

Geography and the outcomes of civil resistance and civil war

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Abstract

This paper reports the results of the first cross-national examination of the impact of the geography of nonviolent contention on regime transitions. Nonviolent tactics ‘work’ in part by signaling the preferences of non-participants through the symbolism of participants, unlike violent tactics. This opens the way for nonviolent campaigns to exploit variations in social-spatial meaning to enhance the meaning and informativeness of dissent. Capital cities are one such symbolic space and the main prediction of this study is a positive relationship between large protests in the capital and regime transitions, but not elsewhere. I also predict a strong direct relationship between the proximity of fighting in civil wars to the capital and regime transitions, a weaker relationship to the proximity of nonviolent contention and, that the intensity of violent conflict impacts regime transitions in a way that is largely independent of location. Results from an analysis of episodes of violent and nonviolent conflict from 1990-2014 generally support these contentions.

Introduction

Scenes of mass protest in the public squares of capital cities have been common in the recent past. Tahrir square in Egypt, Maidan square in Ukraine, or, further back, Tiananmen square or the Plaza del Mayo in Argentina have become symbols of the power of civil resistance. Protestors often attribute the symbolism of space to the success of these protests. But is this the case? Does *where* protests occur affect their outcomes, in this case, regime change? I argue in this paper that it does. The outcomes of resistance campaigns can be understood as solutions to bargaining breakdowns where acts of dissent and response are means of resolving uncertainty over the likely winner of the conflict. Geographical spaces can influence outcomes by increasing the informativeness of dissent or changing the extent to which dissent signals strength or weakness for either side. Since nonviolent campaigns communicate strength by signaling the preferences of non-participants through representations created by participants, there is greater potential to exploit variations in socio-spatial meanings. Capital cities are a symbol of state strength, sovereignty and a hub of domestic and international linkages. I argue that large protests in capital cities should have a higher likelihood of generating cascade and backfire effects, and send a strong signal to the government that dissent against the regime is widespread by leveraging these spatially defined, and, in part, socially constructed features.

These claims are tested with the quantitative analysis of contention-months of civil resistance and civil war from 1990-2014. Cross national georeferenced event data combined with measures of the intensity of contention inside and outside the capital form the main independent variables. The results generally support these conjectures. A strong and direct relationship exists between the proximity of fighting in civil wars to the capital and the probability of regime transitions. A surprising, significant, direct relationship is also observed between the proximity of civil resistance to the capital and the probability of regime transition. In addition, increasing participation in protest in the capital significantly increases the probability of regime transitions, while increasing participation outside of the capital does not have the same effect. We see the opposite effect for civil wars where the intensity of contention in the countryside is correlated

with regime transitions. These results appear to be robust to fixed effects estimation, and the use of alternative modelling strategies.

The article proceeds as follows. I briefly review the literature on geography and the outcomes of resistance campaigns, followed by a discussion of the theoretical links between geography and the outcomes of resistance movements. I then describe the quantitative method used to test hypotheses derived from this discussion and conclude by discussing the results and their relationship to the emerging theoretical literature on civil resistance.

Extant literature

The geographical dimensions of civil war is a growing research area and studies have explained variations in conflict geographyⁱ and how these variations influence the onsetⁱⁱ and severity of war,ⁱⁱⁱ violence against civilians,^{iv} and the duration of war.^v A handful of studies examine how the geographical dimensions of civil wars influence their *outcomes*. Schutte has shown that rebels are less likely to win if a state's population is heavily concentrated around the capital, and Grieg shows that peace talks are more likely when conflict approaches major cities but are less likely when conflict approaches the capital as the rebels anticipate victory.^{vi} Grieg et al also show that the proximity of fighting from the capital in civil wars increases the probability of rebel favorable outcomes including peace agreements and cease fires, while the dispersion of fighting also increases this likelihood.^{vii}

The publication of Chenoweth and Stephan's *Why Civil Resistance Works* and the events of the Arab Spring have seen a renewed interest in the quantitative study of civil resistance. Studies have focused on explaining the onset, outcomes and success rate relative to violent campaigns of civil resistance.^{viii} As yet, there are no cross-national, quantitative studies of how the location of *nonviolent* forms of contention affect campaign outcomes. There is, however, a rich, case-based and qualitative literature on the role of space in protest, much of which I draw upon in the theory section below. Kurt Schock, for example, argues that protest movements that use 'dispersion tactics' increase the costs of repression and make success more likely.^{ix} Studies in the 'social movements' or 'contentious politics' literature argue that dissidents can utilize the socially

constructed, symbolic, meanings of geographical spaces to their advantage.^x Thus far, however, few studies have attempted to show, quantitatively and on a cross national sample, whether or not the integration of dissent and these socially constructed ‘terrains of resistance’ actually influence protest outcomes.^{xi} This methodological focus on contingent micro-geographies is understandable given that the symbolism of space is constructed largely at the local level and similar spaces likely have dissimilar and incomparable meanings across countries. In the next section, however, I argue that capital cities are a ‘symbolic’ space whose meaning is fairly stable across countries and the time period under investigation, presenting an opportunity to test these propositions in a large-n framework.

Theory

In this section I lay out a theory of how the interaction of space and resistance vary across violent and nonviolent conflicts. The location of fighting in civil wars is directly informative about the strength of rebel groups and the probability of dissidents prevailing. The location of resistance is less directly informative in civil resistance campaigns, but can amplify signals sent by dissidents depending upon the symbolic meaning of that location. Because acts of civil resistance work by signaling the preferences of non-participants through what participants *represent* in relation to the government’s ‘pillars of support’, there exist greater opportunities to exploit variations in socio-spatial constructions of government power and support to alter the informativeness of dissent than is the case in civil wars.

Success and signaling in resistance campaigns

Resistance campaigns are ‘a series of observable, continuous, purposive mass tactics or events in pursuit of a political objective’.^{xii} This paper focuses on campaigns with ‘maximalist’ goals over government, that is, goals that include, at least, that the government stand down or new institutions are put in place implying that the government would be required to step down in the future.^{xiii} ‘Success’ is, the fulfilment of these goals, which, in most cases implies a ‘regime transition’. Examples include the head of state stepping down in an ‘irregular’ process, or being compelled by acts of collective dissent to accept the results of a ‘regular’ procedure for

determining political succession (such as in the Ukraine in 2004). This definition focuses on short term success as a disruption to the ‘governing authority characteristics’ that marked the previous regime.^{xiv} Whether or not this ‘opening’ results in longer term democratization (such as in Tunisia after 2011) or does not (Egypt in 2014-2016) is not the focus of this paper.

The success or failure of resistance campaigns can be thought of as the solution to a bargaining breakdown.^{xv} Dissent is costly and risky and the emergence of resistance campaigns can reflect *ex ante* uncertainty over who would win an armed conflict or civil resistance campaign. Violent and nonviolent contention can be thought of as a form of signaling, with dissent today designed to convince an opponent that dissent will continue and be so costly that their best interests are served by yielding today. Violent and nonviolent tactics affect change through different processes, however, and, the types of signals that are informative about the outcome of a conflict are different. Violent tactics affect change by physically destroying the target’s means to resist with direct violence.^{xvi} The outcomes of armed confrontations are the primary means through which information is communicated in armed conflict.^{xvii} Belligerents learn about who is likely to win future encounters as battles unfold over time and estimates of the likely outcome of the war converge.^{xviii} Rebel groups signal capability almost exclusively through the violent actions of participants. Nonviolent tactics work largely through inducing defections from a regime’s support base, thus raising future governance costs.^{xix} The size and composition of demonstrations, strikes and other acts of dissent are the primary means through which dissidents signal strength. Big demonstrations, for example, signal that the government has lost the cooperation of a large section of society and that the costs of governance in the future will be high. Crucially, nonviolent tactics aim to signal the preferences of *non-participants* with the social meanings attached to *participants*.^{xx} Usually no more than 3-5% of a population participates in civil resistance but what this 3-5% *represents in relation to the ‘pillars of support’* of the government signals the depth of opposition to the government.^{xxi} In nonviolent campaigns, governments signal strength through effectiveness in repression. Although these can include lethal violence, repression can also involve selective violence and concessions.^{xxii}

Capital cities as a symbolic space

One way in which geography can influence the outcomes of resistance movements is by increasing the informativeness of acts of dissent by leveraging symbolic meanings. Capital cities embody significant symbolic meaning, one that is largely stable across countries, opening the way for a cross-national analysis of how resistance and symbolic spaces interact to affect conflict outcomes. Capital cities represent: (1) a symbol of state sovereignty and government strength (2) often the largest concentration of people and economic power (3) the hub for connections to international and domestic media. Marika Landau-Wells, for example, has argued that the norm of recognizing groups that are able to exclusively and physically control capital cities, what she calls the ‘locational dimension of sovereignty’, has been a strong norm in the post-World War II period.^{xxiii} Capital cities are, thus, a symbol of ‘sovereignty’ and are often home to spaces that represent the sovereignty of the state and of ‘the people’. For example, Tahrir square in Egypt is also known as ‘Revolution Square’ after the 1919 revolution and Maidan square in the Ukraine is also known as ‘Independence Square’. Governments, especially in the post-colonial world, invested heavily in shoring the support of urban constituents, often at the expense of the countryside, in part as a result of this connection between international recognition and capital cities.^{xxiv} Capital cities are also, therefore, more generally, symbols of government strength and control. Capital cities are also often, but not always, the largest city and most economically important city in a country and a thereby a symbol of the power and wealth of the state.^{xxv} Finally, capital cities are often the hub of connections to international and domestic media networks. Most foreign media organizations are based capital cities, especially in developing countries.^{xxvi} Thus, capital cities are a stable cross-national construction as the symbol of sovereignty and government power, a demographic and economic center, and lodestar for domestic and international connections. Although not all capitals are the same in this respect, many share these features, again, especially in post-colonial states.^{xxvii} The next section develops connections between the location of resistance and conflict outcomes in the case of violent contention (civil wars) and nonviolent contention (civil resistance).

Capital cities and the outcomes of civil wars

Capital cities are often the object of civil wars. It is very unusual for rebel groups to be recognized as ‘sovereigns’ if they cannot physically occupy the capital.^{xxviii} Most civil wars start

far from the capital and progress towards the capital as a function of the ability of rebels to challenge the government on the battlefield.^{xxxix} Thus, the location of civil war in proximity to the capital is a *direct signal* of relative strength of belligerents and we should observe a strong, direct relationship between the proximity of fighting to the capital and the probability of regime transitions.^{xxx} However, this direct relationship is a reflection of military capability, rather than a cause of military capability. Rebel capabilities in civil war are signaled primarily through the actions of participants in battle, and I expect that the effect of *intense* fighting on the probability of regime transitions does not vary greatly across geographical locations. Although there are clearly exceptions to this, in general, a significant military defeat for the government in the countryside should be just as important as a defeat in the capital.^{xxxi} What the outcome of a battle *represents* other than a change in the relative capabilities of both sides is less important than the military outcome of the battle itself. As Clausewitz famously has argued, the outcomes of violent conflicts are rarely determined by the leveraging of symbolic spaces – it is the ability to destroy the opponent’s capability for organized violence, and, by implication, the ability to occupy these spaces, that determines the outcomes of wars.

Capital cities and the outcomes of civil resistance

The proximity of civil resistance to the capital is less informative, directly, about the probability of a dissident victory. It may be that even small protests can leverage some of these opportunities presented by dissent in capital cities discussed below, but given that civil resistance movements often start in capital cities or other major cities, and that governments may even tolerate some levels of dissent, the presence of any dissent in the capital should not be as informative of the relative strength of both sides as for violent conflict.^{xxxii}

While the location of civil resistance may not be informative in and of itself, it can enhance the informativeness of dissent. Specifically, large protests in the capital should have a stronger effect on regime transitions, and increase this probability more rapidly, than large protests outside of the capital. Recall that the effectiveness of civil resistance depends in part on the ability of participants to signal the political preferences of *non-participants* through representational meaning of participants.^{xxxiii} Large demonstrations with representation from across society

communicate that public preferences significantly diverge from the regime's, but a large demonstration in a location where the government is weak may not provide much new information. Governments and dissidents should already know that the popular preferences in this location are likely to be against the government. The same sized demonstration in the capital, however, a symbol of government strength, may represent significant new information that people with preferences that are typically closer to the regime's have also shifted to the opposition.^{xxxiv} In addition, capital cities are symbolic of state sovereignty the ability to mobilize large numbers of people into the capital may project a powerful image of opposition strength in a location symbolically associated with state strength and the 'people' asserting their sovereignty. It may be difficult for the regime to repress without incurring further domestic or international backlash, especially for regimes that construct their legitimacy upon the basis of protecting or realizing the will of the people, as often occurs, even in autocratic states. Finally, capital cities can also amplify the effects of nonviolent actions through the density of communication networks internationally and domestically.^{xxxv} 'Cascades' of participation can occur when people learn that numerous others share preferences against the regime.^{xxxvi} Severe repression can also backfire when government brutality is credibly and widely communicated.^{xxxvii} Capital cities are a prime location within which to generate these cascade and backfire effects. This discussion leads to the four hypotheses below.

H1 – there is a negative relationship between the minimum distance of violent conflict from the capital and the probability of regime transitions

H2 - there is a weak negative relationship between the minimum distance of nonviolent conflict from the capital and the probability of regime transitions.

H3 – Increasingly intense fighting in the capital and increasingly intense fighting outside of the capital increase the probability of regime transition in civil wars.

H4 – Increasingly large protests in the capital have a stronger positive effect on regime transitions than increasingly large protests in outside of the capital.

Method:

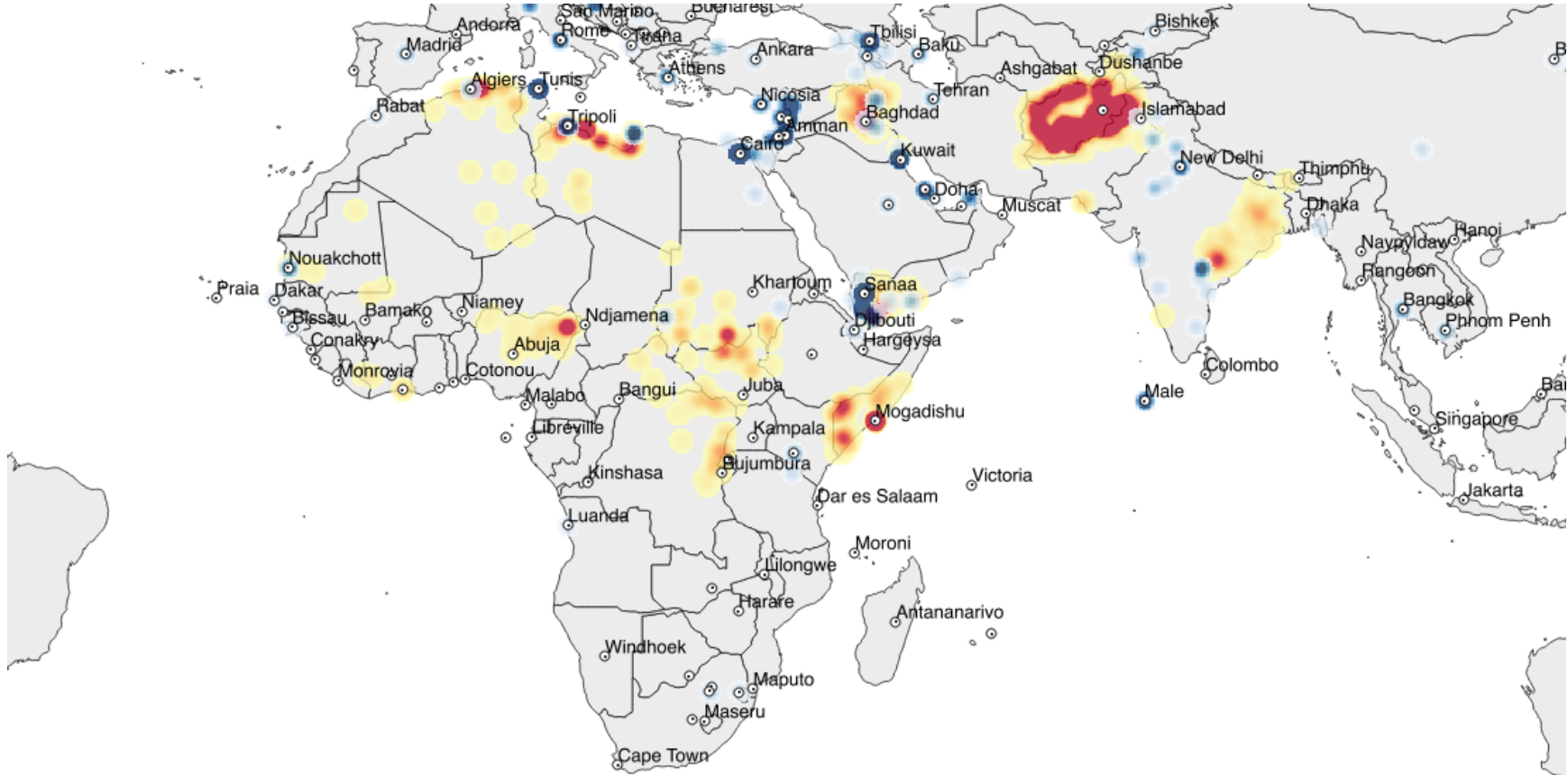
The analysis examines regime transitions from 1990-2014 as a function of the geographical dimensions of resistance strategies. The unit of analysis is a ‘contention-month’ of ongoing violent or nonviolent contention. I have used the Social Conflict in Africa Dataset (SCAD, version 4.1)^{xxxviii} and Integrated Crisis Early Warning (ICEWS) data to construct episodes of nonviolent contention.^{xxxix} For the SCAD data, episodes of nonviolent contention start in a month where there was at least one event of primarily nonviolent conflict targeted at the central government over issues of democracy/human rights or elections, and ends in the month after which there was no further contention of this nature for two months or there was a regime transition (discussed below).^{xl} This yields 1,107 months of contention across 517 distinct episodes. For the ICEWS data, episodes of civil resistance start when a month with an event falling under category ‘14’ ‘protest’ of the CAMEO coding scheme occurred and ends in the month after which there was no further contention of this nature for two months or there was a regime transition. This yields 2,001 contention months across 1,243 distinct episodes. The main purpose for using both ICEWS and SCAD was that, while SCAD contain more detailed information on the nature of protest, the sample is limited to Africa and Latin America. ICEWS contains less information on the nature of protests (discussed below) but is global in scope (from 1995-2015). Because of the possibility that large ‘celebratory’ protests occur on transition-days, events on the day of regime transitions have been removed. Episodes of violent contention were constructed in the same way, but using events of state-based internal armed conflict where the incompatibility was over government using the Georeferenced Event Dataset (GED).^{xli} This yields 3,627 contention months across 374 distinct episodes. The dependent variable for this study is a ‘regime transition’ in a given month or the proceeding two months if the observation month is the last month of resistance. Data for regime transitions come from the PolityIV dataset, 2015 version, and the variable ‘regime transitions’.^{xlii} In the polity data a ‘regime transition’ occurs when there is an ‘abrupt and substantial change in governing authority characteristics’, reflected by a move of at least 3 points on the polity scale. Regime transitions can be towards democracy or autocracy and I aggregate both here. How a transition proceeds once a transition begins is something of an open question and not the main interest of this paper.

The ICEWS, SCAD and GED data record the location of resistance events with latitude and longitude coordinates. Proximity to the capital city was measured by recording the minimum geodesic distance for an Earth-shaped ellipsoid between the points given in the events dataset and the points given for the location of a capital city with the ‘distGeo’ function in the ‘geosphere’ package (version 1.5-5).^{xliii} The parameters for the radius and the flattening come from the WGS84 survey and match those used in SCAD, the GED and ICEWS. Information on capital cities was sourced from the geonames database. Administrative capitals have been privileged but the results are also robust, if slightly weaker, when using the ‘largest’ city in terms of population. Some events last for multiple days and each event was expanded to an ‘event day’ dataset with one observation per active day of the event and the features of the event copied across the number of days before summarizing the results by month. Some events in the SCAD data are ‘nationwide’ and the event is attributed with latitude and longitude coordinates corresponding to the country centroid. I have split these events into two – one event in the capital and one in the centroid with the same corresponding features for both events. Nationwide protests almost invariably involve a significant protest in the capital.^{xliv}

To measure the *intensity* of civil resistance inside and outside the capital, I calculated the size of the largest protest in the capital (within 25km of the latitude and longitude point given for the capital) and the largest protest outside of the capital for those months. For information on the size of protests I used the variable ‘npart’ in the SCAD data. There is a substantial amount of missing data on this variable and I have imputed the median value (3 – 100-1,001) in these instances.^{xlv} The ICEWS data do not measure participation numbers and I measured intensity in this instance by creating a count of the number of protest days occurring in distinct locations in the capital, and outside of the capital. If protests were recorded in four different locations in the capital, for example, for 5 days each, the conflict month will have an intensity score of 20. For the ‘intensity’ of violent contention inside and outside the capital, I used the sum of battle-related deaths suffered by party A (the government) and party B (the rebel group) measured inside and outside of the capital.

Figure 1 shows an example of the geographical distribution of events related to violent and nonviolent conflict across Africa and South/Central Asia in 2011.

Figure 1 – Violent (reds) and Nonviolent (blues) contention, 2011



Control variables

I control for factors that might affect the distance of resistance from the capital, and the likelihood of regime transitions. Regimes with large and effective military forces may be able to deter violent and nonviolent mobilization in the center, and I have controlled for this with a (logged and 1 year lagged) measure of the number of military personnel from the World Bank Databank. I have controlled for regime type with an indicator of democracy based on the PolityIV data's 'polity2' score lagged by 1 year,^{xlvi} land area, and income/poverty with the (logged and 1 year lagged) infant mortality rate.^{xlvii} Reported events in the ICEWS data are correlated with population size, and the models also control for population size from the World Bank (logged and 1 year lagged). Models were also run with country fixed effects (FE) to control for unobserved factors specific to the country that may be driving the results. To control for the effects of time, I also include a cubic polynomial of the time since the start of the episode and a counter for the number of transitions that have occurred during an episode.^{xlviii}

Analysis

The analysis proceeds in the following way. I first examine descriptive statistics for how the geography of contention affects the likelihood of regime transitions, followed by the results of bivariate analysis of resistance locations and regime transitions. The final part examines the results of logistic regression analysis controlling for the factors mentioned above. Regression analyses were conducted in the R software platform with the Zelig package (version 4.1-2), tables were produced with the 'stargazer' and 'texreg' packages.^{xlix}

Descriptive statistics

Table 1 - Violent Conflict Events, 1990-2014, Global

Statistic	N	Mean	St. Dev.	Min	Max
Minimum Distance from	3,627	310.574	392.325	0.000	1,843.376

Capital					
Mean Distance from Capital	3,627	444.556	392.036	0.000	1,880.957
Any event in capital	3,627	0.278	0.448	0	1
Regime Transition	3,627	0.035	0.183	0	1

Table 2 - Nonviolent Protest events, 1990-2014, Latin America and Africa

Statistic	N	Mean	St. Dev.	Min	Max
Minimum Distance from Capital	1,107	87.720	216.766	0.000	1,576.955
Mean Distance from Capital	1,107	140.767	224.767	0.000	1,576.955
Any event in capital	1,107	0.759	0.428	0	1
Regime Transition	1,107	0.049	0.216	0	1

Table 3 - Nonviolent Protest Events, ICEWS data, 1995-2014

Statistic	N	Mean	St. Dev.	Min	Max
Minimum Distance from Capital	2,001	148.898	343.350	0.000	1,954.105
Mean Distance from Capital	2,001	181.734	357.330	0.000	1,954.105
Any event in capital	2,001	0.732	0.443	0	1
Regime Transition	2,001	0.027	0.164	0	1

Table 1 suggests that, on average, events of nonviolent resistance occur closer to the capital than events of violent resistance. The average distance of nonviolent events is 141km in the SCAD data and 182km in the ICEWS data from the capital, while this is 445km for violent conflicts. Roughly 76% of country months saw some nonviolent contention in the capital in the SCAD data and 73% for ICEWS (given there was at least 1 event of nonviolent contention in that month) while 28% of country months saw at least one armed conflict event in the capital.

What impact does the location of events have on the probability of regime transitions? Table 2 shows how the average minimum distance of contention from the capital varies for transition and non-transition months across forms of violent and nonviolent contention.

Table 4 – Proximity to the capital in transition and non-transition months

	Proximity to the capital (km)		
	GED	SCAD	ICEWS
Transition	185.2	30.2	40.6
No Transition	315.1	98.5	152.0

Table 4 suggests that transition events in general are associated with contention in the capital city. Events of nonviolent contention, in general, occur closer to the capital but the largest absolute difference is observed for violent conflicts, where transition events occur 130km closer to the capital than non-transition events. In 93% of transition events in the SCAD data (and 88% in the ICEWS data), there was some contention within 25km of the capital. However, 75% of all nonviolent contention months in the SCAD data also had at least one event in the capital (73% in the ICEWS data). Twenty-seven percent of violent contention months had at least one event in the capital when there were no transitions, and rises to 46% for months where there was a transition. This is suggestive of support for H1 and H2. The direct relationship between the proximity of armed conflict to the capital and regime transitions appears to be stronger than for civil resistance.

Do big protests in the capital have a stronger effect on regime transitions than big protests elsewhere? Tables 5 and 6 investigate the relationship between protest size, location and transition more closely by examining how transition rates vary for big protests (participation greater than 10,000) in and out of the capital (within or outside 25km of the center).

Table 5 – Transition rates across participation size and location

Nonviolent Contention (ICEWS in parentheses)		
	Big	Small
Capital	10.7% (8.3)	5.8% (2.9)
Not Capital	7.4% (4.5)	4.1% (2.1)

Table 6 – Transition rates across armed conflict intensity and location

	Violent Contention		
		>=50 Deaths	<50 Deaths
Capital		14.2%	3.3%
Not Capital		4.9%	3.0%

Table 5 reveals evidence for the kind of ‘amplifier’ effect that has been hypothesised. The highest likelihood of a regime transition during civil resistance is observed when there is a big protest in the capital (more than 10,000 people), and this is the case for the SCAD and ICEWS data.¹ Small protests in general have low transition probabilities, although a small protest in the capital has a higher transition probability than one outside, but not as high as a large protest outside of the capital. If there was no effect of protest location on the probability of transition, then we would expect the transition rates for big protests to be similar regardless of location. We actually see a similar relationship between intense armed conflict in the capital and regime transitions in Table 6. The transition rate is low when fighting is not intense. It rises with higher intensity fighting, and sharply with intense fighting in the capital.

Multivariate Analysis

I now turn to multivariate analysis of these relationships. Model 1 examines how the minimum distance of violent contention from the capital affects regime transitions with the controls

discussed earlier. Model 2 repeats this process with the SCAD data and Model 3 with the ICEWS data. Models 4-6 repeat this process use country-fixed effects to isolate over-time differences.^{li} I then differentiate between events in the capital and outside, and examine how the ‘intensity’ of these events affects the probability of regime transitions. For each of the models shown here I have also run tests using the largest city in terms of population and cox proportional hazards regression. The results of these analyses can be found in the online appendix but are largely the same as those reported here.

Table 7 shows the results of how resistance locations directly affect the probability of regime transitions. As expected there is a highly significant, negative relationship between the proximity of civil war to the capital city and the probability of a regime transition, implying that the closer conflict is to the capital, the more likely a regime transition is. Interestingly, we also see a direct, negative relationship between the proximity of nonviolent contention to the capital and the probability of regime transitions, albeit one that is less ‘statistically significant’ than for armed conflicts. This relationship holds with country-fixed effects and in the analysis with cox proportional hazards regression, and when using the ‘largest’ city rather than the capital city. The relationship between the proximity of protest events in the ICEWS data and the probability of regime transitions is also negative and significant.

Figure 2 – The impact of resistance location on regime transitions.

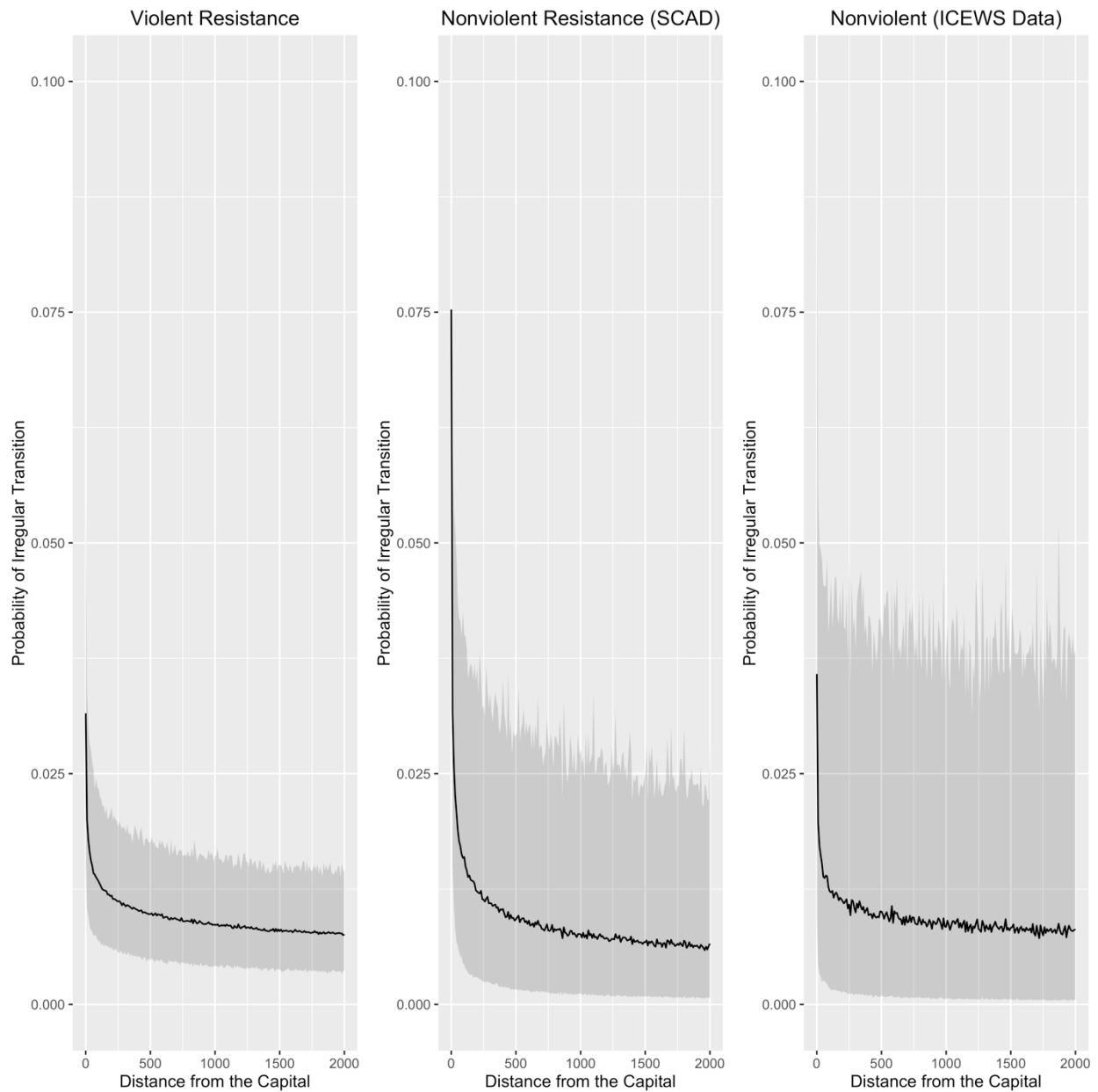
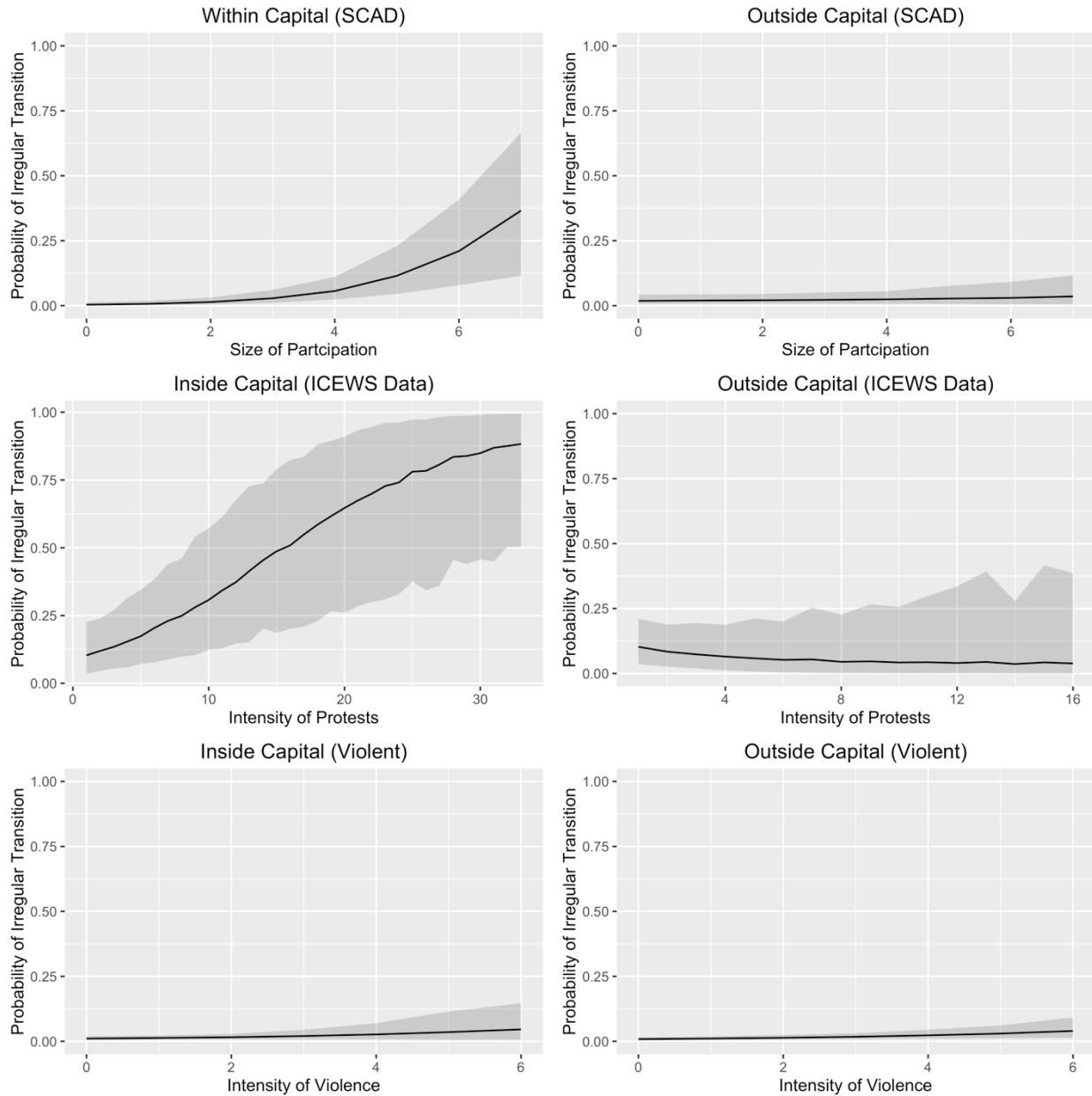


Figure 2 plots the distribution of expected probabilities of regime transition as the minimum distance of conflict moves further from the capital.^{lii} From Model 1, the probability of a regime transition is 2.6% when the average distance of fighting in a conflict month is close to the capital (2km) versus 1.2% when conflict is more than 200km from the capital with the average first difference between these probabilities being -1.4% and 95% confidence intervals of -0.6% to -

2.8%.^{liii} Thus, the effect of a decrease in the proximity of fighting from the capital is confidently negative. For nonviolent conflicts (using the SCAD data) the probability of regime transition when conflict is 2km from the capital, is, on average, 4.3% and 1.1% when conflict is 200km from the capital. Again, this effect is confidently negative with 95% confidence intervals of -5.3% and -1.7% on this change in probability. Thus, we see a significant relationship between the proximity of violent and nonviolent conflict to the capital and the probability of regime transitions. The results are largely the same with fixed effects, for the largest city, and with cox proportional hazards regression. The significant relationship observed in the ICEWS data disappears when fixed effects are used, however.

Table 8 shows the results of how the intensity of contention influences the probability of regime transitions depending upon its location inside or outside the capital. Figure 4 plots how the probability of regime transitions change with increasing intensity inside and outside the capital.

Figure 4 – The impact of resistance intensity on regime transitions, conditional on location



In terms of ‘statistical significance’ there is a significant, positive relationship between the size of protests in the capital (SCAD) and regime transitions, and the number of protest days (in unique locations) within the capital (ICEWS) and regime transitions, but not with increasing participation outside of the capital or protest days outside of the capital. The probability of regime transition when there is a large protest outside of the capital (more than 1 million people) but a small protest in the capital increases by roughly 40 percentage points from 2.5% to 43.4%

(with a confidently positive confidence interval of 11.4% - 75.4%) when protest in the capital is also large (1 million + people). Conversely, if there is a big protest in the capital (1 million +) and a small protest outside the probability increases by 7.7%, but with a confidence interval that spans from -18.1% to 33.3%, which suggest a good deal of uncertainty around inferring whether this is a 'significant' change. These results suggest that the probability of transition rises significantly with increased participation in the capital, but not necessarily with rising participation in the periphery. We see a similar relationship with the number of protest days in the capital, and the probability of transition with the ICEWS data. More days of protest in the capital are correlated with higher transition probabilities, although the confidence intervals are quite wide. It is only in the case of violent conflict that we see increases in the intensity of contention outside of the capital leading to significantly higher transition probabilities. The results are similar with when using country-fixed effects, cox proportional hazards regression and using the intensity of contention in the largest city.

Conclusions

This paper presents results from the first cross-country empirical examination of how the location of nonviolent contention affects the prospects for regime transitions. Analysis of events data of violent and nonviolent contention events suggested a close empirical link between the proximity of fighting in civil wars to the capital city and regime transitions and a weaker link between the proximity of nonviolent contention to the capital city and regime transitions. Regime transitions were especially likely when protests were large and they occurred in the capital. Conversely, intense fighting outside of the capital appears to have a stronger effect on regime transitions in violent conflicts. These results suggest that civil resistance works, in part, by exploiting the symbolism of participants to signal the dissent of both participants and non-participants (who may be similar but have lower risk tolerances). This opens the way to leveraging socio-spatial variations in perceived government strength to enhance the informativeness of protest events. Capital cities are a symbolic space associated with government strength, sovereignty, and often, economic and demographic power in a way that is largely stable across countries. The result of this study suggest that civil resistance is much more effective at

exploiting the representational value of this space than violent movements to generate regime transitions.

What these results do not mean is that protests outside of the capital (or the largest city) are ineffective – there are many ways in which protests in other cities, or in the countryside may also leverage symbolic spaces for effective resistance that simply cannot be covered in a paper of this length. Protests outside of the capital, or across multiple cities, may complement or even enhance the ability of protests in the capital to generate political change. This paper has also focused on a fairly narrow window of time – 1 month – and there are few cross-national analyses of what explains variation in the location of protest events. It could be the case, and probably is, that protests in the capital are only possible when spaces of resistance have been carved out elsewhere, perhaps even years prior, as is often attributed to the 2008 strikes in Egypt and the 2007 strikes in Sfax in Tunisia. These are all crucial questions for further research. What this paper does suggest is that part of the ‘power’ of civil resistance lies in its ability to draw upon the symbolic meaning of geographical spaces to project power. A march of a million people is a powerful force wherever it occurs, but when that march occurs on the footsteps of power, in front of the world’s cameras, the power of this march would appear to be multiplied many times over.

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Table 7 – Logistic regression estimates of proximity of contention to the capital and regime transitions

	Model 1 (GED)	Model 2 (SCAD)	Model 3 (ICEWS)	GED (FE)	SCAD (FE)	ICEWS (FE)
(Intercept)	-0.91 (2.09)	-5.67* (2.81)	-2.71 (2.23)	-427.14 (12541.47)	316497.26 (22902255.75)	-329.88 (8425.09)
Proximity to capital	-0.19*** (0.05)	-0.39** (0.12)	-0.26 (0.13)	-0.25*** (0.06)	-0.54*** (0.15)	-0.12 (0.08)
Infant Mortality	0.25 (0.21)	0.95** (0.32)	0.48 (0.26)	-1.88 (1.06)	-0.29 (1.53)	0.16 (0.91)
Population	-0.01 (0.16)	0.09 (0.19)	-0.15 (0.24)	0.05 (1.26)	-1.59 (1.87)	-3.75 (2.40)
Land Area	-0.05 (0.09)	-0.23 (0.13)	-0.15 (0.16)	NA	NA	NA
Army Size	-0.04 (0.10)	0.06 (0.13)	0.07 (0.17)	-0.05 (0.18)	0.21 (0.29)	0.68 (0.57)
Previous transitions	0.05 (0.04)	-1.07 (0.73)	-14.89 (893.29)	-0.10 (0.06)	-1.84* (0.91)	-20.16 (6702.94)
Democracy	-0.30 (0.37)	0.33 (0.38)	-0.36 (0.43)	-0.02 (0.46)	-0.38 (0.57)	-0.43 (0.52)
Armed Actors	0.71* (0.28)					
AIC	898.05	391.13	289.17	899.69	421.04	665.12
BIC	971.90	445.53	350.21	1293.55	742.53	1522.25
Log Likelihood	-437.03	-184.56	-133.59	-385.85	-145.52	-178.56
Deviance	874.05	369.13	267.17	771.69	291.04	357.12
Num. obs.	3477	1038	1898	3636	1110	2001

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 8 – Logistic regression estimates of contention intensity, location and regime transitions

	Model 1 (GED)	GED (FE)	Model 3 (SCAD)	SCAD (FE)	Model 4 (ICEWS)	ICEWS (FE)
(Intercept)	0.29 (2.04)	-338.74 (12541.72)	-10.71** (4.01)	310377.94 (23577442.73)	-1.72 (1.65)	-317.81 (8470.58)
Battle intensity in cap	0.21 (0.17)	0.15 (0.18)				
Battle intensity out cap	0.26** (0.09)	0.34** (0.11)				
Protest size in capital			0.74*** (0.16)	0.58*** (0.13)		
Protest size outside capital			0.07 (0.12)	0.16 (0.12)		
Event days in capital					0.15*** (0.04)	0.12* (0.05)
Event days outside capital					-0.21 (0.17)	-0.17 (0.18)
Events in cap	0.07* (0.03)	0.09* (0.03)	-0.01 (0.02)	0.02 (0.02)		
Events outside cap	0.01 (0.01)	-0.00 (0.01)				
Infant Mortality	0.08 (0.21)	-2.22* (1.09)	1.44** (0.48)	0.46 (1.57)	0.72*** (0.20)	0.06 (0.92)
Population	-0.13 (0.16)	-0.25 (1.32)	-0.00 (0.26)	-0.92 (1.86)	-0.41* (0.20)	-4.14 (2.42)
Land Area	-0.11 (0.09)	29.22 (29.65)	-0.16 (0.18)	-26815.39 (2036948.59)	-0.03 (0.12)	22.81 (14.44)
Army Size	0.01 (0.10)	0.02 (0.18)	0.08 (0.18)	0.22 (0.29)	0.26 (0.16)	0.71 (0.57)
Previous transitions	0.07 (0.04)	-0.12 (0.06)	-1.03 (0.78)	-2.04* (0.98)	-16.03 (864.75)	-20.26 (6559.96)
Democracy	-0.30 (0.36)	-0.08 (0.47)	0.12 (0.52)	-0.47 (0.59)	-0.23 (0.32)	-0.45 (0.52)
AIC	903.69	900.09	252.93	417.27	470.37	663.18

BIC	989.85	1312.40	322.16	753.60	536.96	1525.87
Log Likelihood	-437.85	-383.05	-112.46	-140.64	-223.19	-176.59
Deviance	875.69	766.09	224.93	281.27	446.37	353.18
Num. obs.	3477	3636	1038	1110	1898	2001

*** p < 0.001, ** p < 0.01, * p < 0.05

Endnotes

- ⁱ A seminal study is Buhaug and Gates; 'The Geography of Civil War'
- ⁱⁱ Buhaug et al, 'It's the Local Economy, Stupid', Buhaug and Rød, 'Local Determinants of African Civil Wars, 1970-2011'
- ⁱⁱⁱ Raleigh and Hegre, 'Population Size, Concentration and Civil War'
- ^{iv} Raleigh, 'Violence against civilians'
- ^v Buhaug et al, 'Geography, rebel capability, and the duration of civil conflict'
- ^{vi} Grieg, 'Rebels at the Gates'. The exception is when fighting rapidly approaches the capital.
- ^{vii} Greig et al, 'Win, Lose or Draw in the Fog of Civil War'. See also Quackenbush, 'Centres of Gravity and War Outcomes'
- ^{viii} Chenoweth and Stephan, *Why Civil Resistance Works*, Celestino and Gleditsch, 'Fresh Carnations or all Rose, no Thorn?', Chenoweth and Ulfelder, 'Can Structural Conditions Explain the Onset of Nonviolent Uprisings?'
- ^{ix} Schock, *Unarmed Insurrections*
- ^x See Tilly, 'Spaces of Contention'. See also, Martin and Miller, 'Space and Contentious Politics' and Zhao, 'Ecologies of Social Movements', Traugott, 'Capital Cities and Revolution'. Sewell Jr, 'Space in Contentious Politics'. Nichols et al, *Spaces of Contention*.
- ^{xi} Sewell Jr, 'Space in Contentious Politics'
- ^{xii} Chenoweth and Stephan, *Why Civil Resistance Works*
- ^{xiii} This is similar to Chenoweth and Stephan, *Why Civil Resistance Works*, but success can be thought of more broadly. Giugni, 'Was it worth the effort?'
- ^{xiv} Marshall, Gurr and Jagers, *PolityIV Project: Dataset User's Manual*, p. 30
- ^{xv} See Fearon, 'Rationalist explanations for war', Slantchev, 'The principle of convergence in wartime negotiations', Filson and Werner, 'A bargaining model of war and peace'. For an application to protest see Ginkel and Smith, 'So you say you want a revolution?'
- ^{xvi} This view of war was most famously articulated by Clausewitz, *On War*.
- ^{xvii} Reiter, 'Exploring the bargaining model of war'
- ^{xviii} Slantchev, 'The principle of convergence in wartime negotiations', Powell, 'Bargaining and learning while fighting'
- ^{xix} Chenoweth and Stephan, *Why Civil Resistance Works*, Sharp, *Waging Nonviolent Struggle*
- ^{xx} DeNardo, *Power in Numbers*
- ^{xxi} Chenoweth and Stephan, *Why Civil Resistance Works*. Lichbach, *The Rebel's Dilemma*
- ^{xxii} Chenoweth and Stephan, *Why Civil Resistance Works*
- ^{xxiii} Landau-Wells, 'Capital cities in civil wars', see also Clapham, *Africa and the international system* and Jackson, *Quasi-States: Sovereignty, International Relations and the Third World*
- ^{xxiv} Bates, *Markets and States in Tropical Africa*, Clapham, *Africa and the international system*; Herbst, *States and Power in Africa*
- ^{xxv} Gordon, 'Planning Twentieth Century Capital Cities'
- ^{xxvi} Kalyvas, 'The urban bias in studies of civil war'
- ^{xxvii} **Hall, 'Seven types of Capital City'**
- ^{xxviii} Landau Wells, 'Capital cities in civil wars'
- ^{xxix} Buhaug, 'Dude, where's my conflict?'
- ^{xxx} Greig, 'Rebels at the Gates'
- ^{xxxi} Exceptions might include strategic locations where the information contained in the outcome is enhanced.
- ^{xxxii} Dahl et al, 'Accounting for Numbers'
- ^{xxxiii} DeNardo, *Power in numbers*
- ^{xxxiv} Trauchott, 'Capital Cities and Revolution'
- ^{xxxv} Lohmann, 'The dynamics of information cascades'
- ^{xxxvi} Lohmann, 'The dynamics of information cascades'
- ^{xxxvii} Sutton et al, 'Explaining political jiu-jitsu'
- ^{xxxviii} Salehyan et al, 'Social conflict in Africa'
- ^{xxxix} Boschee, *ICEWS coded event data*
- ^{xl} Events of nonviolent contention were organized and spontaneous demonstrations, and limited and general strikes. Violent riots and armed attacks were removed.
- ^{xli} Sundberg and Melander, Introducing the UCDP Georeferenced Event Dataset

^{xlii} Marshall, Gurr and Jagers, *The PolityIV Project: Data User's Manual*

^{xliii} Hijmans et al, *geosphere*

^{xliv} A good example is the Egyptian Revolution

^{xlv} The results remain significant if missing observations are omitted from the analysis.

^{xlvi} Marshall, Gurr and Jagers, *Polity IV Project*. Democracies are countries scoring 6 or higher on a scale of -10 to +10.

^{xlvii} World Bank databank

^{xlviii} Carter and Signorino, 'Back to the future'

^{xlix} Imai et al, *Zelig*. Liefeld, *texreg*.

^l For the ICEWS data, a 'big' protest is one with an average intensity level of 5 or more.

^{li} Box-Steffensmier and Jones, *Event History Modelling*

^{lii} Very similar results are obtained if we restrict the sample to Latin America and Africa for violent conflicts as well.

These results were obtained by drawing 1000 simulated expected values in the Zelig package.

^{liii} In a non-democracy with the median infant mortality rate, and no previous transitions.