; McDoom 2013: 6) and the bigger these networks are, the more people can be mobilized. Information can be rapidly diffused across such extensive social bases to induce mass-mobilization, making them useful in civil resistance campaigns (Siegel 2009). So-called 'weak' ties of acquaintance (rather than family or kinship) also facilitate mass-mobilization by diffusing information across clusters or cliques (Granovetter 1973; Siegel 2009). Organizations embedded in narrow

---

[4] Both are affiliates of the Nigerian Labor Congress

social groups with few bridges to other groups will find it more difficult to generate leverage, even if the interpersonal ties in which they are embedded are strong.

In summary, generating leverage in civil resistance is a matter of severing the regime from the networks it depends on to function. Mass mobilization makes it more likely this will occur, but the per-participant cost of dissent is enhanced if the campaign also induces non-cooperation from individuals or groups the regime depends on (Chenoweth and Stephan 2011: 11, 39; Dix 1984: 444; Schock 2005: 142-43). Organizations with extensive social networks that are interdependent with the state are especially powerful in generating leverage and, therefore, short term success.

2.2 Resilience

Resilient civil resistance campaigns can continue acts of dissent in the face of government repression. Most nonviolent campaigns are faced with state-sanctioned violence and restrictions on the activities of organizations designed to increase the costs of collective action (Carey 2010; Chenoweth and Ulfelder 2017; Davenport 2007: 29; Tilly 1978: 100-02). Restrictions include martial law, the removal of civil and political liberties, surveillance, censorship and bans on assembly, organization and political parties. State sanctioned violence includes the killing or harming of protesters, torture, disappearances and assassinations, imprisonment and physical deprivation (Schock 2015: 119). To survive in the longer term, nonviolent campaigns must operate in an environment where the risks to participants are high and there are harsh restrictions on the ability to communicate, assemble and organize, without being able to physically remove participants from the 'conflict zone'. Acts of nonviolent dissent are also typically public and the campaign leadership is (physically) exposed to the risk of imprisonment and death (Wood 2003: 26).

Organizations with a national, confederal structure and 'strong' ties at the local level should be resilient. Strong social ties exhibit high levels of interpersonal trust and reciprocity, often generated through frequent interactions and bonds of friendship or kinship (Granovetter 1973: 80; McAdam 1986; Weinstein 2007: 47-50). For example, religious networks with weekly or daily rituals of worship (McAdam 2010), ethnic

networks built on close family relationships and production networks that imply day-to-day interaction are likely to be strong. Strong ties are the infrastructure that organizations can fall back on for channels of information exchange and relations of trust and reciprocity when public activity is risky (Nelson 1989; Petersen 2001: 2). Parkinson (2013: 427) argues that quotidian ties provide built-in redundancies that enable continued mobilization in the face of severe shocks to formal organizations. Continued participation under repression is extremely risky and disinformation is common, making interpersonal trust crucial to continued mobilization (Hegghammer 2013; McAdam 1986: 80). Organizations characterised by 'weak' ties, even if extensive are likely to break down as the ability to rely on public signals diminishes (Petersen 2001). Obserschall (1973: 119) states that campaigns will 'amount to little more than short-term, localized, ephemeral outbursts' without strong interpersonal networks to mobilize from (Freeman 1977; Lichbach 1998; McAdam 2010). Mass participation, therefore, does not equal longer-term resilience without an organizational backbone embedded in strong interpersonal networks.

Strong local ties do not produce resilient civil resistance without a structure to integrate local acts of resistance into a broader, national strategy. Especially important are geographically dispersed acts of dissent that spread participants widely (such as strikes, boycotts and stay-aways) and raise the costs of repression for the regime (Burrowes 1996: 224; Chenoweth and Stephan 2014: 142-43; Schock 2005). National, confederal organizations can leverage local-expertise and leadership while ties between local leaders generate the capacity to coordinate broader actions (Williamson 2007[1985]: 47). Non-hierarchical (or M-form) organizations also make it difficult for a government to target the movement's leadership as local chapters/divisions each have an autonomous leadership structure (Siegel 2011: 1002) and can take advantage of local contexts for tactical innovation (Cooley 2005; Schock 2005: Chapter 3).

2.3 Durable leverage and resilience

Nonviolent campaigns, in the aggregate, probably have preferences for post-conflict democratization that arise from the diversity of their mass support bases (Acemoglu and Robinson 2005; Bueno de Mesquita et al. 2005; Celestino and Gleditsch 2013; Huang

2016: 36-37), but campaign-level preferences are only translated into durable institutions when attempts by a new regime to re-establish autocracy can be punished (Bueno de Mesquita et al. 2005).

Enforcing democratization requires that leverage and resilience are maintained into the post-conflict period (Walter 2009). When mobilization infrastructures are durable, the campaign retains a latent capacity for collective action. Strong ties provide one source of durability and likely emerge from processes that imply stable, repeated interactions and relations of friendship and family that can endure over long periods. More generally, durable infrastructures have ties that are reproduced through stable processes. Religious beliefs can endure lifetimes, increasing the durability of these networks (Centola 2013; McPherson et al. 2001). Production-based networks are also durable in the absence of rapid changes to the structure of the economy. Campaigns with more brittle infrastructures may succeed in the short term, but will be unable to resist regime attempts at re-autocratization as often as campaigns with a durable mobilization infrastructure.

In summary, organizations with extensive mobilization infrastructures and interdependencies with the state can generate leverage and increase the chances of short term success. National confederations built on strong connections to local interpersonal networks can enable a movement to survive short term setbacks and continue acts of nonviolent dissent, reducing the chances of failure. Organizations with durable leverage and resilience are most likely to be able to shape the post-conflict institutional environment. We argue in the following section that 'national trade unions' (NTUs) bring durable leverage and resilience to civil resistance campaigns.

2.4 Labor Organizations and Civil Resistance Success

2.4.1 Defining Trade Union Movements

Trade unions are organizations emerging from social networks rooted in production relations, with the objective of representing the interests of those involved in production. Trade Unions can be thought of as (a) legal institutions claiming to bargain for worker's rights and (b) social movements advocating for changes to laws or conditions that affect working people (Black et al. 2012). Trade unions exist when they are illegal where there

is continuous association between employees with the self-understood goal of improving conditions related to the workplace. Trade unions can emerge (or re-emerge) during a civil resistance movement. For example, Prodrepka (Support) emerged in 1989 in Bulgaria as an independent NTU to compete with and resist the state-run Confederation of Independent Trade Unions of Bulgaria (Docherty and Van der Velden 2012). The majority of NTUs that participate in civil resistance are less than 10 years old in our data, and 16 formed during, or initiated, a civil resistance campaign.

We focus on trade unions claiming to represent the interests of a 'national' group of workers irrespective of trade, industry or geography. General Workers Unions and Trade Union Federations and Confederations fall into this category. To qualify, organizations must (1) articulate worker's interests as a core goal, (2) claim to represent a 'national' collectivity irrespective of industry, trade or skill. Lindvall (2013) and Hamann et al. (2013) also focus on NTUs in their work on political strikes. To 'participate' in a civil resistance campaign, NTUs must (1) organize or participate in collective action (i.e. demonstrations, strikes or boycotts) with (2) the stated goals of supporting a civil resistance movement, or by articulating the same maximalist goals as the movement (Chenoweth and Lewis 2013b). For example, the Bolivian Workers Central, which is a confederation of trade unions, counts as an NTU in our scheme, while the Union Federation of Bolivian Mine Workers does not, as its membership is linked to employment in mineral extraction. The Beijing Autonomous Workers Federation that formed during the 1989 Tiananmen Square protest does not count as a NTU due to its geographically limited membership (Schock 2005: 106) while the Kosovo Independent Trade Union Federation does, because it was linked to a discernible "Kosovar" national identity.

2.4.2 Leverage and Campaign Success

NTUs can bring leverage to civil resistance and increase the prospects of short term success through two mechanisms: (1) mass mobilization and (2) severing dependency relations with the state.

First, NTUs generally form out of extensive, dense urban networks of workers, as well as pre-existing labor organizations (Collier 1999: 173; Kurtz 2004: 272; Seidman 1994; Sharp and Finkelstein 1973: 43, 779). Kraus (2007: 21) states that, in Africa:

'trade unions have a greater capacity for extensive mobilization of protest than almost any other social group at critical times, given their existing network of unions and branches. These can potentially be mobilized for protests, demonstrations, and strikes, with initiatives taken either by national or local leaders who have the closest links to the rank and file'.

The Tunisian General Labor Union (UGTT) had a membership of 350,000 before the Tunisian revolution, and Bishara (2014) argues that the UGTT's 'geographic reach and its ability to mobilize thousands of members', have made it a powerful organization in Tunisian politics. Angrist (2013) noted that the UGTT was critical in 'in the facilitation of mass sustained protests' in Tunisia in 2010-2011. Of those respondents who answered "yes" to the question of whether they participated in the 2010-2011 protests in the 2011 Afrobarometer survey, roughly 11% were trade union members, as compared to just over 1% for people who responded "no" to the same question (Beissinger et al. 2012). Although this is a small number in an absolute sense, union members can play an important role in the mobilization of non-union members through familial or friendship connections. The extensive social networks that NTUs are embedded in bring the capability for *mass mobilization* to civil resistance and, therefore, leverage.

NTUs also, often, leverage a dependency with the state. Non-cooperation from workers in the formal economy withdraws resources in the form of goods produced by workers, taxation revenue, and consumption. Kraus (2007: 21) notes that trade unions are 'strategically located to disrupt the economy – and government as well – and, hence, challenge the operations of the incumbent regime directly'. Trade unions also, often, reach deep into the state itself though civil servants unions. Several authors identify labor protests and strikes as critical in bringing autocratic regimes to the negotiating table because of the economic costs they impose (Bratton and Van de Walle 1997; Collier and Mahoney 1997; Wood 2001). Previous studies (of democracies) have shown that strikes slow the economy (Becker and Olson 1986; Kim and Gandhi 2010; McHugh 1991) and in our own data economic growth averaged 1.03% in years with NTU participation and

3.2% in years without.[5] For example, Langhor (2014: 186) argues that when the newly formed EITUF in Egypt organized general strikes in January 2011, the strikes 'threatened to paralyze the economy', and may have been a 'last straw' that 'convinced the military to intervene'. In contrast, no independent national trade union movements formed during the Syrian uprising, and Schmidinger (2014: 46) argues that this was 'one of the main reasons why strikes and other forms of worker's struggle could not be used to overthrow the regime, and why the conflict developed into a civil war'. Interdependencies between the workers that NTUs mobilize from and the state increase the per-participant 'punch' of acts of dissent.

If NTUs bring direct economic leverage then they should have a stronger effect in regimes that depend more upon the quiescence of organized labor, independent of their ability to generate large protests. The co-option of organized labor through state run union monopolies are a signal that the regime depends heavily on labor to generate revenues (Gandhi 2008; Kim and Gandhi 2010). These structures appear in Monarchies (such as the Nepal Labor Congress before 1990), military regimes (such as the National Workers Union (UNTM) in Mali prior to 1991, or the Egyptian Trade Union Federation (ETUF) in Egypt prior to 2011) and multiparty regimes (such as the UGTT in Tunisia). When either the state-affiliated labor center defects to the opposition, or an alternative trade union center forms and aligns with the opposition, this should greatly increase the leverage of the campaign. Regimes should be more likely to make major concessions in this situation.

This leads us to our first set of hypotheses:

Hypothesis 1a – The participation of NTUs increases the probability of civil resistance campaign success, as compared to movements that do not have the support of NTUs.

Hypothesis 1b – Campaigns with NTU participation have higher levels of participation than campaigns without and are more likely to succeed due to higher levels of participation.

---

[5] Restricting the sample to years that were not the first or last year of the campaign the difference is larger, 0.35% on average for years with NTU participation, compared to 3.76% without.

Hypothesis 1c – NTU participation in civil resistance has a stronger positive effect on success when the regimes monopolize industrial relations compared to when unions are banned or multiple trade union centers exist.

2.4.3 Resilience and Campaign Failure

NTUs bring resilience to civil resistance campaigns and decrease the probability of short-term failure. First, in addition to extensive social ties, NTUs often have *strong* ties to the workers they claim to represent, including quotidian ties of friendship between workers and their families forged in the workplace. The decentralized, often federated, structure of NTUs means that local leadership is drawn from and closely connected to local workers (Kraus 2007: 21). For example, Chayes (2014) argues that the UGTT in Tunisia has 'a branch in every province as well as nineteen organized by activity, it penetrates society down to the grass roots' and C. Alexander (2016: 75) that it had a 'well established' reputation for 'grassroots leaders around the country'. NTUs also often have experience in strike actions and collective dissent (Sharp 1973: 779). In our data, there were 0.74 general strikes per year in which an NTU participated in an ongoing nonviolent campaign and 0.22 when they did not.[6] Trade unions can also mobilize for concentration tactics, opening the way for tactical diversity. NTU participation is associated with more demonstrations – 3.2 per year compared to 2 per year without NTU participation.

NTUs are often federations of smaller sectoral trade unions which can spread dissent geographically, a feature that characterizes the UGTT in Tunisia, for example (Langhor 2014). Selective repression is difficult and costly in this circumstance. Langhor (2014: 183) states that 'by far the most important role of the UGTT office and activists [in the 2011 Tunisian revolution] was spreading the protests across the country, from Kasserine and Gafsa in the interior to Sfax and Sousse on the Eastern coast to Tunis in the north'. M. P. Angrist (2013: 560) writes that:

"The nationwide geographical extension of dissent [facilitated by the UGTT] was strategically crucial to the revolution, as it prevented the regime's coercive forces from containing the protests in a small area.

---

[6] Data from the Cross National Time Series Data Archive, 2015 version (Wilson 2015). We emphasise that general strikes in the CNTS data archive do not necessarily have 'maximalist' goals and may be limited to economic issues.

Instead, the regime's security forces were obliged to react to multiple widespread disturbances which surpassed their ability to repress the movement."

Trade unions were also able to survive severe repression by military governments in Bolivia, Argentina and Chile in the 1970s and 1980s (R. Alexander 2003: 194). We expect campaigns with NTU participation should be less likely to *fail* in a given year of resistance because they bring a mobilization infrastructure characterized by strong ties and national organization to the campaign. We also argue that this effect is independent of mass mobilization which depends more on extensive ties. Large protests might increase the short-term leverage of the campaign but should be unrelated to whether a campaign fails during a given period absent the organizational infrastructure described above.

Hypothesis 2a – The participation of NTUs in civil resistance campaigns decreases the probability of failure, compared to movements that do not have the participation of NTUs.

2.4.4 Durability and post-conflict democratization

Third, the mobilization infrastructure of NTUs is often durable, enabling campaigns to enforce the implementation of government concessions. Recall that nonviolent campaigns probably have preferences for post-conflict democratization that arise from the diversity of their support bases (Chenoweth and Stephan 2011; Celestino and Gleditsch 2013; Jonstad 2010), but NTUs afford the capability to compel democratization. First, the mobilization infrastructure of NTUs includes strong ties, providing a degree of durability. Second, production networks do not disappear in the post conflict period as the foundations of a disarming insurgent group might or political consensus in a temporary coalition of political parties might (Beissinger 2013). Collier and Mahoney (1997), point to the 'non-ephemeral' nature of labour mobilization. A transitional government, in most contexts, will need to *maintain* these networks in order to generate taxation revenue (Gandhi and Kim 2010), given that the structural basis of the economy is not expected to

change much during the transition period. This mobilization infrastructure associated with NTUs therefore preserves a latent mobilization capacity in the post-conflict period.

Worker's rights will also likely be included in a post-conflict deal and NTUs can reasonably expect an *increase* in their capabilities during the transition period. Independent union membership often surges after the fall of autocratic regimes and these 'free unions' are often at the forefront of consolidating democratic reforms or preventing 'rollbacks' to autocracy (Karatnycky 1992: 48). In Tunisia, the UGTT's membership doubled from 350,000 to 700,000 members after Ben-Ali's ouster (Bishara 2014), and independent trade unionism surged after the Egyptian revolution. In Tunisia the UGTT has resorted to collective action to resolve political crises that have threatened the democratization process, most notably when they organized and carried out a national strike in response to the assassination of Mohamed Brahmi, a member of the constituent assembly (M. P. Angrist 2013). Thus, we expect campaigns with NTU participation democratize more frequently than those without NTU participation.

Hypothesis 3a – The participation of NTUs increases the probability of post-conflict democratization, as compared to movements that do not have the support of NTUs.

Our theory also implies that mass participation in civil resistance does not lead to significant democratization absent a durable mobilization infrastructure that survives into the post-conflict period. 'Spontaneous' mass protests generate short term success and even perceptions of the ability to punish regime defection, but the more brittle mobilization infrastructure will deteriorate faster in the transition period. Such protests may also be easier to divide in the post-conflict period, and may suffer collective action problems absent the unifying goal of regime change (Bratton and Van de Walle 1997; Svolik 2012: Chapter 6).

Hypothesis 3b – Campaign size does not increase or decrease the likelihood of post-conflict democratization.

Figure 1 summarizes hypotheses H1a-H3b.

Figure 1: Summary of main hypotheses
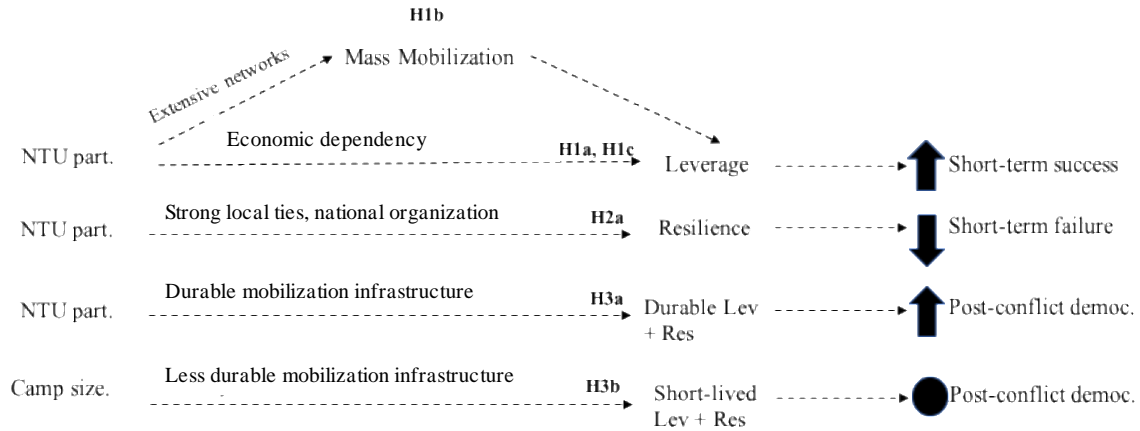
3. Research Design.

3.1 Unit of Analysis

The unit of analysis is a nonviolent campaign year (1946-2006) from the NAVCO 2.0 data (Chenoweth and Lewis 2013b) and we use multinomial regression analysis to estimate the likelihood that a campaign succeeds, fails or continues in a campaign-year.[7] Models of post-conflict democratization use the aggregate campaign as the unit of analysis and OLS regression.

3.2 Dependent Variables

Campaign 'success' occurs when campaigns are coded as 'success' in the last year in the NAVCO data (Chenoweth and Lewis 2013b) and we code failures when the campaign ends without success. Years without success or failure represent 'continuation'. We also use a dependent variable where '3' or more on the progress scale in the last year of the campaign is sufficient for success, and failure otherwise. Of the 128 campaigns in the NAVCO data, 70 were successes with 58 failures.

Post-conflict democratization was measured with polity scores 2, 5 and 10 years after the last year of the campaign (Marshall, Jaggers and Gurr 2014). The 'polyarchy' index from

---

[7] If we use Cox proportional hazards models for the NAVCO data, we obtain slightly stronger results.

the Varieties of Democracy dataset was also used with results similar to those reported below, which can be found in the online appendix (Coppedge et al. 2015).

3.3 Independent variable: the participation of national trade union organizations

There are no global data on the participation of trade unions in civil resistance that we are aware of and we created original data for campaigns in the NAVCO 2.0 data. NTUs were coded as participating in civil resistance when there was evidence to suggest that an organization claiming to represent worker's interests (without respect to industrial sector, skill or geographical location) participated in "active and observable engagement in collective action" (Chenoweth and Stephan, 2011: 30) and articulated the anti-regime goals of the movement. Practically, we coded the participation of NTUs when evidence from news sources, news digests, secondary sources and reports stated that these organizations mobilized for collective action with the intent of aiding, joining, or forming a civil resistance campaign with maximalist aims. Our most important sources were *Trade Unions of the World* (Blackburn 2015), *The Historical Dictionary of Organized Labor* (Docherty and van der Velden 2012), Schock (2005), Nepstad (2011), the FACTIVA database, Keesings Record of World Events, the *New York Times*, the *Washington Post* and the *Wall Street Journal*. We have placed emphasis on consulting a number of secondary sources for each case, as nonviolent forms of conflict are often underreported in the news media (Day et al. 2015).

Coding decisions have an ambiguity score (Day et al. 2015). Where ambiguity is 1 and participation is 1, we believed on the balance of the evidence that an NTU did participate, but there is some possibility that it did not. The source of this ambiguity, along with all sources that led us to these coding decisions are cited in the codebook. Where ambiguity is 1 and participation is 0 we believed that on the balance of probabilities an NTU did not participate, but it is possible that it did. In some tests we use a variable where cases with ambiguity were scored as 0.5 and cases with little ambiguity were scored as 1 or 0, depending on their value for NTU participation. This 'ambiguity-adjusted' variable reflects our confidence that an NTU did participate. Of the 65 campaign years with 'ambiguity', 54% of these cases were uncertain due to the institutionalization of the NTU

(i.e whether it was a 'national' trade union), 45% due to uncertainty over participation in nonviolent action and 12% related to whether the goals were 'maximalist'.[8]

3.4 Control Variables

As with many observational studies there are two primary hurdles to inferring a relationship between NTU participation and the outcomes of civil resistance campaigns (assuming that our concepts are measured well). The first is omitted variable bias, whereby NTU participation and campaign outcomes are explained a third variable that explains both (Morgan and Winship 2014). We 'control' for some alternative explanations with regression models, described below. Second, NTUs may wait until the campaign has a good chance of winning and join to avoid being caught on the losing side (Kuran 1989). Any correlation would reflect (perceived) success causing NTU participation, not the other way around. A common way of dealing with reverse causality is with instrumental variables (J. D. Angrist and Pischke 2008) but we are unaware of plausible instruments for NTU participation. Instead we rely on controlling for 'campaign size' to parse out bandwagoning effects. Potential participants probably infer the likelihood of opposition success from the size of recent demonstrations (DeNardo 1985; Kuran 1989) and campaign size is, therefore, one variable that can control for perceptions of likely success (in a campaign year). However, campaign size and NTU participation are also measured in the same year (in our data) so it is possible (and our theory leads us to expect) that NTU participation also causes larger protests to occur. Controlling for campaign size removes the endogenous relationship *and* the effect of NTU participation on campaign size (J. D. Angrist and Pischke 2008). Residual effects should reflect the direct effect of NTU participation (which we suspect captures the higher economic leverage that NTUs bring to civil resistance campaigns). Justifications for, and measurement of, our control variables are discussed below.

3.4.1 Controls: short-term outcomes

---

[8] These percentages do not sum to 100 because the categories are not mutually exclusive. Ambiguity can arise from multiple sources in some cases.

NTU participation and the outcomes of nonviolent campaigns may be explained by long term political or economic processes that empower civil society, including organized labor and weaken incumbent regimes. Four structural controls were included to block such alternative explanations: economic growth/decline, modernization, economic development and political freedoms in the target state. Declining GDP growth may drive labor unrest and regimes may be, independently, vulnerable to collapse at this point (Brancati 2016; Robertson 2007). Modernization may empower organized labor (Butcher and Svensson 2016) and 'modernized' countries may be more likely to transition (Haggard and Kaufman 2016; Lipset 1959). We controlled for this with urban population as a percentage of total population. Economic development may increase the ability of organized labor to disrupt the economy and economic development can be conducive to regime transitions and democratization (Przeworski and Limongi 1997; Teorell 2010). We control for this with GDP per capita from Gleditsch (2002). Finally, political freedoms facilitate the formation of independent organizations, including trade unions civil resistance campaigns in democracies may be more effective where lethal repression is less likely. A simple logit model predicting NTU participation suggests that GDP decline and urbanization make participation more likely while development makes it less likely. Democracy has a negative but not significant relationship to NTU participation. We have tested other control variables, including worker's rights and rights of freedom of association (Cingranelli and Richards 2010), the proportion of manufacturing to GDP and the socioeconomic modernization index developed by Teorell (2010). None of these substantially changed the results and are reported in the appendix.[9]

A second concern is that campaign-level features co-occur with organized labor participation and explain campaign outcomes. Campaign goals, the presence of repression, radical flanks, the number of other participating 'social groups' and a cubic polynomial for the time elapsed since the start of the movement are included to account for these possibilities (Carter and Signorino 2010). Movements with non-territorial goals are more likely to succeed (Svensson and Lindgren 2011) and plausibly more successful in making broad based appeals for worker's rights, thus facilitating labor activism.

---

[9] We thank Jan Teorell for sharing his data.

Violent repression reduces the probability of success (Chenoweth and Stephan 2011) and may deter the formation and participation of NTUs. Organized labor may avoid participation when more violent forms of contention are used and movements with 'radical flanks' may be less successful (Nepstad 2011). Finally, NTUs may participate during a cascade of participation by other organizations. We control for this with the number of new organizations that joined in that year (Chenoweth and Lewis 2013a). In our data NTU participation is positively correlated with more new organizations joining, and marginally, but negatively correlated to higher levels of repression. There is no clear relationship to campaign goals or radical flanks.

Lastly, we control for campaign size, but in separate models. Already big campaigns may cause NTUs to participate but NTU participation may also *cause* mass participation.

3.4.2 Democratization

The same controls as above were included in models of post-conflict democratization, with three additions: oil dependence, regional democracy and global democracy. Oil wealth likely weakens social organizations and makes democratization less likely (Ross 2012). Transnational linkages with democratic states, globally and regionally, help foster the rise of large social organizations and are crucial to consolidating gains after civil resistance (Gleditsch and Rivera 2017). These variables come from Haber and Menaldo (2011) and are measured in the last year of the campaign. Control variables included in models of short-term success also have plausible links to longer term democratization, especially pre-conflict democracy, income, modernization, simultaneous violent contention (in this case, radical flanks) and organizational diversity (Acemoglu and Robinson 2005; Bratton and Van de Walle 1997; Johnstad 2010; Lipset 1959; Teorell 2010)

Table 1 summarizes our dependent variables, independent variables and control variables, along with operationalizations and sources.

			Short Term Success	**Post-conflict Democratization**
Dependent Variable		**Success/Democratization**	Success' and 'Failure', (Chenoweth and Lewis 2013). Dummy Variable. Coded as "1" if 4 on the "progress" scale in the last year, failure if less than 4 in the last year.	Polity score: 2, 5 and 10 years after the last year of the campaign
Independent Variable		**Participation of Organized Labor**	NTU Participation (Authors's coding)	Maximum NTU participation (Author's coding)
Control Variables	Structural	**Economic Growth**	GDP Growth (World Bank 2014). 1 year lag.	Average GDP Growth (World Bank 2014).
		Political Freedoms	"Polity2" Score (Marshall, Jaggers and Gurr 2014). 1 year lag.	"Polity2" score in the year before campaign onset (Marshall, Jaggers and Gurr 2014).
		Modernization	Urban population as a % of total population (World Bank 2014). 1 year lag.	Average urban population as a % of total population (World Bank 2014). 1 year lag.
		Economic Development	Log GDP per capita (Gledistch 2002). 1 year lag.	Log average GDP per capita (Gledistch 2002).
		Oil Wealth	Not included	Oil rents per capita (Haber and Menaldo 2011)
		Regional democracy	Not included	Number of neighboring democracies (Haber and Menaldo 2011)
		Global democracy	Not included	Number of democracies globally (Haber and Menaldo 2011)
	Collective Action	**Repression**	Repression score (Chenoweth and Lewis 2013).	Maximum repression score (Chenoweth and Lewis 2013)
		Violent Collective Action	Radical Flank (Chenoweth and Lewis 2013).	Radical flank in last year (Chenoweth and Lewis 2013).
		Number of participants	Campaign Size (Chenoweth and Lewis 2013).	Maximum campaign size (Chenoweth and Lewis 2013)
		Number of Active Organizations	Campaign Organizations (Chenoweth and Lewis 2013)	Sum of 'new' campaign organizations during campaign (Chenoweth and Lewis 2013)
		Movement goals	Anti-regime goals (Chenoweth and Lewis 2013). Coded as "1" if goals were <=3 on the "camp_goals" variable.	Anti-regime goals (Chenoweth and Lewis 2013). Coded as "1" if goals were <=3 on the "camp_goals" variable.
		Time	Time since start of the campiagn (years)	Total duration of campaign (years)
Data Structure			Campaign Years (n = 329)	Campaigns (n = 123)

3.5 Method of analysis

We ran six multinomial logit models of short term outcomes. The first includes 'structural' control variables, followed by campaign-level control variables. Third, we use the ambiguity-adjusted measure of NTU participation with campaign-level and structural controls. Campaign size is then included followed by security force defections. The data were collapsed into 'campaigns' as the unit of analysis for the OLS models of post-conflict democratization, measured 2 years, 5 years and 10 years after the end of the campaign.

All models were run in the Zelig program version 5.0 (Imai et al 2008). Multiple imputation with the Amelia II package was used to generate 10 imputed datasets (Honaker et al 2012) and then the average value of the variables across the 10 imputed datasets was taken. Our results are almost identical if we use the imputed datasets and Rubin's rule. Diagnostics and code for the imputation procedure can be found in the online appendix.

4. Results

4. 1 *Descriptive statistics*

Hypotheses 1a - 3b are examined with descriptive statistics, followed by the regression models. Figure 2 shows the temporal distribution of NTU participation in civil resistance (red), all active civil resistance campaigns (grey) and successful campaigns (black line) from 1946-2006,

Figure 2: NTU participation and the success of civil resistance.
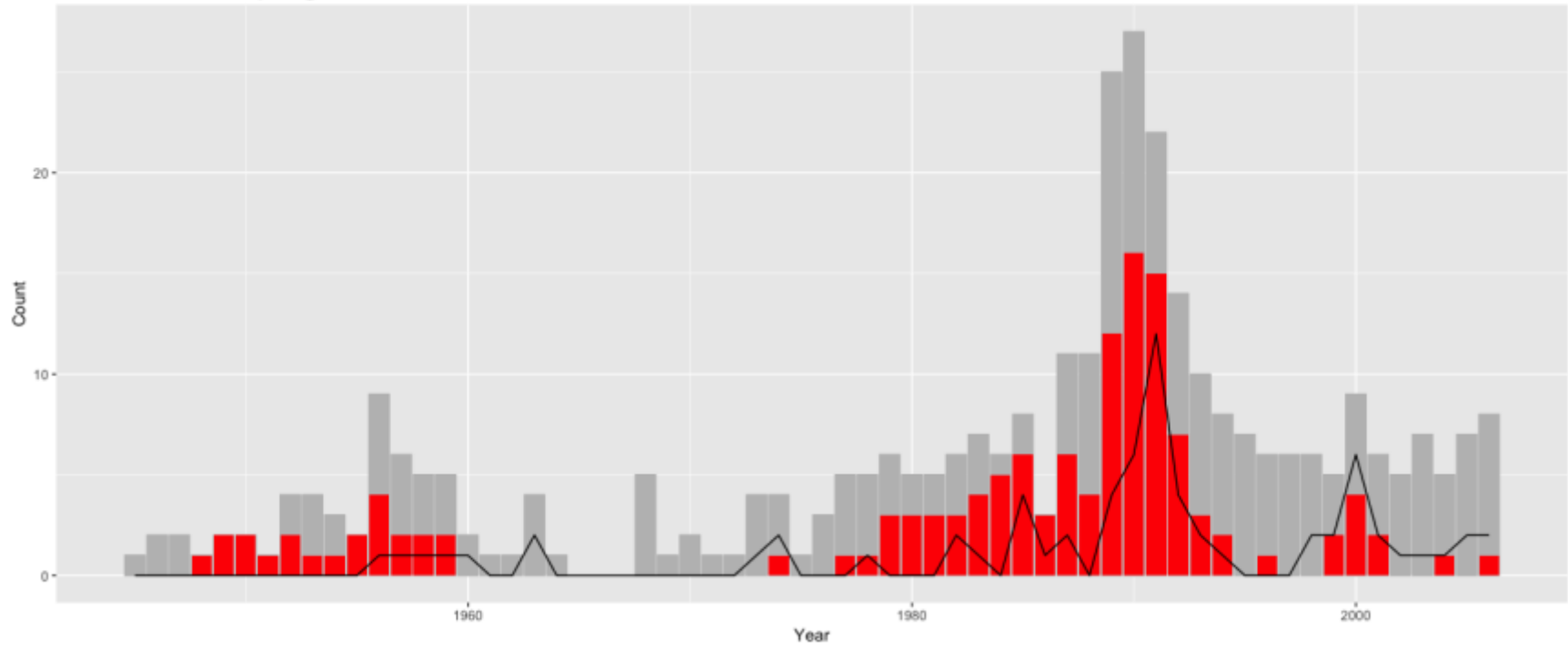
NAVCO Campiagns, 1946-2006

Figure 2 shows peaks in NTU participation that appear to correspond with peaks in the success of civil resistance campaigns, especially in the late 1980s, early 1990s and the 1999-2001 period. NTU participation in civil resistance has declined since the mid 1990s and especially from 2002-2006, when Chenoweth (2016) observes a sharp increase in the failure rate.[10] More generally, 82.7% of campaigns with NTU participation succeeded compared to 28.8% that succeeded without NTU participation.[11] This is a statistically significant difference at the p<0.0001 level following a one-way ANOVA test. This is initial support for H1a and H2a.

Figure 3 traces the post conflict trajectories of the 123 campaigns in our sample. The y-axis shows the change in polity score since the last year of the campaign and the x-axis shows the number of years since the end of the campaign. The blue dashed line is the average change in polity score for campaigns with at least one year of NTU participation and in black are those campaigns without NTU participation. Democratization occurs in the post-civil resistance period, on average (Celestino and Gleditsch 2013) but campaigns with NTU participation exhibit larger shifts towards democracy that persist across the 40 years of observation (although there are fewer observations the further in time we progress). The difference is roughly 3 polity points after 2 years, more than 4 after 5 years and 3.6 points after 10 years.

Figure 3 – NTU participation and post-conflict democratization, nonviolent campaigns, 1946-2006

---

[10] This is not an artefact of the dataset ending in 2006. Of the five campaigns that we coded as failed in 2006 two are onset years and three are final years (Belarus and Mexico respectively). Belarus and Mexico also ended in 2006 according to the Major Episodes of Contention Data, closely related to the NAVCO data.

[11] Because we are examining aggregate campaigns here, success and failure are mutually exclusive. When we analyse campaign years in below, this is not the case.
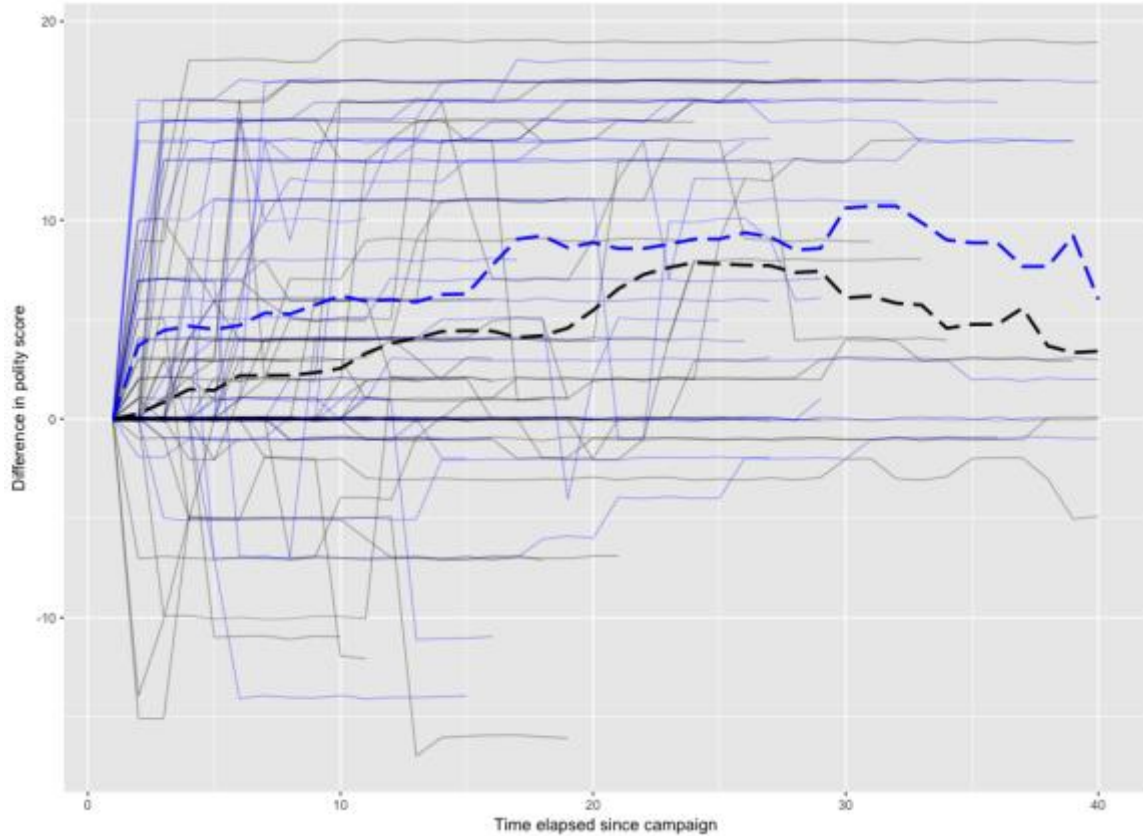
Interestingly, after 2 years the most democratic states are not those with the highest levels of participation. The average polity score for a campaign with more than 1 million participants is about the same (1.5) as a campaign with between 10,000-100,000 participants (1.3). At 10 years the most democratic states are actually those with the smallest participation levels, with an average score of 4.6 compared with 3.4 for campaigns with more than 1 million participants. This is initial support for H3a and H3b.

4. 2 Regression analysis

4.2.1 Short term outcomes

Figure 4 shows the results of multinomial logit regression models of campaign outcomes, including the control variables discussed earlier (the regression tables can be found in the appendix accompanying this article). Panels in Figure 4 show the simulated marginal effects of a change in each independent variable from its 10th percentile value to its 90th percentile value. The models progress as described earlier in the paper.

Figure 4 – Marginal effects of NTU participation on campaign outcome, nonviolent campaigns 1946-2006
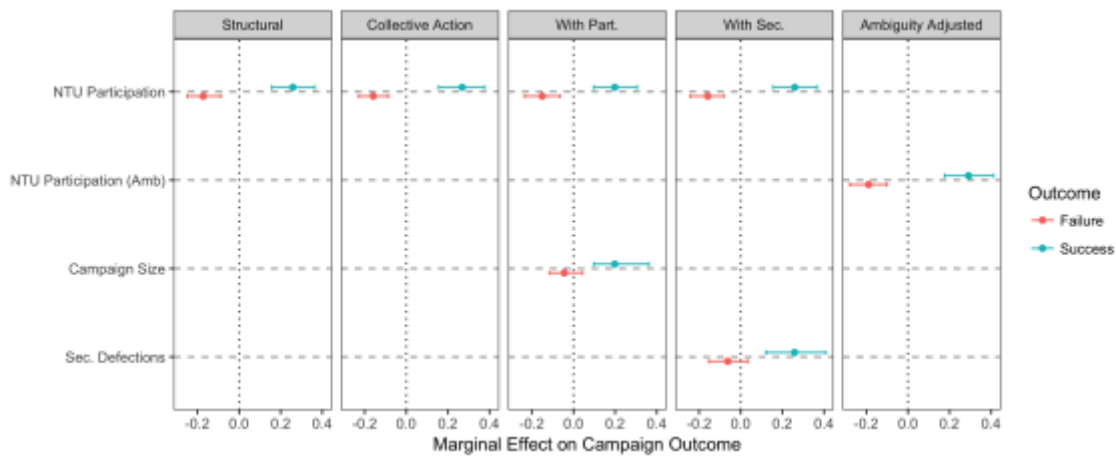

Figure 4 suggests that on average, NTU participation increases the probability of campaign 'success' in terms of regime change or territorial autonomy/secession, and reduces the probability that the campaign will fail in that year (if it does not succeed). This effect is a 25 percentage point increase (from a probability of roughly 11% without NTU participation to 36% with NTU participation). The 95% confidence intervals do not cross the 'zero effect' line in Figure 3, suggesting that this effect is likely to be positive. NTU participation also reduces the probability of failure, from 23.7% to 6.7% (in the 'structural model'). These effects remain similar across the models with a lowest (mean) impact on success of 20.2 percentage points and the weakest negative impact on failure of 14.4 percentage points when campaign size is included.

NTU participation is also positively correlated with campaign success and negatively correlated with campaign failure independent of campaign size. This suggests that NTUs bring leverage (the positive correlation with success) and resilience (the negative relationship to failure) to civil resistance campaigns independent of their ability to facilitate mass mobilization. This is evidence to support H1a and H2b. This also suggests that the impact of NTU participation on campaign outcomes is not fully accounted for by reverse causality as the campaign size variable should control for the effects of bandwagoning on already big campaigns (if we assume that organizations condition their participation on prior, visible displays of dissent). The NTU effect may also run through campaign size as the simulated first difference drops from roughly 25 percentage points to 20 percentage points when campaign size is included. We ran a mediation analysis using the 'mediation' package to obtain a clearer picture (Imai et al 2011). The full results are in the appendix, but the results suggest that 24.4% of the effect of NTU participation on short term success is mediated through increased campaign size and that this is a statistically significant proportion. Both the direct effect and the mediated effect are statistically significant, controlling for the structural and campaign-level variables discussed earlier. In contrast, the negative relationship between NTU participation and failure is largely direct. Just 8% runs through campaign size and the mediated effect is not differentiable from zero. This provides additional support for H1a, H1b and H2a.
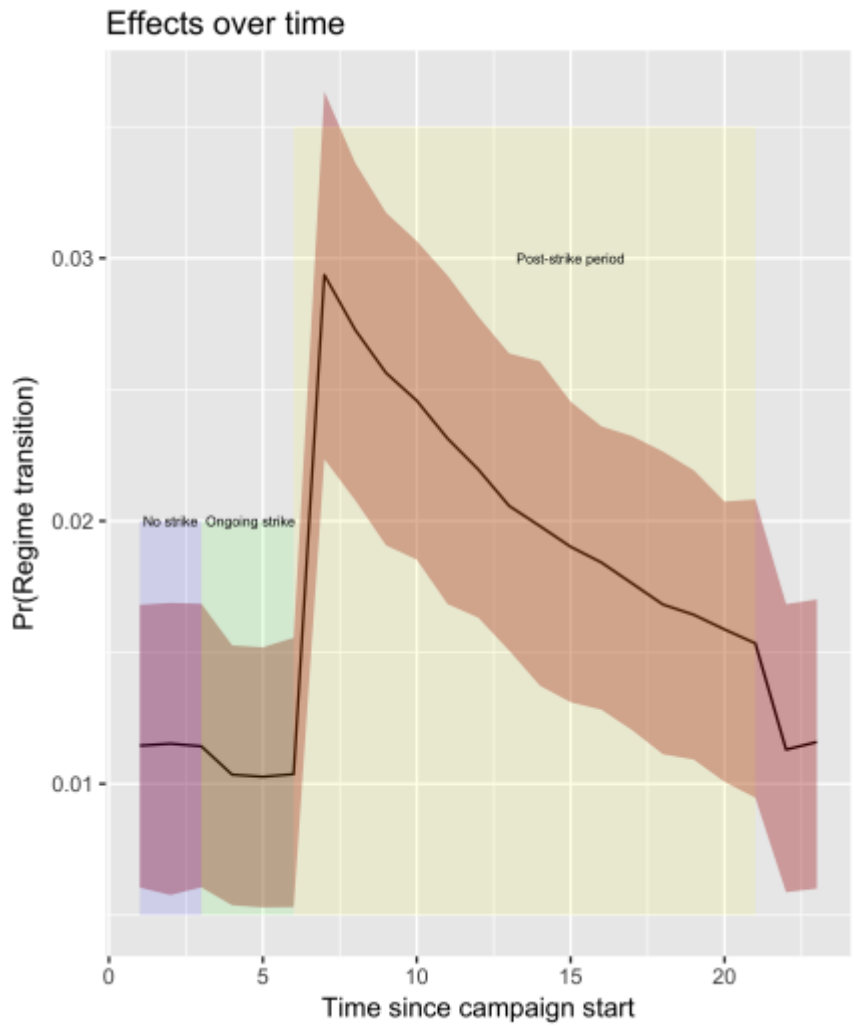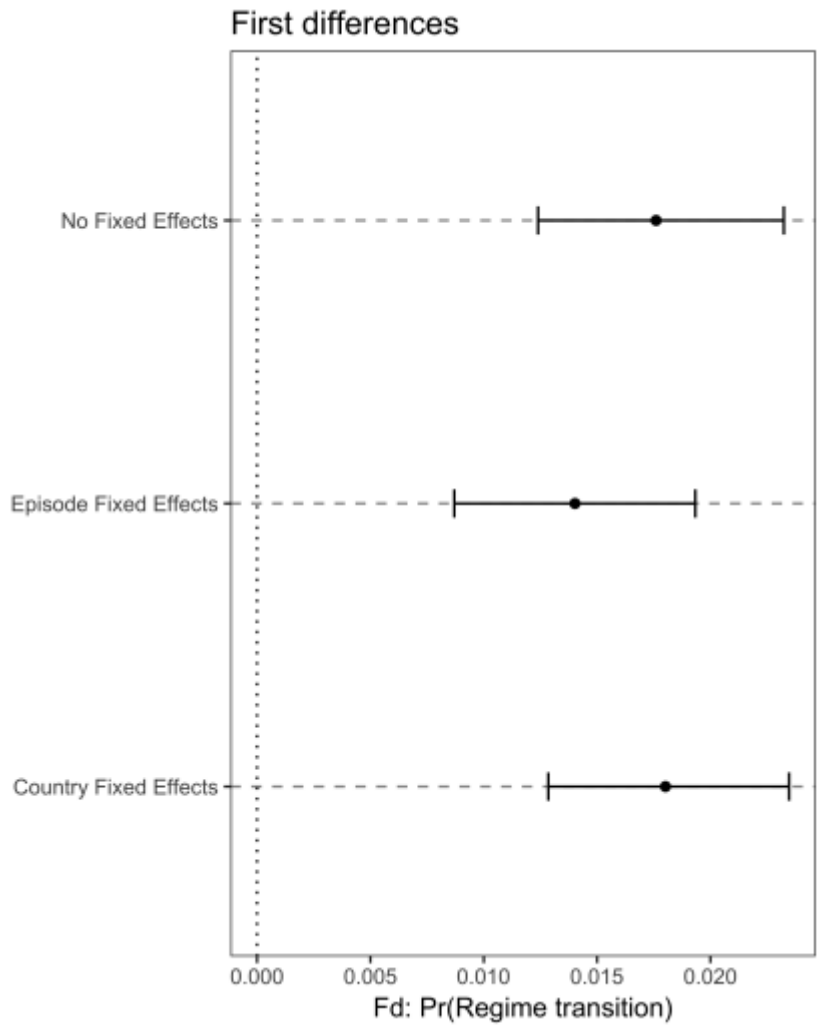
To further probe the possibility that NTUs bandwagon on already big campaigns, we ran a test using the Social Conflict Analysis Dataset (Salehyan et al 2012) estimating the correlation between general strikes and the likelihood of regime transitions. The unit of analysis was the campaign-day for pro-democracy movements in Africa from 1990-2015. Episodes of pro-democracy contention begin when an anti-government event for democracy or human rights occurs and ends when no further events occur in the following three months.[12] The dependent variable is the day of a regime transition in the polityIV data irrespective of whether the transition was towards or away from democracy (Marshall et al. 2014). The main independent variable is a 'decay' of the time since the last general strike and a binary indicator of whether the strike was ongoing. We have

---

[12] Tests using a 6 month and 1 year threshold are also shown in the appendix.

varied the decay rate from 0.1% per day to 0.5%, 1% and 10% and the results are largely unchanged. Episode fixed effects allowed us to isolate the over-time variation and we controlled for the size of the last demonstration (and a decay) along with controls (and decays) for the riots, anti-government violence, demonstrations, and the structural controls included in models with the NAVCO data. If the coefficient connecting organized labor to campaign success was the product of organized labour opting into already big protests or campaigns then it should not be distinguishable from zero when we control for the size of these recent protests. The full details of this analysis can be found in the online appendix, but we find a consistent, positive effect of general strikes on regime transitions in the days after general strikes, independent of the size of preceding demonstrations (we are able to replicate the strong positive effect of large demonstrations on regime transitions with the SCAD data). This suggest that the effect of organized labor on short-term campaign success is not completely endogenous to recent participation. Figure 5 shows the first differences for moving from a day where there was no strike to the day *after* a general strike. The right-hand panel of Figure 5 shows how the strike variable affects the likelihood of regime transitions over time.

Figure 5: Regime transitions (polityIV) and general strikes (SCAD), pro-democracy episodes, Africa, 1990-2015.

First differences

No Fixed Effects

Episode Fixed Effects

Country Fixed Effects

Fd: Pr(Regime transition)

Effects over time

No strike Ongoing strike

Post-strike period

Pr(Regime transition)

Time since campaign start

Returning to the results with the NAVCO data, mass participation and security force defections make success substantially more likely (Chenoweth and Stephan 2011; DeNardo 1985) but do not significantly reduce the probability of failure, which for a small campaign is 14.3% and 11.5% for a large campaign of one million or more people. We interpret this as supportive of our hypothesis that NTUs provide a more resilient mobilization infrastructure than large protests that lack this infrastructure. Additional tests in the appendix also show that it is the older NTUs, (those being in existence for more than 3 years) that are really driving the negative link to campaign failure. Old and new NTUs are correlated with short-term campaign success.

We now turn to H1c – that NTU participation has a stronger effect on short term success in regimes that maintain single-union industrial relations systems. Figure 5 shows the results for Model 4 in Figure 4, with the sample split into cases where there was a de-facto or de-jure trade union monopoly by a single center connected to the regime in the year before campaign onset and cases where there was not (cases where the regime either banned/repressed NTUs or tolerated their existence independent of the state). 'Single union systems' were coded when (a) the regime sponsored union was the only legal union (as in Mali prior to 1990) or (b) multiple unions were legal but an NTU with connections to the ruling party/regime claimed more than 80% of existing union membership (like the ETUF in Egypt prior to 2011). These data come from 'Trade Unions of the World' and the coding can be found in the appendix (Blackburn 2016). Figure 6 shows simplified models including those variables that were found to be strongly and significantly correlated with campaign outcomes in Figure 4 (campaign goals, repression, campaign size, cubic polynomial for time) as the number of observations per sample is much smaller. The marginal effects of moving each variable from the 10th to the 90th percentile value are shown in Figure 6.

Figure 6 – Marginal effects of NTU participation on campaign outcome, single-union and other systems, 1946-2006
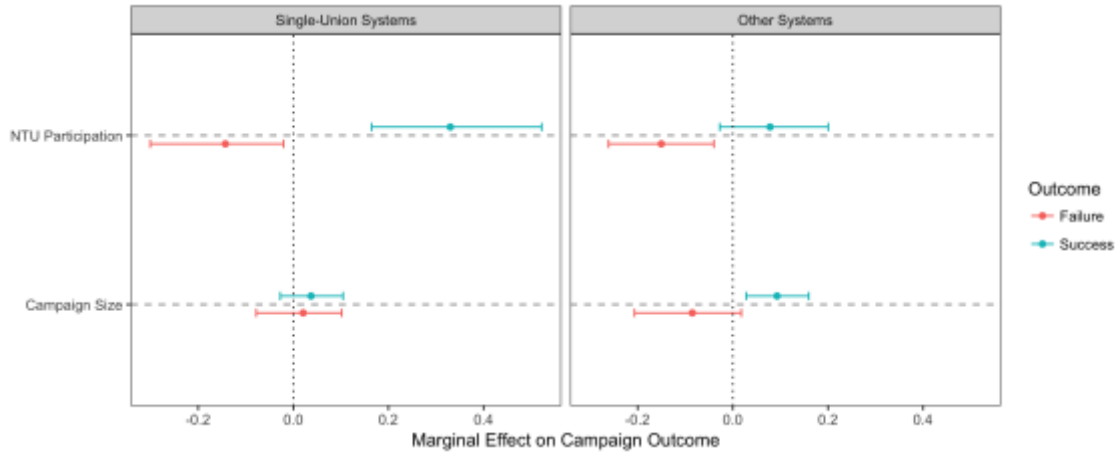
Figure 6 suggests support for H1c. The strongest effects on short term success are found in the sample of single-union regimes. Here the participation of NTUs increases the probability of success by 32.4 percentage points and reduces the probability of failure by 14.3 percentage points. The probability of success increases by 7.7 percentage points in other systems, but this is not statistically significant. Campaign size plays a substantial role in explaining both success and failure outside of the single-union system, but has a dampened role in regimes characterized by union monopolies.[13] These results suggest that the effect of NTUs on short term success is limited to labor dependent regimes, but illustrate more generally that the closer an organization is to the regime the more impactful its defection is. NTU participation also significantly reduces the probability of failure across regimes. This is what we would expect if leverage is a function of the defection of key organizations from the regime whereas resilience is a function of the organizational structure that underpins the campaign.

Finally, we turn to models of post-conflict democratization (H3a and H3b). Figure 7 shows the results of OLS models polity scores measured at 2, 5 and 10 years after the campaign.

---

[13] The results are largely the same if we include security force defections. In no model do security force defections significantly reduce the probability of failure, although they consistently increase the probability of success.

Figure 7 – Marginal effects of NTU participation on post-conflict democratization, 1946-2006
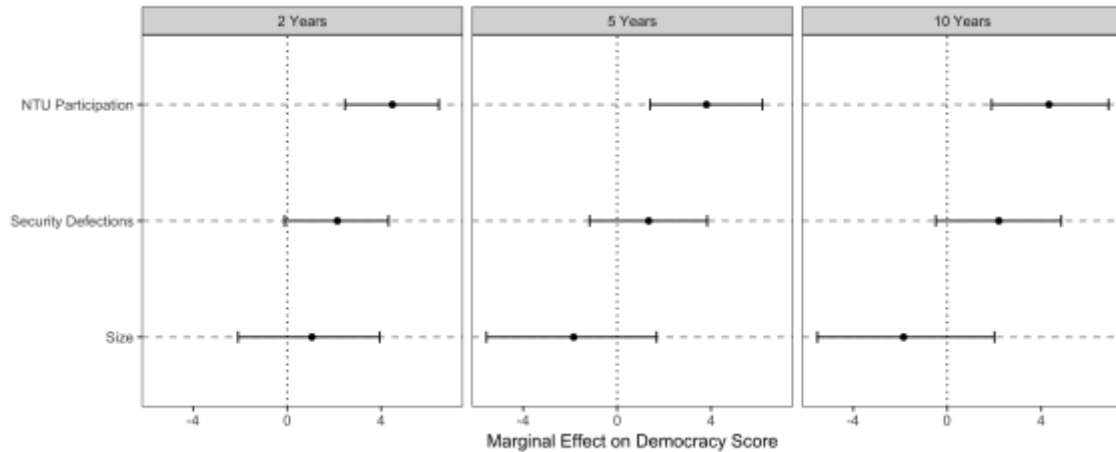

The results support H3a and H3b. NTU participation has a significant and positive effect on the magnitude of democratization in the post-conflict period that endures ten years into the future, from 4.8 points 2 years after, 3.9 points 5 years after and 4.5 points 10 years after the end of the campaign. Follow up analysis in the appendix also suggest that, again, it is the older NTUs that drive this result, suggesting a general link between resilient campaigns and post-conflict democratization. Models in Figure 7 were re-run using country-fixed effects and the 'polyarchy' index from the VDEM data as the dependent variable. In both cases we find positive and statistically significant relationships between NTU participation and post-conflict democracy. The effect of campaign size is not differentiable from zero 2, 5, and 10 years after the end of a campaign, potentially implying that short term mass mobilization does not entail the ability to sustain that mobilization after the campaign ends.

5. Conclusions

Figure 8 summarizes the findings of this study. NTU participation was correlated positively with short-term success, partially through increased campaign size and

partially through a direct effect which we think reflects the importance of unions to the economy. NTU participation also exhibited a pronounced effect in regimes that monopolize industrial relations, which we propose demonstrates the economic leverage NTUs bring to civil resistance campaigns. We could not rule out the possibility that the indirect effect of NTUs through increased campaign size reflects reverse causality with our data and the positive effect of NTUs on short term success may be confined to labor dependent regimes. NTU participation also reduced the probability of short term failure, across our modelling strategies, and was correlated with larger shifts towards democracy in the post conflict period. Campaign size was robustly correlated with success but not campaign failure or democratization.

Figure 8 – Summary of the main results
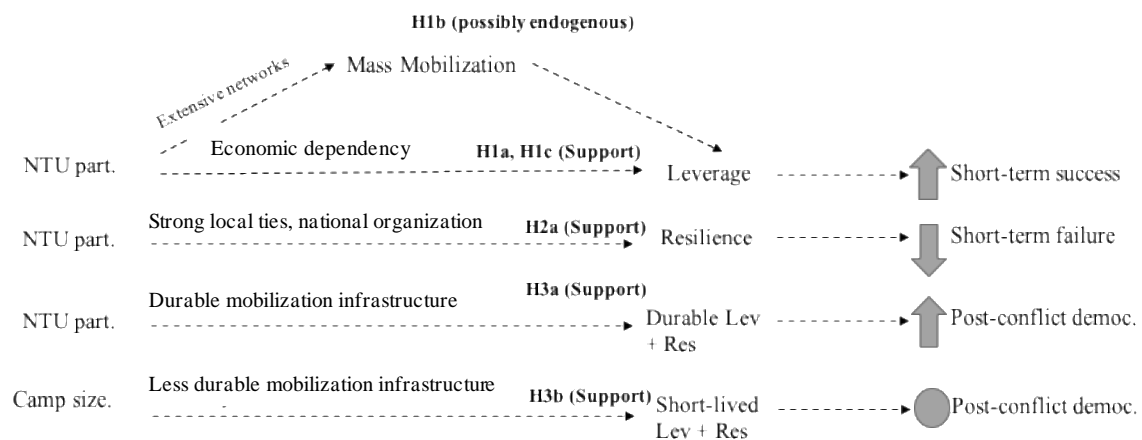
This study highlights the importance of organization-level features for understanding the outcomes of civil resistance campaigns. Like in civil wars, civil resistance campaigns draw upon pre-existing organizations and social groups to mobilize and the character of these organizations shapes their ability to coerce the regime in the short term, survive setbacks and repression and engender long term institutional changes. Given that civil

resistance campaigns are typically shorter than violent campaigns and unarmed groups cannot occupy territory in the same way that violent groups do, civil resistance campaigns may be more dependent upon pre-existing organizations as their ability to re-shape social networks during the conflict period is more limited (Wood 2008). We think further attention to organization-level variables in civil resistance campaigns is warranted.

Our theory and empirical results suggest that the factors driving short-term success in civil resistance are different to those that prevent failure. In addition, the results suggest a connection between resilience and an ability to shape the post-conflict institutional environment. Mass mobilization on its own may make concessions more likely in the short term but is no guarantee of longer term survival if concessions are not forthcoming, nor does mass mobilization necessarily translate into the capacity to shape post conflict institutions. We might, therefore be skeptical of the ability of so-called 'facebook' revolutions, characterized by a proliferation of weak ties, to generate longer term democratization in the absence of strong institutional underpinnings. Our theory suggests that other organizations with a similar mobilization infrastructure to NTUs should have similar effects to those of NTUs. The Muslim Brotherhood in Egypt, for example, had roughly 600,000 members and millions of additional followers before the 2011 revolution with deep ties to local communities through charitable organizations and the penetration of professional associations (Walsh 2003). The 'Workers Party' in Brazil emerged from close connections to industrial and manufacturing workers during resistance to the military regime from 1983-1985 (Seidman 1994)

There are significant limitations to the analysis, as it stands. We have commenced the theoretical process of mapping organization-level features to the technology of civil resistance, but out theory emphasizes concepts with micro-foundations that are difficult to capture in a cross-national framework. We have used qualitative observations to suggest that NTUs approximate a mobilization infrastructure that is usefully re-purposed for civil resistance, but concepts such as the extensivity and strength of social networks are better measured, at the expense of some generalizability, with ethnographic or other in-depth field research techniques. Expanding the empirical focus to organizations other

than labor unions and to direct measurements of organization-level features would facilitate better tests of our causal mechanisms. For example, organizations with extensive ties but few additional interdependencies with the state should increase the likelihood of short term success through increased campaign size, but not exhibit other independent effects and be unrelated to failure. Confederal organizations with strong local ties without dependency relations with the state should make campaigns more resilient without necessarily increasing the prospects of short term success. Expanding the scope to other organizations would also enable analyses of inter-organizational competition and alliance formation in civil resistance campaigns (Christia 2012; K. G. Cunningham 2014). Of course, other features may be crucial to effective civil resistance such as intra-organizational unity and relations of inclusion and exclusion from the state and we see the link between resource-mobilization, organizations and nonviolent tactics as a promising area for further theoretical development.

It is also possible that the results of this study are driven by unmeasured or unobserved factors correlated with labor dissent and regime transitions, but reflective of an alternative causal pathway to the outcomes of civil resistance. Our new data of NTU participation is also probably biased towards larger NTUs - there are likely to be 'failed' attempts at NTU formation that did not make it into our dataset. That said, we still find that NTU participation has a positive effect on the success of civil resistance when we use an ambiguity adjusted measure that should pick up failed attempts at NTU participation. Finally, there are contextual factors that likely condition the effectiveness of organized labor in civil resistance (Robertson 2004, 2007). These may be the extent to which organized labor is united. It may depend on outside support, or the history of labor mobilization. Our data are coarse in this regard, and do not pick up these variations. We see this as an important area for future research.

References

Acemoglu, Daron and Robinson, James A (2005), *Economic origins of dictatorship and democracy* (Cambridge, UK: Cambridge University Press).

Ackerman, Peter and DuVall, Jack (2000), *A Force More Powerful" A Century of Nonviolent Conflict* (New York, NY: Palgrave).

Ackerman, Peter and Karatnycky, Adrian (2005), *How Freedom is Won: From Civic Resistance to Durable Democracy* (Washington D.C: Freedom House).

Alexander, Christopher (2016), *Tunisia : from stability to revolution in the Maghreb* (The contemporary Middle East series: Routledge).

Alexander, Robert (2003), *A history of organized Labor in Argentina* (Westport, CT: Greenwood Publishing Group).

Amenta, Edwin, et al. (2010), 'The political consequences of social movements', *Annual Review of Sociology,* 36, 287-307.

Angrist, Joshua D and Pischke, Jörn-Steffen (2008), *Mostly harmless econometrics: An empiricist's companion* (Princeton, NJ: Princeton University Press).

Angrist, Michele Penner (2013), 'Understanding the success of mass civic protest in Tunisia', *The Middle East Journal,* 67 (4), 547-64.

Arrow, KE (1974), *The limits of organization* (New York, NY: W. W. Norton & Company).

Asal, Victor, et al. (2013), 'Gender ideologies and forms of contentious mobilization in the Middle East', *Journal of Peace Research,* 50 (3), 305-18.

Bartkowski, Maciej J. (ed.), (2013), *Recovering Nonviolent History: Civil Resistance in Liberation Struggles* (Boulder CO: Lynne Rienner).

Becker, Brian E and Olson, Craig A (1986), 'The impact of strikes on shareholder equity', *Industrial & Labor Relations Review,* 39 (3), 425-38.

Beissinger, Mark R (2013), 'The Semblance of Democratic Revolution: Coalitions in Ukraine's Orange Revolution', *American Political Science Review,* 107 (03), 574-92.

Beissinger, Mark R, Jamal, Amaney, and Mazur, Kevin (2012), 'Who participated in the Arab spring? A comparison of Egyptian and Tunisian revolutions', *American Political Science Association Annual Convention, New Orleans*.

Bishara, Dina (2014), 'Labor Movements in Tunisia and Egypt: Drivers vs Objects of Change in Transition from Authoritarian Rule', *German Institute for International and Security Affairs,* SWP Comments 1, January 2014.

Black, John, Hashimzade, Nigar, and Myles, Gareth (2012), *A dictionary of economics* (Oxford, UK: Oxford University Press).

Blackburn, Daniel (2015), *Trade Unions of the World* (7th Edition edn.; New York, NY: John Harper Publishing).

Brancati, Dawn (2016), *Democracy Protests* (Cambridge, UK: Cambridge University Press).

Bratton, Michael and Van de Walle, Nicholas (1997), *Democratic experiments in Africa: Regime transitions in comparative perspective* (Cambridge, UK: Cambridge University Press).

Bueno de Mesquita, Bruce, et al. (2005), *The Logic of Political Survival* (Cambridge, MA: MIT Press).

Burrowes, Robert (1996), *The Strategy of Nonviolent Defense: A Ghandian Approach* (Albany, NY: State University of New York Press).

Butcher, Charles and Svensson, Isak (2016), 'Manufacturing Dissent: Modernization and the Onset of Major Nonviolent Resistance Campaigns', *Journal of Conflict Resolution,* 60 (2), 311-39.

Carey, Sabine C (2010), 'The use of repression as a response to domestic dissent', *Political Studies,* 58 (1), 167-86.

Carter, David and Signorino, Curtis (2010), 'Back to the Future: Modelling Time-Dependence in Binary Data', *Political Analysis,* 18 (3), 271-92.

Celestino, Mauricio Rivera and Gleditsch, Kristian Skrede (2013), 'Fresh carnations or all thorn, no rose? Nonviolent campaigns and transitions in autocracies', *Journal of Peace Research,* 50 (3), 385-400.

Centola, Damon M. (2013), 'Homophily, networks, and critical mass: Solving the start-up problem in large group collective action', *Rationality and Society,* 25 (1), 3-40.

Chayes, Sara 'How a Leftist Labor Union Helped Force Tunisia's Political Settlement', <http://carnegieendowment.org/2014/03/27/how-leftist-labor-union-helped-force-tunisia-s-political-settlement-pub-55143>.

Chenoweth, Erica (2016), *The Rise of Nonviolent Resistance* (PRIO Policy Brief, 19; Oslo, NOR: PRIO).

Chenoweth, Erica and Stephan, Maria J. (2011), *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict* (New York NY: Columbia University Press).

Chenoweth, Erica and Lewis, Orion A (2013a), 'Unpacking nonviolent campaigns: Introducing the NAVCO 2.0 dataset', *Journal of Peace Research,* 50 (3), 415-23.

Chenoweth, Erica and Lewis, Orion A. (2013b), 'Nonviolent and Violent Campaigns and Outcomes (NAVCO) Data Project, Version 2.0, Campaign Year Data, Codebook', *Josef Korbel School of International Studies, University of Denver*.

Chenoweth, Erica and Stephan, Maria J (2014), 'Drop your weapons: When and why civil resistance works', *Foreign Aff.,* 93, 94.

Chenoweth, Erica and Ulfelder, Jay (2017), 'Can Structural Conditions Explain the Onset of Nonviolent Uprisings?', *Journal of Conflict Resolution,* 61 (2), 298-324.

Christia, Fotini (2012), *Alliance formation in civil wars* (Cambridge, UK: Cambridge University Press).

Cingranelli, David L. and Richards, David L. (2010), 'The Cingranelli-Richards Human Rights Dataset', *CIRI Human Rights Data Project*.

Collier, Ruth Berins (1999), *Paths toward democracy: The working class and elites in Western Europe and South America* (Cambridge, UK: Cambridge University Press).

Collier, Ruth Berins and Mahoney, James (1997), 'Adding collective actors to collective outcomes: Labor and recent democratization in South America and Southern Europe', *Comparative Politics,* 29 (3), 285-303.

Cooley, Alexander (2005), *Logics of hierarchy: The organization of empires, states, and military occupation* (Cornell, NY: Cornell University Press).

Coppedge, Michael, et al. (2015), 'Varieties of Democracy: Codebook v4', *Varieties of Democracy (V-Dem) Project*.

Cunningham, David E., Gleditsch, Kristian Skrede, and Salehyan, Idean (2009), 'It Takes Two: A Dyadic Analysis of Civil War Duration and Outcome', *Journal of Conflict Resolution,* 53 (4), 570-97.

Cunningham, Kathleen Gallagher (2013), 'Understanding strategic choice: The determinants of civil war and nonviolent campaign in self-determination disputes', *Journal of Peace Research,* 50 (3), 291-304.

--- (2014), *Inside the Politics of Self-determination* (New York, NY: Oxford University Press).

Dahl, Marianne, et al. (2017), 'Accounting for Numbers: Actor Profiles and The Choice of Violent and Non-Violent Tactics.', *Typescript, University of Essex & Peace Research Institute Oslo. .*

Davenport, Christian (2007), *State repression and the domestic democratic peace* (Cambridge, UK: Cambridge University Press).

Davis, Gerald F, et al. (2005), *Social movements and organization theory* (Cambridge University Press).

Day, Joel, Pinckney, Jonathan, and Chenoweth, Erica (2015), 'Collecting data on nonviolent action: Lessons learned and ways forward', *Journal of Peace Research,* 52 (1), 129-33.

DeNardo, James (1985), *Power in numbers: The political strategy of protest and rebellion* (Princeton, NJ: Princeton University Press).

Dix, Robert H (1984), 'Why revolutions succeed & fail', *Polity,* 16 (3), 423-46.

Docherty, James and Van der Velden, Sjaak (2012), *Historical dictionary of organized labor* (Lanham, MD: Scarecrow Press).

Freeman, L. C (1977), 'A set of measures of centrality based on betweenness.', *Sociometry,* 40 (1), 35-41.

Gamson, William A (1990), *The strategy of social protest* (Homewood, IL: Dorsey Publishing).

Gandhi, Jennifer (2008), *Political institutions under dictatorship* (Cambridge, UK: Cambridge University Press).

Giugni, Marco G. (1998), 'Was It Worth the Effort? The Outcomes and Consequences of Social Movements', *Annual Review of Sociology,* 24, 371-93.

Gleditsch, Kristian S (2002), 'Expanded trade and GDP data', *Journal of Conflict Resolution,* 46 (5), 712-24.

Gleditsch, Kristian S and Rivera, Mauricio (2017), 'The diffusion of nonviolent campaigns', *Journal of Conflict Resolution,* 61 (5), 1120-45.

Goldstone, Jack A. (2011), 'Cross-class Coalitions and the Making of the Arab Revolts of 2011', *Swiss Political Science Review,* 17 (4), 457-62.

Gould, Roger V. (1993), 'Collective Action and Network Structure', *American Sociological Review,* 58 (2), 182-96.

Granovetter, Mark S. (1973), 'The Strength of Weak Ties', *American Journal of Sociology,* 78 (6), 1360-80.

Haber, Stephen and Menaldo, Victor (2011), 'Do natural resources fuel authoritarianism? A reappraisal of the resource curse', *American political science Review,* 105 (01), 1-26.

Haggard, Stephan and Kaufman, Robert R (2016), *Dictators and Democrats: Masses, Elites, and Regime Change* (Princeton, NJ: Princeton University Press).

Hamann, Kerstin, Johnston, Alison, and Kelly, John (2013), 'Striking Concessions from Governments: The Success of General Strikes in Western Europe, 1980-2009', *Comparative Politics,* 46 (1), 23-41.

Hegghammer, Thomas (2013), 'The recruiter's dilemma: Signalling and rebel recruitment tactics', *Journal of Peace Research,* 50 (1), 3-16.

Huang, Reyko (2016), *The Wartime Origins of Democratization: Civil War, Rebel Governance, and Political Regimes* (Cambridge, UK: Cambridge University Press).

Johnstad, Petter Grahl (2010), 'Nonviolent Democratization: A Sensitivity Analysis of How Transition Mode and Violence Impact the Durability of Democracy', *Peace & Change,* 35 (3), 464-82.

Karatnycky, Adrian (1992), 'The Battle of the Trade Unions', *Journal of Democracy,* 3 (2), 43-54.

Kim, Wonik and Gandhi, Jennifer (2010), 'Coopting workers under dictatorship', *The Journal of Politics,* 72 (03), 646-58.

Kraus, Jon (2007), 'Trade Unions in Africa's Democratic Renewal and Transitions: An Introduction', in Jon Kraus (ed.), *Trade Unions and the Coming of Democracy in Africa* (New York, NY: Palgrave), 255-86.

Kuran, Timur (1989), 'Sparks and prairie fires: A theory of unanticipated political revolution', *Public choice,* 61 (1), 41-74.

Kurtz, Marcus J. (2004), 'The Dilemmas of Democracy in the Open Economy: Lessons from Latin America', *World Politics,* 56 (02), 262-302.

Langhor, V (2014), 'Labor Movements and Organizations', in Lynch (ed.), *The Arab Uprisings Explained: New Contentious Politics in the Middle East* (New York, NY: Columbia University Press).

Lichbach, Mark (1998), *The Rebel's Dilemma* (Ann Arbor, MI: University of Michigan Press).

Lindvall, Johannes (2013), 'Union density and political strikes', *World Politics,* 65 (03), 539-69.

Lipset, Seymour Martin (1959), 'Some Social Requisites of Democracy: Economic Development and Political Legitimacy', *American Political Science Review,* 53 (01), 69-105.

Marchant, Eleanor and Puddington, Arch (2008), 'Enabling environments for civic movements and the dynamics of democratic transition', *Freedom House special report. July,* 18, 1.

Marshall, Monty, Gurr, Ted, and Jaggers, Keith (2014), *Polity IV Project: Political Regime Characteristics and Transitions, 1800-2013* (Vienna, VA: Centre for Systemic Peace).

McAdam, Doug (1986), 'Recruitment to High-Risk Activism: The Case of Freedom Summer', *American Journal of Sociology,* 92 (1), 64-90.

--- (2010), *Political process and the development of black insurgency, 1930-1970* (Chicago, IL: University of Chicago Press).

McAdam, Doug, Tarrow, Sidney, and Tilly, Charles (2001), *Dynamics of Contention* (Cambridge, UK: Cambridge University Press).

McCarthy, John D and Zald, Mayer N (1977), 'Resource mobilization and social movements: A partial theory', *American journal of sociology,* 82 (6), 1212-41.

McHugh, Richard (1991), 'Productivity effects of strikes in struck and nonstruck industries', *Industrial & Labor Relations Review,* 44 (4), 722-32.

McPherson, Miller, Smith-Lovin, Lynn, and Cook, James M (2001), 'Birds of a feather: Homophily in social networks', *Annual review of sociology,* 27 (1), 415-44.

Morgan, Stephen L and Winship, Christopher (2014), *Counterfactuals and causal inference* (Cambridge, UK: Cambridge University Press).

Nelson, Reed E (1989), 'The strength of strong ties: Social networks and intergroup conflict in organizations', *Academy of Management Journal,* 32 (2), 377-401.

Nepstad, Sharon Erickson (2011), *Nonviolent Revolutions: Civil Resistance in the Late 20th Century* (New York N.Y: Oxford University Press).

Öberg, Magnus (2002), 'The Onset of Ethnic War as a Bargaining Process. Testing a Costly Signaling Model', (University of Uppsala).

Oberschall, Anthony (1973), *Social Conflict and Social Movements* (Englewood Cliffs, NJ: Prentice-Hall).

Parkinson, Sarah Elizabeth (2013), 'Organizing rebellion: Rethinking high-risk mobilization and social networks in war', *American Political Science Review,* 107 (03), 418-32.

Pearlman, Wendy (2011), *Violence, Nonviolence and the Palestinian National Movement* (New York, NY: Cambridge University Press).

Petersen, Roger D (2001), *Resistance and rebellion: lessons from Eastern Europe* (Cambridge, UK: Cambridge University Press).

Pierskalla, Jan Henryk (2010), 'Protest, Deterrence, and Escalation: The Strategic Calculus of Government Repression', *Journal of Conflict Resolution,* 54 (1), 117-45.

Przeworski, Adam and Limongi, Fernando (1997), 'Modernization: Theories and Facts', *World Politics,* 49 (02), 155-83.

Roberts, Adam, et al. (2016), *Civil Resistance in the Arab Spring: Triumphs and Disasters* (Oxford, UK: Oxford University Press).

Robertson, Graeme B. (2007), 'Strikes and Labor Organization in Hybrid Regimes', *American Political Science Review,* 101 (04), 781-98.

Ross, Michael (2012), *The oil curse: how petroleum wealth shapes the development of nations* (Princeton, NJ: Princeton University Press).

Schmidinger, T. (2014), 'The Role of Labor Unions in the Transitions and Political Struggles after Mubarak', *Revolution as a Process: The Case of the Egyptian Uprising,* 1 (1), 127.

Schock, Kurt (2005), *Unarmed Insurrections: People Power Movements in Nondemocracies* (Minneapolis, MN: University of Minnesota Press).

--- (2015), *Civil resistance today* (Hoboken, NJ: John Wiley & Sons).

Seidman, Gay (1994), *Manufacturing Militance: Workers' Movements in Brazil and South Africa, 1970-1985* (Ewing NJ: University of California Press).

Sharp, Gene (2005), *Waging Nonviolent Struggle: 20th Century Practice and 21st Century Potential* (Boston MA: Sargent).

Sharp, Gene and Finkelstein, Marina (1973), *The politics of nonviolent action* (3; Boston, MA: P. Sargent).

Siegel, David (2009), 'Social Networks and Collective Action', *American Journal of Political Science,* 53 (1), 122-38.

--- (2011), 'When does repression work? collective action in social networks', *The Journal of Politics,* 73 (4), 993-1010.

Slater, Dan (2010), *Ordering power: Contentious politics and authoritarian leviathans in Southeast Asia* (Cambridge, UK: Cambridge University Press).

Staniland, Paul (2012), 'Organizing Insurgency: Networks, Resources, and Rebellion in South Asia', *International Security,* 37 (1), 142-77.

--- (2014), *Networks of Rebellion: Explaining Insurgent Cohesion and Collapse* (Ithaca, NY: Cornell University Press).

Svensson, Isak and Lindgren, Mathilda (2011), 'Community and consent: Unarmed insurrections in non-democracies', *European Journal of International Relations,* 17 (1), 97-120.

Svolik, Milan W (2012), *The politics of authoritarian rule* (Cambridge, UK: Cambridge University Press).

Tarrow, Sidney G (2011), *Power in Movement: Social Movements and Contentious Politics* (Cambridge, UK: Cambridge University Press).

Teorell, Jan (2010), *Determinants of democratization: Explaining regime change in the world, 1972–2006* (Cambridge, UK: Cambridge University Press).

Tilly, Charles (1978), *From mobilization to revolution* (New York, NY: Random House).

Tilly, Charles and Tarrow, Sidney G (2015), *Contentious politics* (Oxford, UK: Oxford University Press).

Ulfelder, Jay (2005), 'Contentious collective action and the breakdown of authoritarian regimes', *International Political Science Review,* 26 (3), 311-34.

Walsh, John (2017), 'Egypt's Muslim Brotherhood', <http://hir.harvard.edu/article/?a=1048>, accessed 25/07.

Walter, Barbara F. (2001), *Committing to Peace: The Successful Settlement of Civil Wars* (Princeton, NJ: Princeton University Press).

--- (2009), 'Bargaining Failures and Civil War', *Annual Review of Political Science,* 12 (1), 243-61.

Weingast, Barry R (1997), 'The political foundations of democracy and the rule of the law', *American political science review,* 91 (02), 245-63.

Weinstein, Jeremy M. (2007), *Inside Rebellion: The Politics of Insurgent Violence* (Cambridge UK: Cambridge University Press).

Williamson, O. E. (2007[1985]), 'The modern corporation', in Derek S. Pugh (ed.), *Organization theory: Selected readings* (New York, NY: Penguin).

Wood, Elisabeth Jean (2001), *Forging Democracy from Below: Insurgent Transitions in South Africa and El Salvador* (Cambridge: UK: Cambridge University Press).

--- (2003), *Insurgent collective action and civil war in El Salvador* (Cambridge University Press).

--- (2008), 'The social processes of civil war: The wartime transformation of social networks', *Annu. Rev. Polit. Sci.,* 11, 539-61.