Identifying and Testing Logics of Regional War Diffusion

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August 20, 2012

Abstract

Why does violent conflict tend to cluster in certain regions of the world? IR scholars are increasingly interested in the diffusion of war, with recent work identifying a number of mechanisms by which war might spread, for example when spillover effects from civil wars generate disputes between the country experiencing the civil war and its neighbor. I identify a logical mechanism whereby the existence of a war can make war between two actors who are not involved in the ongoing conflict more likely. Specifically, I argue that in the context of balance of power politics, one country’s involvement in war leaves its logical allies temporarily vulnerable, presenting their opponents with a window of opportunity to achieve a favorable resolution to an existing disagreement. Because non-state actors are capable of forming alliances, this argument can apply to both interstate and civil conflict, although for the time being I test it on interstate relations. Consistent with this argument countries are more likely to be targeted in a new MID when their alliance partner is at war and hence unable to provide as effective assistance. I find a similar effect when using “checkerboard” alliances in lieu of formal alliances. This finding suggests that war diffusion can result in the emergence of new conflicts that are unconnected to ongoing wars, in turn providing a potential explanation for the existence of regions of endemic conflict.

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1 Introduction

In the modern world, war is rare and peace is the norm; indeed, in many regions of the world conflicts within and between countries are almost unthinkable. This observation obscures important variation, however. While most regions are peaceful, a few experience repeated wars, both overlapping and parallel. Thus, the Middle East today is home to a high-profile civil war in Syria, a low-intensity but ongoing internationalized civil war in Iraq (springing from an interstate war), intense interstate rivalries involving Iran that threaten to develop into war, an ongoing and increasingly complex internal conflict in Israel/Palestine, a low-level but long-term internationalized conflict in Lebanon, a low-level civil war in Turkey, intermittent terrorist attacks by groups professing affiliation to al Qaeda, ongoing violent protests against several other authoritarian regimes, and a number of latent internal conflicts in other countries that could conceivably escalate in the future. Importantly, these conflicts in practice are neither wholly connected nor wholly independent: unlike the World Wars, one cannot easily subsume the various localized conflicts into one overarching narrative, but at the same time to ignore their interconnections would be to miss a significant component of the strategic landscape for the actors involved. Thus, for example, the renewal of PKK violence in Turkey in the middle of the past decade was obviously connected to developments in Iraq, even if the core PKK political demands focus entirely on Turkish domestic politics.

These links between conflicts seem to matter. Turkish involvement complicated attempts to organize a negotiated solution to the Iraq imbroglio, while outside assistance to the Palestinians has facilitated their violent opposition to Israeli occupation. Broadly speaking, it is a reasonable guess that the surrounding violence has both increased the probability that potential conflicts in the region become actual and complicated the ability of participants to bring ongoing fighting to a close. From this perspective, then, the Middle East today might be termed a regional system of violence, in which positive feedback helps to ensure that the region far more closely approximates Europe at the time of the Thirty Years War than Europe today.

Does war actually beget war? If so, how? In other words, given actors A, B, C, and D, are there circumstances in which a war between A and B increases the probability of a (nominally indepen-
dent) war between C and D? The existence of such sorts of links would have important implications for both scholars and policymakers. If war between two actors in a region makes violence elsewhere in the region more likely, then it is possible that war could become self-reinforcing, as each new conflict in turn contributes to the outbreak of war elsewhere in the region. The result then could be a violence trap that is extremely difficult to escape. Most studies of violent conflict assume away the possibility of these sorts of links, while the relatively few studies that have examined spatial diffusion of conflict have frequently been more interested in its implications for statistical analysis than in the process generating spatial diffusion. It is thus important that we seriously consider the possibility that war begets war, creating regions of endemic and interconnected violence.

In this paper, I argue that war can in fact beget war. While several plausible mechanisms exist whereby conflict between two actors might increase the probability of conflict between two entirely separate actors, I focus in particular on a window of opportunity logic that is inherent, if little recognized, in balance of power theory. Specifically, I argue that precisely because external alliances can be useful in deterring aggression, the involvement of one’s allies in a separate war leaves one vulnerable to attack, and gives opponents the incentive to take advantage of the temporary window of opportunity that the ally’s war entails. This argument, moreover, applies not just to interstate relations but also to non-state actors, with the added complication that war creates the environment in which non-state actors might emerge. From this perspective, initial wars create a setting in which additional conflicts might begin, which in turn may beget further violence, potentially creating a self-reinforcing regional cycle of conflict.

I test this argument statistically, examining the effect that a putative ally’s involvement in war has on the probability that a country will end up in a different conflict. Using both formal alliance ties and the known predisposition of countries to form “checkerboard” alliances in which two states that do not share a border cooperate against a third country that both border, I find that larger windows of opportunity arising from the ally’s involvement in war are associated with a significantly higher probability that a country is targeted in a dispute. This finding suggests that war really does beget war according to a window of opportunity logic.

The remainder of this paper builds on this argument. I first review what insights the existing
literature can provide about the regional diffusion of conflict. The next section develops my theoretical argument, explaining the logic of windows of opportunity within a balance of power framework and expanding the argument to the discussion of intrastate politics and non-state actors. The third section introduces the data used to test my argument and presents the results from statistical tests. I conclude with a review of the argument and findings and a discussion of implications for future research.

2 Existing Arguments

There is by now a significant literature examining the spatial diffusion of conflict. Some early work, especially in the more quantitative literature, treated spatial diffusion as a nuisance that complicated efforts to accurately identify relationships among specific variables, or focused on demonstrating the existence of spatial dependence without seriously theorizing its source (e.g. Davis, Duncan & Siverson 1978, Faber, Houweling & Siccama 1984, Houweling & Siccama 1985, O’Laughlin & Anselin 1991). Other studies, however, were more theoretically motivated. In a series of studies, Most and Starr (1980, 1990) explored a range of logics of international war diffusion, focusing primarily on the reasons why ongoing conflicts expand. Along similar lines, Siverson & Starr (1991) found that alliance membership and shared borders predicted intervention in ongoing conflicts. Levy (1982), in a survey of great power conflict over almost five centuries, highlights a wide range of reasons why conflict might either beget or discourage further conflict, both in space and in time, and finds limited evidence of spatial diffusion in the outbreak of conflicts, while observing no evidence of temporal diffusion consistent with a war-weariness hypothesis. Gleditsch (2002) demonstrates the significance of spatial dependence for conflict, along with several other variables. As a whole, these studies suggested clear evidence of spatial diffusion of conflict, albeit unsurprisingly most clearly in the form of intervention in ongoing wars rather than in the initiation of new ones.

More recently, a number of studies have focused specifically on the way in which civil wars in a given country might diffuse, either generating additional civil conflicts in adjacent countries or serving as the basis for interstate conflict. One set of arguments focuses on refugee flows arising
from civil war, which have been found to increase the probability of civil war in receiving countries (Salehyan & Gleditsch 2006) and to increase the probability of interstate conflict between the sending and receiving countries (Salehyan & Gleditsch 2008, Gleditsch, Saleyhan & Schultz 2008).1 Another line of research focuses on transnational ethnic ties: Buhaug & Gleditsch (2008) find that transnational ties with ethnic groups that are fighting civil wars are associated with a significant increase in the probability of separatist civil war onset, while Cederman, Girardin & Gleditsch (2009) find that transborder ethnic ties for marginal groups increase the probability of civil war onset in general. From a different perspective, Beardsley (2011) finds that peacekeepers can substantially reduce the probability of civil war diffusion to neighboring states, an effect that he attributes to limits that their presence places on the movement and support of transnational insurgent groups. There is thus an active literature examining civil war diffusion to neighboring countries, both with respect to the onset of new conflicts and with respect to international conflict between the state experiencing the civil war and its neighbors; these studies are less interested, however, in the possibility that the diffusion of conflict might produce war in neighboring countries over issues fundamentally unrelated to the initial war.

A separate literature examines variation in regional levels of conflict, of the sort that can be a logical consequence of the kind of diffusion discussed here. This work has found substantial variation in the frequency of conflict (Wallensteen & Sollenberg 1998, Lemke 2002), the likelihood that conflict spills over to neighboring countries (Bremer 1982, Faber, Houweling & Siccama 1984, Houweling & Siccama 1985), the prevalence and resilience of democracy (Cederman & Gleditsch 2004), the relationship between democracy and peace (Crescenzi & Enterline 1999, Gleditsch & Ward 2000, Gleditsch 2002), and a variety of other variables (e.g. Ross & Homer 1976). Working from these observations, a number of studies have specifically explored apparently anomalous regions, most notably Africa, in greater detail (Jackson & Rosberg 1982, O’Laughlin & Anselin 1991, Lemke 2002).2 Qualitative scholars have also evinced a growing interest in regional variation (Kacowicz

1Kathman (2010) similarly finds that countries that are more likely to be “infected” by an ongoing civil war are more likely to intervene in it.
1998, Buzan & Waever 2003, Katzenstein 2005). A number of studies have examined the related and extremely important question of how regions that experience endemic conflict transition to peace (Holsti 1996, Kacowicz 1998, Miller 2007, Paul 2011), although no consensus on this issue has yet emerged.

3 Shifting Power and Regional War

Existing work is thus suggestive of the possibility that the outbreak of a conflict between two actors might make war between a different set of actors more likely. In this paper, I argue that there is a good reason why such diffusion, less directly obvious but nonetheless real, might occur. I approach this question from the perspective of the rationalist bargaining and war framework, which focuses on particular mechanisms that can explain why actors choose to resolve disputes through force rather than through the cheaper strategy of bargaining (Fearon 1995). Research has focused in particular on private information leading to overoptimism (e.g. Blainey 1973) and commitment problems typically driven by shifting power (e.g. Powell 2006). I focus in particular on the latter mechanism.\(^3\)

A well-established literature dating back to Thucydides examines the proposition that shifts in relative power may cause war. A number of broadly Realist scholars have argued that hegemonic wars among the great powers occur when the existing hierarchy is disrupted, either because the

\(^3\)The private information mechanism can also potentially be pertinent here. One of the primary reasons why actors might disagree about the likely outcome of fighting is because they disagree about the probability and effectiveness of third-party involvement. Thus, for example, Saddam Hussein invaded Kuwait in 1990 believing that military retaliation, most notably by the United States, was unlikely; the Kuwaitis did not take Iraqi threats seriously in the period prior to the invasion, likely in part because they expected a stronger international response to an invasion. As long as the two sides in a dispute agree about the likelihood and consequences of intervention in their conflict, third-party involvement should not be destabilizing. The involvement of the third party in a separate war, however, creates opportunities for divergent expectations to emerge where they were previously absent. To cite a hypothetical example, were the United States to become involved in a war on the Korean peninsula, it is conceivable that the Iranians would conclude that the US was no longer likely to aid Israel in a Middle Eastern conflict, or that its assistance would be more limited, while the Israelis might remain relatively sanguine about the likelihood and effectiveness of American assistance. To be clear, there is no particular reason why the two sides in such a dispute should reach these particular interpretations—it is just as plausible that the Israelis would expect the US now not to intervene while the Iranians expected the opposite, or for both sides to reach similar conclusions and adjust their expectations equally. As war is unlikely in most disputes most of the time, however, the potential pacifying effect of divergent pessimistic interpretations would typically simply solidify what was likely to happen anyway, while the effect of divergent optimistic interpretations would be to make war more likely in a context in which it might not otherwise have happened, with the overall implication that the involvement of the US in a war in Korea would make war between Iran and Israel more likely on average than it otherwise would have been.
rising power begins a war to remake the political system or, more plausibly, because the declining power sees war as a risky but viable way to prevent its decline from occurring (Organski & Kugler 1980, Gilpin 1981, Kennedy 1987, Levy 1987, Copeland 2000). Indeed, Copeland argues that almost every great power war in the modern era has been driven by shifting power concerns. More recently, Reiter (2009) has identified the difficulties that credible commitment concerns—which most commonly arise because of shifting power—have played in a number of historical interstate conflicts, while Weisiger (2013) has used both quantitative and qualitative evidence to argue that commitment problems produce particularly severe wars. At the same time, scholars starting with Walter (1997, 2002) have observed that difficulties committing credibly, arising because of the shift in relative power inherent to demobilization and the allocation of government offices, are a central obstacle to building negotiated settlements to civil wars (cf. Fearon 2004).

For most recent studies, the central logic connecting shifting power to war is the credible commitment problem. As Fearon (1995) observes, political agreements that would in principle be acceptable to both sides in a dispute may be undermined if the distribution of power is likely to shift in the future, as the side that gains power will be in a position to abrogate the agreement and demand additional concessions. Aware that the rising power cannot commit to not breaking the agreement in the future, the declining power must either risk being taken advantage of or find some way to prevent the decline from occurring. War is, if not the only way, often the most final.

Thus far, this logic has been examined primarily in a dyadic context. I argue, however, that it has important implications for regional politics as well. The interconnections among states (and non-state actors) under anarchy makes it difficult to alter one relationship without altering others, and can produce system-level effects that are more than the sum of actor-level characteristics and behavior (Waltz 1979, Jervis 1997). Because any state is a potential threat, no conflict takes place in a vacuum. Even if country C is entirely indifferent to the substance of a political dispute between

4Power transition theorists have at times argued that relative equality (which is not the same thing as shifting power, but which is associated with transitions in which one power passes another) are dangerous because of uncertainty about who would win a war (e.g. Lemke 2002, pg. 26). This argument invokes a separate mechanism, private information with incentives to misrepresent that information. As Powell (1999) notes, however, the observation that both sides might win a war simply implies that each should be willing to make concessions at the bargaining table to avoid a potential loss, implying that the probability of war should be no higher than at other levels of relative power. The relationship between relative power and the probability of war through overoptimism remains debated, but most discussions of shifting power now focus on the role of commitment problems and preventive motivations to fight.
A and B, if the manner in which the dispute is resolved makes either A or B stronger in relative terms, then C must still be concerned that the winner will use its gains to C's detriment in the future. Balance of power theory follows from this observation. C may come to B's aid, as Germany came to the aid of Austria-Hungary in 1914, not because she necessarily believes that B is in the right, but because B's defeat would leave C intolerably vulnerable to exploitation by A. In a well-functioning balance of power system, the knowledge that C would come to B's aid often will deter A from going to war with B, thus providing a degree of stability even in the presence of significant political disputes.\(^5\)

If by deterring aggression alliance ties produce peace, however, then the disruption of those ties may produce war. Such disruption is one central way in which conflict may beget conflict at a regional level. If A is deterred from attacking B by the knowledge that C would come to B's aid, then in the event of a war between C and some other actor, A would be presented with a window of opportunity to use force to revise the relationship with B in his favor. C's commitment elsewhere renders A stronger than before relative to B, but this strength will last only so long as C is occupied. B will of course try to avoid war while her ally is unavailable, but any concessions she might make in the short term are ones on which she might be expected to renege once her ally is again available. A thus may decide that a war that allows him to lock in his temporary advantage is preferable to the presumably temporary concessions B is willing to offer.\(^6\)

The acceleration of Japanese expansion in the late 1930s follows this logic. Knowing that Britain and the United States would oppose further Japanese expansion into China, the leadership in Tokyo recognized that the threat posed by Nazi Germany would prevent them from obstructing Japanese moves to the extent that they otherwise would, and thus gambled first on an all-out invasion of China and later on a more general Pacific War (Sagan 1988, pg. 326; Snyder 1991, pg. 421).\(^5\)\(^6\)

\(^5\)As Jervis (1997, ch. 3) points out, IR scholars, notably including Kenneth Waltz, have used “stability” to mean multiple things, including both the absence of war (or of major war) and the persistence of the international system. Here I use stability to refer to the absence of war.

\(^6\)This logic goes one step beyond what Schweller (1994) refers to as “jackal bandwagoning,” in which actors pile on when a country comes under attack, as with the Italian entry into the war against France in 1940 or the subsequent Thai attack on Vichy France’s colonial possessions in Southeast Asia. This sort of behavior is also frequently driven by concerns related to shifting power—an opponent who is already at war is obviously a more attractive target now than she would be once the war is over and she is able to devote all her resources to fighting back—and thus can help explain how wars expand, if not how war in one place produces conflict among apparently uninterested actors elsewhere.
During the same period, Stalin started a war with Finland—a German ally—secure in the knowledge that Hitler would not intervene, given his desire to avoid opening another front while already at war with Britain and France (Upton 1974, pp. 25-26; Edwards 2006, pp. 87-88).

Nor was this phenomenon restricted to the World War II period. During the nineteenth century, the British repeatedly intervened to prevent Iran from gaining control over the then-independent Afghan city of Herat, which provided a useful buffer between Russia and British India. In 1856, however, the Iranians took advantage of the Crimean War to invade and conquer Herat (Hunt & Townsend 1858, pg. 180; Walpole 1912, vol. VI, pp. 270-271). A few years later, Napoleon III of France launched a quixotic attempt to install a Hapsburg Emperor on the throne of Mexico; the resulting 1862-1867 Franco-Mexican War would never have occurred had the United States, which would have opposed European intervention in its sphere of influence, not been fully occupied by the American Civil War (Hyde 1946, pp. 158-159; Dabbs 1963, pg. 18; Hannah & Hannah 1971, ch. 6). All of these examples have in common the observation that one side in a dispute was weakened by another actor’s involvement in fighting elsewhere, and that that side’s opponent took advantage of that situation to launch a war to revise the status quo.

Importantly, this logic does not apply only to interstate relations. Although they codify them less frequently, non-state actors are just as capable as states of forming effective alliances, both with other non-state actors (such as the cooperation between the Provisional IRA and the FARC) and with states (as with ongoing ties between the Rwandan government and rebel groups active in Eastern Congo, or links between Hezbollah and the governments of Syria and Iran). The window of opportunity logic thus can apply in just the same manner to intrastate relations. Thus, for

As it happened, the Crimean War ended earlier than expected, and the British went to war with Iran, in the little-known Anglo-Iranian War of 1856-1857, to force the Iranians to withdraw.

This window of opportunity logic obviously does not constitute a complete explanation for any of these cases—the Japanese, for example, likely would have continued to expand into China whatever the events in Europe, albeit with less urgency—but it did make war more likely, and I would argue was frequently a necessary condition for war to occur.

As I discuss in greater detail in the data section below, IR scholars have required that cooperation between two actors be codified in a written agreement for it to be considered an alliance. Especially in the statistical literature, this approach is driven by reasonable validity and reliability concerns: while we can all agree, for example, that the United States is likely to aid Israel in the event of a major war in the Middle East, reasonable actors will disagree about a wide range of more marginal cases, such as the United States and Georgia, not to mention the difficulty that would arise in identifying when such informal alliances begin and end. Qualitative scholars have been more willing to consider such informal agreements, either under the broader category of alignments (Snyder 1997) or simply as alliances in a different form (Walt 1987).
example, during the War of the Triple Alliance, while pitted Paraguay against Brazil, Argentina, and Uruguay, Argentina (i.e., Buenos Aires) withdrew most of its army to crush domestic rebels who in other times might have expected aid from Brazil, Paraguay, or both; a little over a decade later the Argentines took advantage of Chilean involvement in the War of the Pacific to launch a near-genocidal campaign (the War of the Desert) against the Native American tribes in Patagonia, who benefited in other times from Chilean aid (de la Fuente 2004, Scheina 2003, vol 1, pp. 367-369). More recently, the PKK in Turkey took advantage of ongoing conflict in Iraq, which allowed it to set up safe havens across the border, to renew resistance to the Turkish government.

Indeed, non-state actors frequently owe their very existence to war. At the most basic level, a country that is fighting a serious external war (or a significant rebellion in a different part of the country) will be less able to respond quickly when a group of people with a grievance but no military capacity to fight organizes to press its grievance. Similarly, a central tenet of much of the recent work on civil war diffusion is that rebel groups may take advantage of war-caused disorder in a neighboring country to organize into an effective military force, only then invading their home country and precipitating a civil war that they would not have been capable to conducting earlier. To cite one example, the Rwandan Patriotic Front organized in Uganda in the late 1980s, during the time that the Ugandan government was confronting a rebellion by the Lord’s Resistance Army under Joseph Kony.

Indeed, to take the logic one step further, in the context of interstate rivalry and war, state leaders sometimes encourage the emergence of militarily-organized groups in a neighboring state with whom they can then form alliances. During the Iran-Iraq War, both sides assisted Kurds in the other country in forming groups that were capable of challenging the state. In Iraq in particular, these groups have never lost this capacity, surviving a brutal crackdown in the later stages of the conflict to flourish under the protection of the United States after the Persian Gulf War. Elsewhere, al Qaeda initially organized in the context of the Afghan insurgency, and was nurtured for several years by an Islamic Sudanese government that was fighting an ongoing civil war against non-Muslim rebels in South Sudan. War thus not only provides windows of opportunity for actors to take on rivals who are shorn of allies, but it also can provide the very actors who participate in war, or
whose participation in one conflict makes another more likely. As Barbara Walter (1997, 2002) has observed, commitment problems greatly complicate any attempts to negotiate a settlement to an ongoing civil war that has as one goal state consolidation, as the necessary merging or elimination of independent military forces generates fears that one side will grab control of the state in the future and abrogate its political concessions. At the same time, the strategic significance of non-state actors for surrounding states provides an incentive to intervene to ensure that one’s local ally is never eliminated militarily. Should both negotiated settlement and decisive military victory be out of reach, as appears to be the case today in Somalia, then war threatens to become endemic.

This situation thus can lead to the emergence of a regional system of war, in which each outbreak of war encourages further violence, both by creating windows of opportunity for predation against opponents weakened by the preoccupation of their allies, and by facilitating the emergence of additional (typically non-state) actors, whose conflicts are particularly hard to resolve, and whose survival becomes a strategic interest of neighboring countries. In the extreme, this argument implies the existence of what we might refer to as multiple regional equilibria: an initial conflict in a basically peaceful region might beget an additional war, which in turn brings about a further conflict, until most actors in the region are fighting someone most of the time, yet this entire complex of violence might not have arisen in the absence of the initial war.

This argument has a range of testable implications. For this paper, however, I focus on the strongest version of the claims, which is that the existence of violent conflict in between one set of actors can increase the probability of violence between a separate set of actors over different political issues. This possibility goes beyond the standard types of conflict diffusion envisioned in recent literature, and implies greater possibilities for the regional diffusion of war. It is thus worth examining to what extent it is plausible.

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10 Moreover, the decision to shelter rebel groups as potential allies generates commitment problems that can serve as the basis for interstate disputes (Schultz 2010).
11 Regen (2002) notes that most intervention in civil wars occurs on behalf of the side that is losing, with the result that intervention tends to extend the violence.
4 Data and Methods

My argument concerns incentives that actors have to initiate disputes with opponents, based on temporary windows of opportunity. The optimal test of this argument thus requires using the directed-dyad-period as the unit of analysis. Following convention in the literature, I use the year as the period of interest. Using any measure of conflict, conflict initiation is a rare event, which introduces biases in the statistical computation of event occurrence in traditional logit or probit regression (King & Zeng 2001a, King & Zeng 2001b). I thus use rare events logit (relogit). I correct standard errors for dyadic clustering, and also introduce both temporal splines and a spatial lag (described below) to address duration and spatial dependence.

My central hypothesis predicts that, because participants in an ongoing war will be less able to provide effective assistance to their allies, those allies will particularly likely to face challenges by opponents seeking to take advantage of the resulting window of opportunity. I take two separate approaches to identifying countries that face window of opportunity concerns. The first is to use existing alliance data, specifically the Alliance Treaty Obligations and Provisions (ATOP) dataset (Leeds, Ritter, Mitchell & Long 2002). The ATOP dataset contains information on alliances, noting most importantly the years that they were in existence and the nature of the commitments that they required of members. I focus in particular on alliances that required positive action by participants in the event of war (i.e. not neutrality or non-aggression pacts), given good reason to doubt that countries that have signed non-aggression pacts will be likely to aid one another in the event of war (Leeds, Long & Mitchell 2000). For every dyad-year involving countries A and B, I identify all countries that are allied to either one but not to both, as I cannot predict reliably who (if anyone) shared allies would be expected to aid. Then, using the Correlates of War’s Composite Index of National Capabilities (CINC), the conventional measure of state military capacity, I calculate the relative significance of all of country B’s allies that are currently at war, and hence unlikely to aid B as effectively as they would if at peace. Specifically, if we denote an actor \(i\) with capabilities \(\text{cap}_i\), exclusive allies \(A_i\), and current number of wars being fought \(\text{wars}_i\), then I calculate the window of opportunity available to an opponent of \(i\) in year \(t\) according to the following formula:

Basic relationships are robust when substituting a traditional logit or probit specification.
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$$Window\ of\ Opportunity_{it} = 1 - \frac{cap_i + \sum_{j \in A_i} cap_j}{cap_i + \sum_{j \in A_i} cap_j \cdot \text{wars}_j}$$ (1)

The denominator in the fraction in equation 1 is simply the summed capacity of country \(i\) and all of \(i\)'s allies. The numerator is the same value, except that the capacity of \(i\)'s allies is reduced proportional to the number of separate wars that they are currently fighting.\(^{13}\) This approach is based on the assumption that an ally is not barred from providing assistance because it is already fighting, but that it is both less likely to do so and less likely to provide as extensive assistance the more that it is already committed to fighting other wars. As a whole, the fraction ranges between mathematical bounds of 0 and 1, where a score of 1 indicates that \(i\) either has no allies or that all of its allies are at peace, while values less than 1 arise when \(i\) has at least one ally who is currently fighting a war. If the ally is relatively unimportant, as would be the case, for example, for the United States were Estonia—a member of NATO—to end up fighting a civil war, then the fraction will be only slightly smaller than one, but when the ally’s strength is high relative to that of state \(i\), then the fraction will take a value closer to zero. Subtracting the fraction from one produces a more intuitive variable, still bounded between zero and one, that is increasing in the size of the window of opportunity available to \(i\)'s opponents. In just over half of observations, the potential target state has no window of opportunity; of the remainder, over 35 percent have relatively small windows of opportunity, associated with a reduction of 10% in total capabilities or less, while in less than 5% of all observations is the total reduction in capabilities arising from an ally’s involvement in war over 50% of the peacetime total. The left half of figure 2 presents the distribution of non-zero values graphically.

[Figure 2 about here]

Much work on the international diffusion of conflict has focused on formal alliances, albeit not

\(^{13}\)Tuvalu and Nauru in the final years of the dataset (1999-2001) have a National Military Capabilities CINC score of zero and no allies. As a result, both the numerator and the denominator in equation 1 take a value of zero, and the resulting variable is undefined. To avoid this problem, and given that even the weakest country has some capacity, I simply assign these countries (which are the only countries to have a CINC score of zero in the NMC dataset) the lowest non-zero CINC score observed in the dataset. Simply omitting them from the analysis does not materially change the results.
in the exact manner examined here.\textsuperscript{14} That said, much international cooperation occurs between countries that are not formally allied. Indeed, using the Correlates of War list of interstate war participants and the ATOP list of alliances, 32 percent (187 of 584) of dyads that fought on the same side in a war were allied the year prior to war onset (34 percent if examining the year of war onset). Along these lines, it is commonly assumed that the United States would come to the assistance of Israel in the event of an attack by Iran, despite the absence of a formal Israeli-American alliance agreement. From this perspective, more qualitative scholars have argued for expanding the definition of alliances to include “alignments,” in which countries are relatively likely to aid each other, even in the absence of formal agreements to do so (Walt 1987, Snyder 1997).

While no approach will predict this sort of behavior perfectly, there are approaches that can identify actors that are predisposed to aid each other. In particular, based on the increased frequency of disagreements between geographic neighbors and the common logic that “the enemy of my enemy is my friend,” there exists a well-known tendency for states to form “checkerboard” alliance patterns, with states partnering with countries with whom they do not border, but with whom they share a common neighbor. Thus, for example, during much of the Cold War, the Soviet Union had much more friendly relations with (North) Vietnam than China did with either the Soviets or the Vietnamese; China by contrast maintained relatively good relations with Pakistan, in large part because both had significant disagreements with India. Similarly, in South America, Brazil’s natural ally historically has been Chile, the only major state with which it does not share a border, while Argentina and Peru tended to similar reasons to have friendly relations (Kelly 1997).

I therefore generate a list of checkerboard allies, coding two countries as checkerboard allies in a given year if they 1) are not directly contiguous to each other and 2) are both directly contiguous to a third state. This approach then identifies both a set of countries that might be expected to assist each other in a war, and a logical opponent (the country or countries contiguous to both checkerboard allies) that would have a particular incentive to take advantage of a window of opportunity. Figure 1 illustrates this coding process. Countries A, C, and E are all checkerboard allies, as they border D (their checkerboard opponent) and do not border each other; for A and C,

\textsuperscript{14}See for example Siverson & Starr (1991).
B is also a checkerboard opponent, but for E, B is a checkerboard ally. Countries D and F are also checkerboard allies, by virtue of bordering E but not each other. Thus, my argument is that a war that pitted B against C, for example, would create an incentive for D to go to war against either A or E, who normally would be likely to receive assistance from C in a war with D. The strength of this incentive should be strong when C is strong relative to A and E, implying that C’s intervention would substantially alter the likely outcome of the war, and weaker when C’s capabilities would not significantly affect the fighting.

[Figure 1 about here]

Given the list of checkerboard allies, I calculate the window of opportunity available to a checkerboard opponent according to a formula that is analogous to that used for the alliance window of opportunity:

\[
Checkerboard\ Window_i = 1 - \frac{\text{cap}_i + \sum_{j \in A_i} \frac{\text{cap}_j}{\text{wars}_j}}{\sum_{j \in A_i} \text{cap}_j}
\]  

As with equation 1, this formula generates values that are logically bounded by zero and one. Because checkerboard windows of opportunity are coded only for the country or countries that border both of the checkerboard allies, this variable is zero in the vast majority of observations.

The checkerboard alliance variable has both a significant disadvantage and a significant advantage relative to the formal alliance window of opportunity variable. The main disadvantage is that there is no guarantee that a given set of checkerboard allies would in fact see themselves as sharing common interests or would plan on coming to each other’s aid, while formal allies have made a commitment to aid each other. In some cases in which I identify a checkerboard window of opportunity, therefore, actors will see no such window, because they never expected the state currently embroiled in war to come to its “ally’s” assistance. The advantage, however, is that I can more precisely identify those actors who have a particular incentive to take advantage of a window of opportunity, namely the country that lies between the checkerboard allies. Because existing formal alliance datasets do not code the target of an alliance, the formal alliance window of opportunity must be generated for all countries in the international system. This greater precision
means that in the vast majority of cases (99% of observations) the checkerboard alliance window takes a value of zero, either because the countries are not checkerboard opponents or because the target’s checkerboard ally is not at war. Cases with non-zero values are more evenly distributed, however, as figure 2 demonstrates.

The remaining variables are standard in analyses of conflict onset:

- **Interstate conflict**: For conflict onset, I use the initiation of a militarized interstate dispute (MID) (Ghosn, Palmer & Bremer 2004), lagged one year to limit endogeneity concerns. A MID is any incident in which a state threatens, displays, or uses force against another state. Because I am interested in the initiation of new disputes as a consequence of neighboring conflict, I only examine new MID onsets (setting aside intervention in ongoing MIDs). I also conducted the analysis examining only MID onsets that resulted in fatalities, reaching substantively identical conclusions.

- **Geographic contiguity**: Given the importance of geography for my argument, I include a control for geographic contiguity, using data from the Correlates of War project. The variable is a dummy that takes a value of one if states share a direct land border or if they are separated by less than 150 miles of water, and 0 otherwise.

- **Military capabilities**: Military capabilities are often theorized to influence conflict onset. Following standard practice in the literature, I control for capabilities using the National Military Capabilities dataset’s Composite Indicators of National Capabilities (CINC). Relative capabilities are the share of dyadic capabilities held by the stronger side in the dyad. Following Hegre (2008), I also control for the sum of dyadic capabilities (Capability sum), based on the observation that, holding relative capabilities constant, stronger states are more likely to have both the ability and the incentive to pursue disputes with each other.

- **Major Power Status**: Major powers tend to be more active in the international system. I thus include control variables capturing whether one (One Major) or both (Both Major) of the countries in the dyad were major powers, as specified by the COW list of major powers.
• **Democracy**: A large literature has found that jointly democratic dyads historically have been less likely to experience conflict, although there remains debate about the reasons for this relationship and the likelihood that it will endure in the future.\footnote{Prominent explanations for the democratic peace have focused on feature of democratic institutions and norms (e.g. Fearon 1994, Bueno de Mesquita, Morrow, Siverson & Smith 1999, Russett & Oneal 2001); Gartzke (2007) however argues that economic variables that covary with democracy are responsible for the absence of conflict. For arguments about the democratic peace weakening in the future, see Gowa (2011) and Gartzke & Weisiger (2013).} Following Russett & Oneal (2001), I measure dyadic democracy levels using Polity IV data, which codes a variety of institutional indicators to generate eleven-point indices of democracy and autocracy, which can be converted into a single variable by subtracting the autocracy indicator from the democracy indicator. *Democracy (low)* is the lower of the two resulting scores in the dyad.

• **Alliance**: I also code for the presence of an offensive or defensive alliance between the two members of the dyad, using the ATOP dataset (Leeds et al. 2002).

• **Spatial Lag**: The window of opportunity argument that I am proposing is designed to explain the spatial diffusion of conflict. There are, however, alternate mechanisms that can account for spatial diffusion. A harder test for my argument thus would entail introducing a spatial lag variable to control for general conflict levels in a country’s vicinity, which should increase confidence that any positive finding for the window of opportunity variable actually reflects countries taking advantage of windows of opportunity, rather than some other logic of conflict diffusion. The spatial lag variable is constructed in the manner used by Buhaug & Gleditsch (2008): for every country in every year, the variable is equal to the proportion of neighboring countries (where neighboring countries are those that share a land border or are separated by 150 miles of water of less, as reported by the COW contiguity data) that experience war in the year in question.\footnote{A small number of island countries have no neighbors. As conflict diffusion is less likely in this scenario, I simply set the spatial lag to zero for these observations (reflecting the absence of conflict in any neighboring states). The results are robust to simply omitting these observations from the analysis.} I focus on the spatial lag from the perspective of the potential target in a given directed dyad, as that is also the country from whose perspective I am calculating the window of opportunity.

• **Temporal Dependence**: Finally, following Beck, Katz & Tucker (1998), I include four temporal
spline variables as a control for temporal dependence.\textsuperscript{17}

5 Results

The results are presented in table 1. Model 1 examines the effect of having an ally who is at war on the probability that a country is targeted in a MID. Consistent with expectations, countries who have important allies who are currently at war are significantly more likely to be the target in a new dispute. Note that this effect is \textit{not} the consequence of target intervention in the ally’s conflict (which would appear in the dyad with the target as the initiator), nor is it a consequence of the target being attacked in the context of that dispute (which would register as the target joining the ongoing MID); instead, this development reflects the initiation of a new dispute that was not previously present.

[Table 1 about here]

Model 1 thus suggests that countries are more likely to be targeted for attack when their allies are at war and hence less able to come to their assistance. That said, if, as is often the case, allies are geographically propinquitous, this relationship could be picking up conflict diffusion that is occurring for reasons other than the windows of opportunity logic. Model 2 thus introduces a spatial lag variable that simply registers the amount of conflict in countries near the (potential) target of a dispute. This variable is unsurprisingly positive and statistically significant, consistent with arguments about spatial diffusion. The ally window of opportunity variable, while substantively slightly smaller, remains positive and statistically significant, suggesting that the observed relationship is not simply a consequence of failure to control for other forms of spatial diffusion. Readers may still be concerned, however, that the result is biased by the inclusion of large numbers of observations involving countries that are remote and unlikely to interact. Model 3 thus replicates model 1, restricting the analysis to politically relevant dyads, where a dyad is considered politically relevant if the countries involved are geographically contiguous or if at least one is a great power.

\textsuperscript{17}To preserve space, I do not report results for the spline variables in the results.
Again, the window of opportunity variable is positive and significant. Model 4 again adds the spatial lag, with results that are analogous to model 2.

Models 5 through 8 replicate the analysis in models 1 through 4, substituting the window of opportunity as calculated using the checkerboard alliance variable. Again, countries who are rendered temporarily weak by their (checkerboard) ally’s involvement in war are unusually likely to be the target of attack. This finding holds when including the spatial lag, and when reducing the sample to the subset of politically relevant dyads. Approached in either of two ways, therefore, windows of opportunity generated by the involvement of countries likely to come to a country’s assistance in war are associated with a significant increase in the probability that the country comes under attack.

Control variables behave basically as expected in table 1, except that dyadic democracy is less robustly associated with conflict than is often seen in the literature, at least in the analyses in models 1, 2, 5, and 6 that include all dyads. The great power variables also vary in their effect when the analysis transitions from all dyads to politically relevant dyads. Importantly, the spatial lag is consistently strongly associated with an increased probability of new conflict.

Figure 3 plots the predicted probability that a country will be targeted in a new MID, holding control variables at medians and allowing both the formal alliance window of opportunity and the checkerboard alliance window of opportunity to vary across the range of values observed in the data. In both cases, an increase in the size of the window of opportunity is associated with a substantial increase in the probability of a new attack.

[Figure 3 about here]

6 Conclusion

This paper constitutes a first cut at a broader research program examining the logic of regional war diffusion, examining in particular the question of why war between two actors might produce conflict between two entirely separate actors, potentially on a totally unrelated issue. I argue that this behavior is consistent with a window of opportunity logic inherent in the operation of the
balance of power: while the expectation that A and B will come to each other’s aid should C attack either may deter C from aggression at normal times, the involvement of either A or B in a war with some other actor presents C with a window of opportunity to secure a favorable settlement against the ally that is currently at peace. By this logic, the outbreak of one war creates a situation in which additional conflicts potentially become more likely; these conflicts in turn may contribute to the emergence of further violence by the same logic. Statistical analysis of interstate interaction provides strong support for this argument. Countries whose alliance partners are embroiled in war, and hence unable to assist them as effectively as they otherwise would, are more likely to be the target of new attacks. I find a similar effect examining both formal alliance partners as well as “checkerboard” alliance partners: in both cases, ally involvement in war leaves the country more likely to be the target of an attack.

The analysis in this paper remains incomplete in several respects, however. For one, windows of opportunity do not provide the only rationalist logic by which conflict might spread. Thus, for example, demonstration effects generated by the emergence of rebellions have been observed to make rebellions elsewhere more likely, as in the Revolutions of 1848 or the more recent Arab Spring. In future work, I also plan to extend this analysis beyond interstate relations to examine the window of opportunity argument in civil war onset, building on existing work on transnational rebel groups and the spread of civil conflict.

These mechanisms provide a logic for endemic regional conflict: one war makes another more likely, which in turn facilitates the emergence of another. In combination with the emergence and strengthening of non-state actors, this process thus can potentially leave a region stuck in a cycle of repeating violence. That said, regions of endemic violence have transitioned in the past to regional peace, as for example with the emergence of stable regional peace in historically quite violent Europe, or the establishment of a zone of peace in South America. While a few studies have examined this process (e.g. Holsti 1996, Kacowicz 1998, Ripsman 2005, Miller 2007, Paul 2011), existing arguments have not seriously considered the mechanisms that can lead to self-replicating regional conflict, raising questions about whether they have managed to identify the true reasons for regional transition. Thus, while both Holsti and Miller argue that the transition from regional war
to regional peace occurs because of increased state strength (conceptualized somewhat differently),
neither considers the possibility that states are weak because of endemic war, in which case increased
state strength might be a consequence of the transition to peace, rather than a direct cause.
Ultimately, the goal of this research project is to better explain this sort of transition; we can
only do so convincingly, however, if we have a good explanation for why endemic regional conflict persists.
Figure 1: Illustrating the Coding of Checkerboard Alliance Partners and Opponents

Figure 2: Observed Distribution of Non-Zero Values for Window of Opportunity Variables
Figure 3: Predicted Probability of New MID Onset for the Observed Range of Formal and Checkerboard Alliance Windows of Opportunity

References


## Table 1: Relogit Analysis of MID Onset

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Standard errors clustered by dyad. † p < .1, ‡ p < .05, *** p < .01. Significance tests are two-tailed.


