Territory and war

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Abstract
In the past four decades scholars have produced a large literature on the relationship between territory and war. What is clear is that territory has been and will continue to be a core issue in explaining the escalation and onset of war and that territory has peculiar features that impact whether and how a conflict evolves and ends, and the nature of the peace that follows. These dynamics have received significant consideration theoretically and empirically. Although research initially centered on interstate wars, focus broadened to include intrastate or civil wars. On the methodological side, scholarship has taken a quantitative shift. The article concludes that both theorizing and empirical testing have become increasingly sophisticated.

Keywords
bargaining, borders, conflict, enduring rivalries, escalation, indivisibility, interstate, intrastate, self-determination, termination, territory, war

Territory and war

When the Journal of Peace Research (JPR) was established 50 years ago, 25 armed conflicts were active in 17 locations (Gleditsch et al., 2002). Of these, three-quarters centered on combatants’ control over a specific territory. Given that the majority of conflicts in 1964 were fought over territorial control with possible secession at stake, one would expect the links between territory and war to have been incorporated into the peace research agenda by 1964. Yet it was not until 1972, seven years after JPR was established, that an article specifically related to territory and war was published: Johan Galtung (1972) analyzed the two Koreas and the ‘misfit’ between the separate territories. Not only is Galtung credited as the founder of the peace and conflict studies discipline and the Peace Research Institute Oslo (PRIO) in 1959, but JPR itself.

Since JPR was established, territory and war have been the subject of 36 articles published in JPR and 198 articles across another 21 leading journals.¹ Moreover, a number of important books have addressed the question of territory and war directly (Holsti, 1991; Siverson & Starr, 1991; ‘territory AND conflict’ yielded 650 results. However, many of the results were irrelevant. Moreover, as was to be expected, there was significant overlap in articles between the two searches. On the basis of these two searches, relevant articles from the following 21 leading journals were selected: American Journal of Political Science, American Political Science Review, Annual Review of Political Science, British Journal of Political Science, Comparative Political Studies, Conflict Management and Peace Science, GeoJournal, International Affairs, International Interactions, International Organization, International Security, International Studies Quarterly, International Studies Review, Journal of Conflict Resolution, Journal of Peace Research, Journal of Politics, Political Geography, Political Geography Quarterly, Proceedings of the National Academy of Sciences of the United States of America, Security Studies, and World Politics. Following these two searches in Web of Science, I used the same keywords to search for articles within these journals directly, which yielded several additional articles. As a final check, the bibliographies of all the selected articles were assessed to determine whether relevant articles containing such keywords as ‘borders’ were missed in the searches. This chain-referral sampling strategy yielded only a few more articles. An appendix with the full results, related articles, and associated graphics is available online at http://www.prio.no/jpr/datasets.

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As this accounting reveals, despite its delayed start, scholarship on territory and war has produced a large literature on many aspects of how we might think about the dynamics of peace, conflict, and war in the past and into the future. Moreover, this literature has made some important empirical, theoretical, and methodological advances. The rest of this article highlights some of the more significant contributions from each of these areas and concludes with thoughts about future directions.

Main empirical findings

Over the decades, social science scholarship has shown several empirical patterns with respect to war and territory. The results of this corpus of research clearly demonstrate that armed disputes over territory are a major source of the global distribution of violence and destruction, and this trend appears to be increasing over time.

Indeed, when states fight, they often tend to fight over territory (Kocs, 1995; Heldt, 1999; Hensel, 2000; Vasquez, 2001, 2004; Mitchell & Thyne, 2010; Mitchell & Thies, 2011). Territorial disputes produced some 65% of the dyadic wars fought from 1816 to 1945 and produced an even higher percentage – 72% – in the post-1945 period (Vasquez & Henehan, 2011: 184).

Territorial issues have a similar effect on conflict escalation. While escalation is measured in many different ways, Braithwaite & Lemke (2011) find a consistent influence of territory on escalatory processes regardless of how escalation is measured. Territorial interstate disputes are also more likely to lead to arms races (Senese, 2005; Rider, 2013), as well as the formation of politically relevant alliances (Gibler, 1996, 1997; Sprecher, 2004; Senese, 2005).

Moreover, territory not only has an independent effect on escalation and the outbreak of interstate war, but also interacts with other factors. Vasquez (2004)
finds that outside allies, enduring rivalries, and arms races are much more likely to lead to war in territorial disputes than in non-territorial disputes. A study by Dreyer (2010) indicates that territorial issues become especially conflictual when linked to other issues. The role of territory differs across contexts. Lektzian, Prins & Souva (2010) find that rather than being contentious by itself, territory is contentious in dyadic contexts characterized by rivalry.

Civil wars are also frequently fought over territory. About half of all civil wars fought since 1990 were the result of ethnic groups seeking greater autonomy or statehood. Between 1940 and 2000, 98% of civil wars fought for territorial control involved identity groups and 73% of all identity-based civil wars centered on control over territory (Toft, 2006).

There is an important connection between territorial ‘homeland’ and the onset of war. People and states behave differently in conflicts over their homeland than in conflicts over other sorts of land (Toft, 2003). Several determinants of such intrastate territorial conflicts have been identified. Territorial insurgencies are more frequent in poor countries with what scholars have called low ‘state capacity’, whereas non-territorial conflicts tend to occur in countries with intermediate levels of development (rich countries are free of internal violence) (De la Calle & Sánchez-Cuenc, 2012). The concentration of different groups within a state also affects the likelihood of territorial wars. Regionally concentrated groups are much more likely to take up arms against the government than those dispersed throughout the territory (Jenne, Saideman & Lowe, 2007; Weidmann, 2009; Weidmann, Rød & Cederman, 2010), especially if that territory is deemed to be a homeland (Toft, 2002, 2003). Furthermore, bordering kin can come to the aid of fellow co-ethnics (Roy, 1997; Saideman, 1997).

Finally, one of the strongest, most consistent findings is that wars over territory tend to last longer and be more difficult to resolve than wars fought over other issues. As a result of being harder to resolve, territorial disputes often result in enduring rivalries (Goertz & Diehl, 1992, 1993; Fuhrmann & Tir, 2009; Dreyer, 2012). Moreover, territorial rivalries tend to be more enduring than rivalries rooted in ideological or regime-related conflict (Miller & Gibler, 2011; Dreyer, 2012). It has been shown that one of the difficulties of resolving territorial wars is that as interstate territorial conflict becomes more entrenched, the value of the territory becomes more symbolic (Hassner, 2006), leading political agents to construct symbolic narratives that affect the nature of the conflict parties’ claims to territory (Goddard, 2006; Goddard, Pressman & Hassner, 2008). Both factors make territorial conflicts more indivisible.

What these empirical findings reveal is that leaders are clearly more willing to risk escalation over territorial issues than over other types of political grievances. There appears to be something unique about territory and its connection to conflict escalation and war. The question is: what mechanisms and motivations drive humans to fight and die over territory?

**Main theories and theoretical advances**

Several theories have been developed over the years that link territory to the conflict escalation and the onset of war.

**Strategic and intrinsic worth**

The simplest reason for war over territory might be the strategic worth of the territory itself, a value that does not vary among actors, but extends directly from its geostrategic position and material value. According to this theory, which might be thought of as the ‘geostrategy school’ (Mackinder, 1904; Spykman, 1944; Sprout & Sprout, 1968), strategic worth describes the security value of a given piece of territory. Is the territory astride major routes of communication? Does it share an interstate border? Does it contain natural barriers to invasion from other states, especially historical enemies?

While Mackinder and Spykman spent much of their energy on identifying key locations, Harold and Margaret Sprout explored how geography informs actors’ interests and how it conditions their behavior. Indeed this is what traditional and contemporary international relations theory leads us to expect. And it has found some empirical support. Paul Huth, for example, found that a powerful predictor of territorial disputes among states was the desire to control strategically located territory (Huth, 1996), though he also found that disputes over strategic territory make up only a small percentage of cases. Furthermore, Huth found that the presence of a bordering minority with linguistic or cultural ties to a challenger state was not a primary cause of territorial disputes between states in the post-World War II period, a finding that was later substantiated (Huth, 1996; Toft & Saideman, 2010). More recently, Carter (2010) argues and finds that ‘when territory is strategically located, target states are more likely to consolidate their position, while challenger states are less likely to escalate militarily’. According to Carter, the control over a piece of territory with strategic value has an impact on the balance of military capabilities between
disputants. Since the target of territorial claims usually controls the disputed territory, the target state can improve its military strength just by consolidating this strategically located territory. This, in turn, negatively affects the prospects for the challenger state to gain a victory, thus making escalation less likely.

Given that location is often key, scholars have spent a lot of energy examining borders. The most extensive testing of borders and location came in the 1970s with the publication of Harvey Starr and Benjamin Most’s articles testing whether the amount of shared borders and proximity of states to one another contribute to a state’s propensity for war (Starr & Most, 1976, 1978; Siverson & Starr, 1990; Starr, 2002; Starr & Thomas, 2005). These articles conceptualize as constraints on the interaction opportunities of states. It follows from this conceptualization that bordering states are more likely to engage in war simply because of the ease of interaction. Wars occur only when states can reach each other.

Instead of emphasizing opportunity, Bremer (1992) highlighted various causal mechanisms that can explain his finding that contiguity is a strong predictor of the war onset. Vasquez (1995) also added to the findings on contiguity and war onset by explaining that wars are not only concentrated among neighbors because this provides an opportunity for war, but also because territoriality, under the right circumstances, provides a motivation for war. More specifically, he argued that although non-neighbors may have ideological, economic, or political disagreements, neighboring countries are much more likely to experience armed conflict because territorial issues have greater probability of escalating than these other sources of conflict (Vasquez, 1995). Recent empirical research has established the effects of territory and contiguity on war onset independently. These studies suggest that territory is a more consistent determinant of conflict than contiguity (Vasquez, 2001; Senese, 2005). Senese (2005) points out that since nation-states comprise well-defined areas of land, territorial disputes may become a foundational threat to a state’s security. Consequently, state leaders are more willing to resort to the use of military force when the issue at stake concerns territory. Linking territory to the willingness of states to go to war is a major theoretical advancement, since the link makes it possible to identify specific factors that motivate states to enter into conflict, rather than emphasizing characteristics that are relatively constant such as ample opportunity to start a war because of proximity (Toft, 2003; Senese, 2005).

In distinction to strategic worth, intrinsic worth arguments focus on the wealth or resources that inhere in a territory. Does it contain infrastructure or industry of value? Does it have space for expanded population or arable land that could support an expanded population? Does it contain a concentration of mineral or natural resources? If the loss of contested territory threatens to undermine the security or economic survival of an actor, then that actor may resort to force. The theoretical relevance of the intrinsic value argument is confirmed in a study by Hensel (2001), in which he reports that action over territorial claims is most likely when more valuable territory is at stake.

With regard to conflicts within states, Sorens (2011) argues that, on one hand, local mineral abundance is likely to lead to secessionist objectives, since total or greater control over the contested territory would allow the secessionist movement to enjoy a larger share of the benefits flowing from mineral revenues. On the other hand, mineral abundance provides the government with more incentives to exercise greater control over these areas, which has a negative impact on the rebel parties’ opportunity structure to engage in armed violence. These two contradicting mechanisms may explain why Lujala et al. (2007) find no significant relationship between oil and gas located in conflict areas and the length of territorial conflicts. Similarly, based on evidence from 13 civil wars, Ross (2004) finds that lootable resources generally do not increase the likelihood of conflict outbreak, but rather prolong conflicts once underway.

Because of the tangible nature of territory and its divisible properties, conflict is not seen as inevitable, and in fact, might be avoided if an equitable division could be arranged (Rosenau, 1966, 1967). This corresponds to the rationalist logic set out by Fearon (1995) that conflict parties usually can agree on a division of the issues over which they compete. The argument that territory can be divided, thus making territorial wars avoidable, contains a powerful logic and has been found to explain some variation in outcomes. Consider the work of Gibler on borders. According to Gibler, a key reason democracies do not fight each other is because they have stable borders between them (Gibler, 2007; Miller & Gibler, 2011). Gibler argues that states commonly resolve their most dangerous disputes prior to becoming democracies, including territorial issues. As a result, conflicts involving democracies are usually of less salience and therefore easier to resolve (Miller & Gibler, 2011). This is in line with the finding that in territorial disputes issue-related variables matter more than regime type variables in explaining whether these disputes will turn violent (James, Park & Choi, 2006). Moreover, it was the settlement of borders that enabled states to become democracies not vice
versa (Gibler, 2007). Although other studies support Gibler’s conjectures (Kacowicz, 1995; Mitchell & Prins, 1999; Miller & Gibler, 2011; Owsiak, 2012), not all evidence supports Gibler’s argument that resolved territorial issues rather than democracy by itself explains the absence of armed conflict between democracies. For instance, Huth & Allee (2002) find strong support for democratic dyads being less conflictual, controlling for many other factors.

That territory can be divided, thus making territorial wars avoidable, is also reflected in the numerous studies on peaceful resolution of territorial disputes. Several studies have found that negotiations are more likely when disputes concern territory; yet, the findings in the same studies suggest that military strategies are also more likely to be employed in territorial disputes (Hensel, 2001; Hensel et al., 2008; Mitchell & Thies, 2011). Nonetheless, it seems that states have strong incentives to peacefully resolve territorial disputes, since allowing these disputes to remain unresolved can carry high economic and military costs (Simmons, 2002, 2005). This also explains why states are willing to commit to arbitration in order to resolve territorial disputes. Arbitration is an option often preferred by political leaders from democratic states, since, compared with bilateral negotiations, arbitration better shields political leaders from domestic criticism (Huth, Croco & Appel, 2011).

A number of factors with a positive impact on the peaceful resolution of territorial disputes have been identified. Huth, Croco & Appel (2011, 2012) find that international law increases the prospects for the peaceful resolution of territorial disputes when relevant legal principles justify the resolution of the dispute in favor of one state.

**Symbolic worth**

However, territory may not be only a material, tangible good, but also of intangible and symbolic value. Although noted by Rosenau, broader theorizing and testing of this argument came only in the early 1980s when John Vasquez engaged a ‘hunch’ that territory’s value might be intangible, and therefore more prone to conflict escalation and war (Vasquez, 1983, 1995).

This research was followed by other compelling takes on the potential unique role of territory (Diehl & Goertz, 1988, 1991; Diehl, 1992; Forsberg, 1992). The authors find that territorial changes that are regarded as more ‘important’ are most likely to lead to violence.

What is important to point out is that this research considers the ‘relational’ value of the territory in which the actors attach some sort of historical or identity-value to it, and that this value varies across actors. This is a powerful insight, but when it came to operationalization, the research faltered. The indicators the scholars used in their model were all ‘materially based’. Nevertheless, the contribution was significant for calling attention to different meanings of territory and how one might think about testing those different meanings statistically.

This notion of the perceived meaning or value of territory has emerged as a dominant theme in the literature that addresses bargaining failures and war, with dispute over territory often featuring centrally.

**Bargaining and indivisibility**

James Fearon (1995) argues that commitment and information problems, although acknowledged as theoretically possible, account for much violence in the real world, including that over territory, and dismisses the notion that indivisible issues account for much. His model assumes that the issue at stake can always be made perfectly divisible (by, for example, allowing two princes to alternate stints on an otherwise single and indivisible throne). Although numerous territorial disputes have been resolved through peaceful means, the numerous territorial disputes that have turned violent contradict the logic that division of territory is always possible. In general, whether negotiations can resolve territorial disputes seems to depend on the value of the territory. Another reason why Fearon does not regard the issue of indivisibility as an analytically distinct path to war is that some possible solutions to issue indivisibility are infeasible due to commitment problems (for instance, two princes alternating stints on a throne might be infeasible, since the prince that sits on the throne first will have incentives to hold on to the throne, because of a concern the other prince will do the same). For example, conflict parties both claiming a piece of territory with strategic value may resort to violence because of a commitment problem rather than the indivisible nature of this territory (Carter, 2010).

In most cases of disputes over territory, however, especially where an identical location is crucial to both opponents, such as Jerusalem, the prize may simply not be realistically divisible. With regard to the Palestinian–Israeli dispute, Kaufman (2009) notes that emotive symbols and narratives concerning territorial indivisibility enabled hardline leaders on both sides to block compromises and escalate conflict. This is in line with an argument made by Hassner (2003) that conflicts over sacred spaces are indivisible. Besides emphasizing the symbolic
value of territory, evolutionary theory has been used as an explanation for why humans are so concerned with preserving territorial integrity (Johnson & Toft, forthcoming 2013/14). Statistical evidence seems to confirm the argument that there is something special about territory. Hensel & Mitchell (2005) find that disputes over a piece of territory with high intangible salience are significantly more likely to turn into wars. This suggests that intangible issues are often indivisible. Indeed, even allowing one side access to some revered resource may represent a defeat for the other (Toft, 2006).

While theorizing on territorial indivisibility was first conducted by scholars studying intrastate conflicts (Toft, 2003), several recent works also address this issue in relation to interstate wars. Hassner (2006) observes that many territorial conflicts between states last longer than the material benefits linked to the piece of land would justify. He explains this puzzle by the fact that the symbolic value of disputed territory grows over time, eventually leading to indivisibility. Territory invested with nationalist, religious, ethnic, and other emotional value makes partition and redefinition of the disputed territory, as well as compensation for it, more difficult to implement.

Furthermore, without actually addressing the issue of indivisible territory, several authors have made the case that since territory is loaded with a number of emotional and normative elements, territorial disputes between states should be explained by adopting social and psychological perspectives, and by referring to subjective conceptions of justice and international norms (Barzilai & Peleg, 1994; Forsberg, 1996).

This indivisibility of territory along with the interplay of domestic and international politics might help to explain why the number of states in the interstate system has quadrupled in the last 100 years. After World War I, and especially after World War II, the rights of national and ethnic minorities became more privileged in international law, opposing self-determination of ethnic groups against the territorial integrity of states. Such conflicts have been pushed to the center of global politics, leading to the demise of once formidable empires. Although self-determination movements tend to be defensive, territorially confined, and limited in scope, the dynamics of bargaining and the nature of stakes compel patron states and outside actors to get involved. Consequently, national self-determination and the question of secession are often an international problem as domestic actors vie for control over territory (Saideman, 1997).

Just consider the end of the Cold War and the disintegration of the Soviet Union and Yugoslavia, which led to the creation of almost two dozen new states. This transformational shift in the global balance of power resulted from groups that advanced claims based on the legitimacy of national self-determination over pieces of territory (Ayres, 2000). These claims ranged from modestly increased autonomy (economic or political) to secession and independent statehood.

Since 1945, the Minorities at Risk data project, for instance, has identified at least 283 groups at political risk for discrimination and repression, many of which have engaged in militant activism in order to advance claims of self-determination. Historically, most groups that have engaged in secessionist war have failed to achieve their objectives. Since 1990 about half of all civil wars resulted from ethnic groups seeking greater autonomy or statehood, and a number of conflicts remain violent or unresolved.

The problem is perhaps more common than uncommon the world over and spans all kinds of conflict. Robert Pape argues that the principal impetus behind all major suicide campaigns is not religion per se, but rather territorial defense against foreign invaders and occupying powers (Pape, 2005). Osama bin Laden himself referenced the foreign occupation of Muslim lands as a primary basis for his holy war against the West, calling in his February 1998 fatwa for the killing of US and allied military personnel and civilians ‘in order to liberate the al-Aqsa Mosque and the holy mosque from their grip, and in order for their armies to move out of all the lands of Islam’ (Simon & Benjamin, 2000: 68).

**States and reputation**

The reason this is so is because territory is vital to all sides, though in different and not necessarily mutually exclusive ways. For ethnic and religious groups, territory is invariably tied to the group’s identity. Control over homeland means a secure collective identity. For states, control over territory is directly linked to physical survival: all else equal, more territory means more physical security from conquest or from coercion. States are likely to view an ethnic group’s bid to control territory – even objectively worthless or costly territory – as a threat whenever they fear precedent-setting (Toft, 2002, 2003; Walter, 2003, 2006, 2009).

That territory is indivisible due to states’ concerns for their reputation has also been put forward as an explanation of interstate territorial wars. According to Wiegand (2011), states not only use force to demonstrate their resolve to an opposing state, but to credibly signal their resolve to other states. The willingness to use force sends a costly signal to all the adversaries of a state, mitigating
the incomplete information these adversaries have about a state’s resolve. In essence, the outbreak of a militarized territorial dispute transfers reputation for resolve from one dispute to other disputes, making the outbreak of other militarized territorial disputes less likely. Furthermore, Atzili & Pearlman (2012) explain how states have incentives to use threats and/or punishments against another state to coerce it to prevent non-state actors from conducting attacks from its territory, a dynamic Atzili describes as triadic deterrence.

**Territory as opportunity**
This brings us to the conditions under which conflict is likely to happen. Again, we can turn to territory for an answer. The symbolic and identity attachment aspects of territory have already been addressed. But there is another crucial element: the territorial disposition of the challenging group. Research clearly shows that where groups live will influence whether they come to blows with the state. The location of rebels with the objective to secede is likely to be at a distance from the capital, whereas rebel groups taking up arms over state governance are more likely to be near to the capital (Buhaug & Gates, 2002; Buhaug & Rød, 2006; Cederman, Buhaug & Rød, 2009). Since rebel groups with secessionist demands aim to create a new state, these rebel groups are not likely to take up arms in the territory that is proximate to a capital holding the seat of state power. Most secessionist movements emerge in peripheral regions and a separatist war is more likely to take place in regions of states’ borders than nearer to states’ capitals. Location thus geographically defines the characteristics of a war.

Moreover, since the projection of state power tends to decline with increasing distance from the capital, the location of armed conflicts has an impact on the capabilities, limitations, and vulnerabilities of armed forces. One of the major advantages rebel parties have compared to governments is that they can choose the area of operation. Rebel parties aim to minimize the possible damage inflicted by government forces, which is why they are more likely to take up arms in remote areas where the balance of power is less in favor of the government. Fuhrmann & Tir (2009) identify distance as one of the tactical advantages of rebel groups involved in territorial disputes, making territorial conflicts more likely to evolve into enduring internal rivalries than other types of domestic conflict.

Whether rebel groups are concentrated within or dispersed across a territory will also influence the likelihood of war. Groups that are regionally concentrated are much more likely to mobilize for self-determination and engage in violence than those that are dispersed throughout the territory of the state or live largely in urbanized areas (Toft, 2002, 2003; Jenne, Saideman & Lowe, 2007; Weidmann, 2009; Weidmann, Rød & Cederman, 2010). In fact, it turns out that regional concentration of a group within a circumscribed territory serves as practically a necessary condition for a self-determination movement and secessionist war to emerge (Toft, 2003).

Why is this? It appears to be the case that group concentration (1) makes political organization easier over a compact territory, thus overcoming the collective action problem; (2) facilitates military operations; and (3) defines the territory over which claims can be made (Toft, 2003; Weidmann, 2009).

We know from the insurgency literature that foreign borders provide needed sanctuary for rebels challenging states by allowing access to goods and services that might otherwise be inaccessible (Arreguín-Toft, 2005). Indeed, Salehyan highlights that rebel parties can evade the power of the state in several ways, but one particularly effective way is to set up safe havens in a neighboring country because state strength is limited by international boundaries. This makes it possible for rebel parties to mobilize and sustain their forces, thus making rebellions feasible (Salehyan, 2007, 2008, 2009). In addition, neighboring states and ethnic kin living across the border might support groups seeking self-determination (Brubaker, 1996; Jenne, 2006; Cederman et al., 2013). To date, most of the evidence suggests that decisions to support self-determination movements are driven by politics at home rather than the plight of the group, especially when ethnic ties are involved (Saideman, 1997; Saideman & Ayres, 2008).

While there is a growing body of research on the impact of external support on the onset and resolution of armed conflicts, further research is needed with regard to what causes some external states to support self-determination beyond their borders. There is an assumption of a status quo bias among states when it comes to borders, and given this bias, they are expected to show restraint and not support secessionists. The reason is that they too are vulnerable to secessionists (most states in the world are multi-ethnic) and therefore would not want to weaken the norm of inviolate territorial borders. Although this logic is sound, the behavior of states consistently undermines it. Time and again, states with their own secessionists have supported secessionists elsewhere. The most obvious case is Russia, which has been fighting secessionist Chechens for two decades
any data on territorial conflicts per se, it gave rise to a war. Although the original COW project did not collect to systematically accumulate scientific knowledge about territory and war is the Correlates of War (COW) Project. Founded in 1963 by J. David Singer, a political scientist at the University of Michigan, it was designed to systematically accumulate scientific knowledge about territory and war across time and space. Initially the analyses were largely on interstate wars. There seems to have been a sense that interstate wars were comparable while civil wars were idiosyncratic and therefore not comparable. This view changed as datasets emerged allowing for a comparison of substate violence across time and space. Now scholars can undertake systematic comparison of the factors that influence war onset and termination across a large number of cases and test for a whole host of potential causes across time and space.

Perhaps the most significant dataset used to analyze territory and war is the Correlates of War (COW) Project. Founded in 1963 by J. David Singer, a political scientist at the University of Michigan, it was designed to systematically accumulate scientific knowledge about war. Although the original COW project did not collect any data on territorial conflicts per se, it gave rise to a number of other important datasets that did code whether the issue at stake involved territory. The most well-known dataset within the COW project is the Militarized Interstate Dispute (MID) dataset that is used to study the causes of interstate war and includes a variable that indicates whether the issue at stake involved territory (Jones, Bremer & Singer, 1996). Another dataset within the COW project is the territorial change dataset, developed by Tir et al. (1998), which identifies all territorial changes involving at least one nation-state for the period 1816–2008. Finally, the Issue Correlates of War (ICOW) project was started in 1997 by Paul R. Hensel, then at the Political Science department at Florida State University and now at the University of North Texas, to generate systematic data on a variety of different types of issues dividing nation-states. Rather than focusing on armed violence, ICOW thus focuses on the underlying issues of interstate disputes, while Huth’s (1996) and Huth & Allee’s (2002) datasets were tied directly to territorial disputes.

Huth developed his 1996 dataset to study territorial interstate disputes rather than militarized interstate disputes. This was an important advance in the study of territory and war as it makes it possible to study the factors that provoke leaders of states to decide to pursue territorial goals by diplomatic or military means. An additional advantage of Huth’s dataset is that it allows researchers to control for the potential problem of sampling bias when they study militarized disputes. A telling example in this regard is the use of Huth’s data by Senese & Vasquez (2003). Using both Huth’s dataset and COW data, Senese & Vasquez (2003) mitigate the sample bias problem by using a two-stage estimation model to examine whether the presence of territorial claims affects the relationship between territorial militarized disputes and war. This allowed Senese & Vasquez to conclude that territorial militarized disputes increase the probability of war, even while controlling for the effect of territorial claims on the onset of these disputes.

Although COW contributed much to the study of territory and war, much of the gain was on understanding the dynamics of interstate wars. In fact, COW was biased against civil wars, especially those deemed ethnic, that is, those involving territory. Nevertheless, COW emerged as critical to the study of civil wars with the publication of Roy Licklider’s (1995) ‘The consequences of negotiated settlements in civil wars, 1945–1993’. Licklider accomplished two important tasks. First, by publishing in the American Political Science Review (APSR), the flagship journal of the political science discipline, he helped bring the study of civil wars into the

![Figure 2. Number of journal articles that addressed territory and the causes, conduct, or resolution of war, 1964–2012](image)
mainstream. Second, although he presented only a rudimentary dataset of civil wars – based on COW – Licklider divided them into two types, distinguishing between identity-based and non-identity-based civil wars. He then presented some preliminary findings about the differences between the two. He not only showed that civil wars could be systematically and statistically compared in insightful ways, but his separation of civil wars into two types appealed to scholars who were witnessing the outbreak of ethnic violence in places that were supposed to have been immune, and more importantly, suggested there were useful – even crucial – generalizations that could emerge from a systematic comparison of civil wars across time and space.

Two additional crucial datasets must be mentioned here. The first is the Minorities at Risk dataset compiled by Ted Robert Gurr and James Scarritt at the University of Maryland in the late 1980s, findings of which were first published in the 1993 *Minorities at Risk* volume (Gurr, 1993). This dataset allowed scholars to examine and weigh political, economic, cultural, and other factors bound up with the question of ethnic and identity issues in substate violence, including factors related to territory and the geographical disposition of groups within states.

Finally, the UCDP developed out of the States in Armed Conflict report series, which began in the 1970s. The UCDP collects data broadly on armed conflicts (those resulting in at least 25 battle-related deaths), at both the intrastate and interstate levels. The data have been published annually since 1988 in the SIPRI yearbook, and since 1993, a list of all armed conflicts appears annually in *JPR*.

As follows from Table I, of the 78 articles from *JPR* and the other 21 leading journals that address territory and interstate war and employ quantitative methods, exactly half, namely 39, used the COW dataset. Another 16 articles relied on Huth’s (1996) and Huth & Allee’s (2002) datasets, and 10 articles used ICOW. The COW dataset has thus been the most frequently used dataset to study interstate territorial wars.

The use of datasets in the study of intrastate conflicts is more diverse. The UCDP and MAR are the most frequently used, but are both used in only 7 out of the 38 quantitative articles on territory and intrastate armed conflict. The remaining 27 articles examining territorial intrastate conflicts used a different data source; but among these different data sources, no single dataset was used frequently.

More recently, several new datasets have been developed and are particularly promising in terms of the use of Geographic Information Systems (GIS), which has allowed for a more refined assessment of how location and aspects of geography – borders, distance, terrain, and settlements – impact war and its spread from one state or region to another.

Initially GIS was used to study borders. In 2002, Starr introduced a new GIS dataset based on the 1992 Digital Chart of the World, including 301 contiguous land borders. This dataset makes it possible to go beyond the dichotomous view of contiguous land borders by measuring borders in terms of ease of interaction (opportunity) and salience/importance (willingness). Analyses on the basis of this dataset suggest that the ‘nature’ of contiguous borders matters in relation to the outbreak of territorial wars, thus highlighting how adversarial proximity by itself is not a sufficient explanatory variable of territorial disputes (Starr, 2002; Starr & Thomas, 2005).

In yet another application of GIS data, Gleditsch & Ward (2001) measure the minimum distance for pairs of polities in the international system within 950 km of each other from 1875 to the present. This dataset remedies some of the shortcomings of other empirical data such as the categorical data on distance that treat proximity as an either/or issue and do not permit identifying the degree of proximity among states.

GIS has also been used to produce datasets to study intrastate conflicts. Disaggregating the country by using grid cells as the units of observation makes it possible to go beyond country-level approximations of local phenomena (Buhaug & Red, 2006). The use of GIS has been particularly fruitful with regard to the geo-referencing of ethnic groups with the Ethnic Power Relations (EPR) dataset, which identifies all politically relevant ethnic groups and codes their access to state power. Crucially, however, the

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4 Although COW provided some data on civil wars, even cursory familiarity with the data and with the period in which it was collected and published makes it clear that civil wars were of marginal importance (Small & Singer, 1982).
dataset goes beyond an exclusive focus on minorities, by employing GIS as a way to model ethnic center–periphery dyads that confront governments with excluded groups. Evidence based on this dataset suggests that the conflict probability of marginalized groups increases with the demographic power balance compared with the group(s) in power.

Finally, arguably the most comprehensive public collection of political violence data to date is the ACLED (Armed Conflict Location and Event Dataset). ACLED contains information on the specific dates and locations of political violence, the types of event, the groups involved, fatalities, and changes in territorial control. As of early 2013, ACLED has recorded over 75,000 individual events. ACLED data suggest that, on average, conflict covers 15% of a state’s territory, but almost half of a state can be directly affected by internal wars (Raleigh et al., 2010). Yet, it should be pointed out that an important limitation of ACLED is that it is restricted to Africa.

**Conclusion**

We have always suspected that territory and borders mattered. Both logically and empirically these arguments have been long supported. We had good working theories explaining how territory mattered, and after the 1990s a range of technologies, carefully employed by a succession of researchers, have been able to add empirical support to these theories, in much the same way that the science of genetics was able to add support to Charles Darwin’s theory of evolution.

That said, there remains a great deal more work to do on the links between territory and armed conflict. What is clear is that as scholarship has progressed over the past four decades, so has our understanding of territory. No longer does research simply address borders, neighbors, and physical manifestations surrounding territory, but also the symbolic dimensions and how people, societies, states, and nations relate to territory and then how they might come to blows over that territory. Theorizing has become more sophisticated on this front, as has the empirical testing.

In terms of empirical testing, perhaps the most exciting development is the availability of new methods and data for testing our insights and hunches. For example, a good deal of research has already been published on whether violence is contagious or containable by examining the spatial connections between locations of violence and nonviolence across a given territory (Gleditsch & Weidmann, 2012; O’Loughlin et al., 2012; Toft & Zhukov, 2012; Zammit-Mangion et al., 2012; Zhukov, 2012; Weidmann & Salehyan, 2013). As more data become available and the use of computer programs becomes more sophisticated, we will gain a better understanding of the flow of violence itself over territory.

**Replication data**

The data underlying the figures and table in the article as well as an online appendix can be found at http://www.prio.no/jpr/datasets.

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**References**


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