Whether military intervention can be explained by the same causes as the onset of war and whether wars which experience military intervention have distinct causes from wars that do not experience intervention are open questions. This article attempts to answer them by arguing that wars caused by commitment problems are more likely to experience outside military intervention than are wars with other causes. This implies that while certain types of wars may be more likely to experience intervention, the same causes can explain both intervention and onset. Wars caused by commitment problems are more likely to draw in outside states because they tend to be more severe and produce larger wars aims. These larger stakes in turn create both threats and opportunities for non-belligerent states prompting military intervention. The greater stakes also generate incentives for belligerent states to seek outside aid. The argument is tested on the Correlates of War Interstate War dataset using logit based generalized linear models. The findings support the commitment problem hypothesis and have implications for theories about the causes of multilateral and general wars.

**Key words:** commitment problems; military intervention; interstate war

The question of why states intervene militarily in ongoing interstate wars has both theoretical and practical implications. Military intervention matters for theory as explanations of wars should be able to explain not only their causes and termination, but why they sometimes draw in additional states and how they are fought. From a practical standpoint, the question matters as interstate wars which experience military intervention are longer and deadlier than those that do not (Shirkey 2012b; Slantchev 2004). While substantial progress has been made on which states are more likely to intervene (Altfeld and Bueno de Mesquita 1979; Raknerud and Hegre 1997; Richardson 1960; Siverson and Starr 1991; Valeriano and Vasquez 2010)\(^1\) and

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\(^1\) Geographically proximate states, great powers, allies, and perhaps enduring rivals are more likely to intervene.
when they are likely to do so (Joyce, Ghosn, and Bayer 2014; Melin and Koch 2010; Shirkey 2009; 2012a), far less is known about which wars are likely to draw in outside states.

I argue that interstate wars caused by commitment problems are more likely to experience outside military intervention than are wars with other causes. While commitment problems are certainly neither a necessary nor sufficient cause of military intervention—wars with other causes do experience intervention and wars caused by commitment problems do not always draw in outside states—there are reasons to think that such wars are more likely to attract intervention than are other wars. First, it is likely not coincidental that wars which experience intervention are both deadlier and longer on average (Shirkey 2012b; Slantchev 2004) and that the same is true for wars caused by commitment problems (Copeland 2000; Powell 2006; 2012; Reiter 2009; Weisiger 2013). This suggests the higher severity of such wars share a common cause. Second, the additional length of wars caused by commitment problems creates more opportunities for states seeking to acquire spoils through intervention. Finally, there are theoretical reasons to think wars fought over commitment problems are more likely to draw in outside states. Such wars produce larger war aims and are more likely to alter regional, sub-regional, and global power structures (Weisiger 2013). This in turn creates balancing concerns and perhaps even additional commitment problems for outside states prompting their intervention (Shirkey 2012a; Wolford 2014a).

In making this argument, I aim to contribute to the debate between the bargaining framework (and parts of the expected utility literature upon which it draws) and some of its detractors about whether multilateral and bilateral wars can be explained by the same set of causes or whether distinct explanations are needed for each. I do so by showing that while both types of wars can be explained by the bargaining framework, wars which prompt military
intervention are likely to come from a specific cause within that framework: commitment problems.

The argument is tested on the Correlates of War Interstate War dataset version 4.0 using logit based generalized linear models. Commitment problems are operationalized as pre-war shifts in the primary belligerent states’ relative National Material Capabilities. The findings support the argument that wars caused by commitment problems are more likely to experience military intervention and that the bargaining model of war is able to explain both bilateral and multilateral wars.

**Differing Views of Intervention: Bargaining or Steps to War**

Most rationalists see war initiation, war termination, and military intervention as stemming from the same general theory of war—bargaining and expected utility, hereafter referred to as the bargaining framework (Altfeld and Bueno de Mesquita 1979; Blainey 1973; Bueno de Mesquita 1990; Fearon 1995; Shirkey 2009; Liebel 2012; Wagner 2007; Wolford 2014a). Scholars working within this framework argue that states calculate whether fighting would advance their goals at acceptable costs and make decisions about whether to wage war in the same manner regardless if they are considering initiating a conflict, continuing it, or intervening in an ongoing war. Wars occur when agreements cannot be struck—most often but not exclusively because of private information with incentives to misrepresent or commitment problems (Fearon 1995). In this vein, military intervention can be seen as a breakdown of an agreement to remain at peace between an outside actor and one of the belligerent parties—just as the initial conflict was a result of such a breakdown. ² While wars resulting from such

² A number of works suggest that the bargaining model can be used to explain a continuous series of actions spanning multiple wars, peace treaties, and shifting coalitions (Powell 2012; Wagner 2004; Wolford 2014b).
breakdowns may vary greatly in scope and severity, some within the bargaining framework claim this variation is a matter of quantity not one of quality (Bueno de Mesquita 1990). This means multilateral or even general wars are a best seen as smaller wars which grew to include many other states when those states, using a similar calculus to the initial belligerents, decided to intervene (Levy 1990; Thompson 1990).

Furthermore, the bargaining framework argues that war initiation is affected by beliefs about the likelihood of intervention (Gartner and Siverson 1996; Levy 2011) and any given intervention or potential intervention alters the likelihood of further interventions (Stevenson 2011). Therefore, war initiation and intervention cannot be considered in isolation from each other. Indeed, the decision to intervene may be taken prior to the outbreak of war. Levy (2011) cites Russia’s determination to join Austria in a war against Prussia prior to the outbreak of the Seven Years War (1756–63) as a prominent example of this. Other ante bellum decisions to intervene include the French intervention in the War of Italian Unification (1859), Italian involvement in the Seven Weeks War (1866), and British and French participation in the Suez Crisis (1956) (Shirkey 2012b). Despite such occasional pre-war plans to intervene, it is unclear ex ante which wars will prompt military intervention (Bueno de Mesquita 1990).3 For instance, in the literature on general wars there is even significant debate ex post about which wars to include in such a list (Copeland 2000; Kugler 1990; Levy 1982; Thompson 1988; 1990) reinforcing the notion that states cannot readily distinguish which wars will become general or characterized by a more limited scale of military intervention until after the wars have become multilateral conflicts. Thus, the bargaining framework sees initiation and intervention as

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3 Such pre-planned interventions have occurred in both general and smaller wars.
intimately linked and argues that multilateral and bilateral wars can be explained by the same theory.

This view is not without detractors. Arguments against the position that initiation and intervention are driven by the same processes come in two forms. The first objection is that distinct theories are needed to explain initiation and intervention (Midlarsky 1990; Vasquez, et al 2011). This is different from claiming that any given intervention has an idiosyncratic cause which is distinct from the specific cause of the larger war (Levy 2011). That is certainly true, but is consistent with the bargaining framework. Rather what is argued by Midlarsky and Vasquez among others is that there separate paths to the outbreak and spread of war (Valeriano and Vasquez 2010). Whether both paths could be consistent with the bargaining framework is debated with Valeriano and Vasquez (2010) suggesting they may be and Midlarsky (1990) arguing they are not.4

Second, others argue it is bilateral and general wars rather than initiation and intervention which need distinct explanations (Midlarsky 1990; Rasler and Thompson 1985; Thompson 1988; Vasquez et al 2011).5 This school of thought argues that structural forces and not the decisions of states within the bargaining framework determine which wars become general and which remain limited meaning intervention in general wars is the product of whatever forces cause general

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4 Vasquez et al (2011) are unclear on this point.

5 There is overlap between these camps with some scholars believing both that initiation and intervention have distinct causes and that general and dyadic wars have distinct causes. Additionally, the argument that general wars have distinct causes from dyadic wars is consistent with proponents of long cycle theories (Modelski 1987; Richardson 1960), but the preponderance of evidence suggests such cycles do not exist (Beck 1991; Levy 1982; Singer and Small 1972).
wars (Kugler 1995; Thompson 1988; Vasquez 2009). While this fits with a basic intuition that general wars cannot be seen simply as dyadic wars that grew, it does little to explain wars such as the Crimean War (1853–56) or Gulf War (1990–91) which did not become general but which did experience some military intervention. Furthermore, general wars do often grow out of wars that are initiated in the hope they will remain more limited or even bilateral in character (Sabrosky 1985) begging the question of why such hopes could have been held if general wars are distinct from more limited wars in their causes.

A further school of thought, the Steps to War research program (Vasquez 2009), offers an even more complicated model of war in opposition to the bargaining framework. It proposes that wars between rivals are distinct from those over singular issues and that both can experience military intervention. Each type of war requires its own theoretical explanation and intervention in either type requires a further distinct theory. Yet Vasquez (2009) states that multilateral wars are best seen as a series of dyadic conflicts, begging the question of why these conflicts cannot all be explained by the same theory. In sum, critics of the bargaining framework’s approach dispute both the notion that dyadic and larger wars can be explained by the same causes and that

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6 Midlarsky (1990) argues that general wars are the result of the accumulation of many disputes whereas dyadic wars result from singular disputes. Yet, work on rivalry has shown that dyadic wars within rivalries are a result of issue accumulation (Dreyer 2010) meaning the presence of multiple issues in and of itself is not sufficient to explain general wars.

7 For instance, the Russians certainly hoped for a more limited war than what the Crimean War became when they invaded the Ottoman Empire.

8 General wars are seen in this framework as a subset of wars of rivalry requiring special explanations, but not new theories (Vasquez 2009).
the initial outbreak of war and intervention can be explained by the same processes, though the critics often differ in the particulars of their alternative explanations.

In sum, both the bargaining framework of war and its critics have important insights and yet leave something to be desired. The bargaining framework is at its best in suggesting that war results from the breakdown of bilateral agreements, tacit or explicit, to not fight and that such breakdowns explain both war initiation and intervention. The critics, including the Steps to War program, are strongest at suggesting that general wars are more than just bilateral disputes which grew and instead that general wars have distinct causes. As general wars are characterized by military intervention, it may be that wars which attract military intervention, whether general or more limited, have causes which differ from those wars that do not attract intervention.

Thus, each view captures part of the nature of the connection between war onset and military intervention. I propose to synthesize these views and argue that wars initially caused by commitment problems are more likely prompt military intervention than are wars with other causes. This recognizes that there are multiple pathways to war (Bremer 1995; Diehl 1995; Kugler 1990; Vasquez 1995), but argues that the multiple pathways can be explained by one overarching theory. It means that military intervention does emerge from the bargaining framework as commitment problems are a core component of that framework. Yet this approach also acknowledges that wars which experience intervention are distinct from many bilateral wars in that they usually arise from a specific type of cause. The approach also helps explain those wars which expand but do not become general as they are likely to have arisen out of commitment problems which affected regional or sub-regional but not global power structures. In other words, the same overarching framework or theory can explain both onset and intervention but wars resulting from a particular part of the overarching framework, i.e.,
commitment problems, would be more likely to attract intervention. This is consistent with seeing war initiation, expansion, and termination as distinct parts of an overarching process (Bremer 1995; Starr 1995) and recognizes that while typologies of war may be helpful, basing such typologies on the ultimate size of a war may not be the best way to proceed (Copeland 2000; Levy 1990).

Wars Caused by Commitment Problems and Military Intervention

Wars caused by commitment problems are more likely to attract outside military intervention for several reasons. First, such wars are more likely to prompt greater war aims such as state death, regime change, significant territorial annexation, or even near genocidal policies and absolutist war-fighting strategies. These goals arise as a way to eliminate the commitment problem by halting or minimizing shifts in the future distribution of power or significantly altering the existing distribution of power (Reiter 2009; Weisiger 2013). Because of this, these wars are more likely to substantially alter the existing power structure of a sub-region, region, or even the world (Weisiger 2013). This threat to the greater power structure may in turn pose a commitment problem for third parties prompting them to intervene.\(^9\) Thus, wars driven by commitment problems are likely to create incentives to balance against one of the belligerent parties to prevent an altering of the greater status quo.

Second, because wars fought over commitment problems are likely to be more severe, belligerent states should be willing to make greater efforts to win them (Powell 2006; 2012; Reiter 2009; Weisiger 2013). Belligerent states were willing to take immense casualties in wars such as the Paraguayan War (1864–70), Crimean War, World War Two, and Iran-Iraq War (1980–89) in hopes of seriously weakening their opponents or overthrowing their regimes as a

\(^9\) Commitment problems have been shown to be a cause of military intervention (Shirkey 2012a).
way to eliminate the underlying commitment problems. As suggested above, this severity is a direct result of the expansive war aims needed to eliminate the commitment problem and consistent with a separate literature which argues issue salience influences how high of costs states are willing to bear in conflicts (Diehl 1995; Gochman 1995; Vasquez 2009). Greater severity means that such wars are more likely to result in significant territorial realignments—at least in the pre-1945 period10—creating opportunities for interveners to pick up territorial spoils. Importantly, belligerents should also be more willing to distribute territorial spoils to attract allies again increasing the odds of outside intervention. Germany’s willingness during the World War Two to reward with territory states such as Hungary that were willing to bandwagon is an example of such behavior. Belligerents should also be more willing to offer non-territorial spoils, such as aid or promises of future alignment, in order to induce states to join their side.11 Of course, the high costs and risks associated with such wars may also deter potential interveners (Haldi 2003), but for many the opportunities offered by intervention are likely to outweigh these greater costs.

Finally, wars caused by commitment problems are unlikely to be short. Though decisive victories leading to major changes in relative power are occasionally achieved quickly, they usually are not. Likewise, it is unlikely that a declining power would concede defeat quickly if it is unable to achieve its expansive aims. Rather the declining power would want to keep fighting until it achieves a decisive victory or reaches a point where it is “unable to continue to fight or sees fighting as no longer in its interest.” (Weisiger 2013, 20). Given this tendency of wars

10 See Zacher (2001) on the norm of territorial integrity in the post-1945 era and the very limited extent of territorial redistribution in that era.

11 Such non-territorial spoils may well be more important in the post-1945 era than territorial spoils (Shirkey 2009).
caused by commitment problems to be lengthy, they should provide more opportunities for intervention. This is likely to be the least important reason why such wars would attract military intervention, but still may play a role. Taken together these three reasons provide the article’s core hypothesis.

**H1**: Interstate wars caused by commitment problems are more likely to experience outside military intervention.

The argument, like a great many causal claims in social science, is a probabilistic one. Wars which remained bilateral yet were caused by commitment problems—such as the Iran-Iraq War (Weisiger 2013) or Russo-Japanese War (1904–05) (Streich and Levy 2014)—have occurred as have wars which experienced intervention despite not having been caused primarily by commitment problems—such as the Gulf War.\(^\text{12}\) In other words, wars arising out of commitment problems are neither a necessary nor sufficient cause of military intervention, yet as argued above there are strong reasons to believe they are an important factor in determining which wars are more likely to experience outside military intervention.

Being that such wars are neither a necessary nor sufficient cause of intervention, it should be obvious that this approach does not explain everything of interest about military intervention. Most notably it does not address the timing of intervention nor which actors are more likely to join. However, it need not do so especially as these questions have been addressed elsewhere—extensively so in the case of who is likely to intervene. Rather it is a part of the intervention puzzle which has not received sufficient attention heretofore. Given that existing explanations for the timing of intervention or who intervenes have only limited implications for which wars

\(^{12}\) The Naval or Chincha Islands War (1865–66) between Spain and Chile with Peru joining on Chile’s side is another example of such a war (Schiena 2003).
are likely to be joined, this work adds considerably to our body of knowledge about military intervention.

The connection between wars caused by commitment problems and military intervention has two other important implications. To start, states with very large revisionist aims are far more likely to violate norms of neutrality than are more moderately revisionist powers (Wolford 2014c). This should be especially true for gross violations of neutrality such as bombardment, invasion, or occupation. Given that commitment problems should lead states to have especially large war aims, it seems likely that such highly revisionist states are more likely to be belligerents in wars caused by commitment problems than in wars resulting from other causes such as private information. This leads directly to the second hypothesis.

H2: States entering wars as a result of being attacked and states being occupied during wars without having engaged in sufficient military resistance to be considered belligerent powers should be strongly correlated with wars caused by commitment problems.

The final implication builds on the observation that while most military intervention occurs many months or years after a war has begun, a reasonable number of states join within a month of the onset of hostilities.¹³ Given that distinctions between early and late intervention regarding alliance reliability have been found (Joyce, Ghosn, Bayer 2014; Melin and Koch 2010; Shirkey 2009), it is possible that the relationship between commitment problems and intervention would exhibit a similar dichotomy. While it is likely that commitment problems as a cause of war are associated with intervention in both the early and later stages of wars, the strength of those relationships are not necessarily equal. One possibility is that since the commitment problem that caused the war must have by definition existed prior to the war’s onset,

¹³ 27 of the 99 instances of military intervention in interstate war in the COW dataset occurred in the first 30 days of a war.
it should trigger intervention sooner rather than later. This is because states should be aware of
the commitment problem from the beginning of the war implying that if states are prompted to
intervene because of the commitment problem, they should do so quite quickly.

**H3a**: The relationship between military intervention and wars caused by
commitment problems should be stronger for interventions in the first month of
the war than interventions which occur later.

It is equally possible, however, that the threat posed by the war to regional and global
power distributions and any resulting alterations of the territorial status quo may not be apparent
at the outset of the conflict even if outside states are aware of the commitment problem which
caused the war. Which states will be threatened and what opportunities exist may become
apparent only as battles are fought and demands revealed meaning outside states may not see a
need or opportunity to intervene until the war has been underway for some time. This may be
especially true for risk averse states or for states which significantly discount future costs. Wars
caused by commitment problems, therefore, may not induce states to intervene until the war is
well underway.

**H3b**: The relationship between military intervention and wars caused by
commitment problems should be stronger for later interventions than those which
occur in the first month of the war.

Thus, whether the relationship between commitment problems and military intervention is
stronger earlier in wars or later is theoretically ambiguous and must be resolved empirically.

Which of these two competing hypotheses is correct matters a great deal for the
theoretical debate about military intervention. If commitment problems are more strongly
correlated with early intervention, then the argument that wars which experience military
intervention are distinct from the outset would be strengthened. This is because if such wars
expanded very quickly, it would suggest that their distinct nature would have been apparent from
the beginning. Yet, if later interventions are more strongly associated with commitment problems that would suggest wars which expand often initially appear to be quite similar to wars which remain bilateral. Though one of the underlying causes of expansion—commitment problems—would be present from the outset, the effects of that cause would not manifest itself for months or perhaps even years. Indeed, this would suggest that non-belligerent states would be unable to initially distinguish wars which may ultimately require their participation from those which do not. This would lend support to the bargaining framework’s view of war which holds that the difference between dyadic and general wars is more one of scale than type. The outcome of this test, therefore, has implications not just for the causes of military intervention but also for our understanding of war processes and the causes of multilateral and general wars.

**Methodology and Results**

These four hypotheses are tested using generalized linear models with a binomial functional form on a dataset of 94 interstate wars taken from the Correlates of War (COW) Interstate War dataset version 4.0 which covers the 1816–2008 period (Sarkees and Wayman 2010). The data are organized such that an individual case consists of a non-belligerent state at the outbreak of a given war. So in a world with ten states, a war which began bilaterally would produce eight cases. Before discussing the statistical methods in detail, the variables are described below.

**Variables**

The dependent variables are all permutations of whether or not an outside state intervened militarily after the war’s initial outbreak. These were taken from COW. The most basic version of the independent variable includes all states in COW which intervened at least a day after the war’s initial outbreak. The second version includes only states which became
belligerents as a direct result of their territory being invaded or their military forces being attacked—such as the United States at Pearl Harbor or Greece in World War One—and states which were militarily occupied during the course of a war, but which did not suffer sufficient casualties to be considered belligerents by COW.¹⁴ For brevity such states will be called involuntary interveners from now on. Last, military interveners were divided into early and late interveners. A state was considered an early intervener if it joined within 30 days of the war’s outbreak. States joining after 30 days were considered late interveners. A 30 day window should allow states which have decided to intervene because of factors which were evident ante bellum to actually do so.

The main independent variable is whether or not a war was caused by a commitment problem. Commitment problems are operationalized as relative power shifts in the COW National Material Capabilities version 4.0 (Singer 1987) between the two primary belligerents prior to the war.¹⁵ The shift is measured over a period of five years ending the year prior to the war. This is done to avoid conflating the shift with mobilizations for the war which could produce apparent spikes in a state’s capabilities (see Weisiger 2013). Power shifts were selected as they are one of the major causes of commitment problems (Powell 2006) and are easily

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¹⁴ These states include Albania during World War One and Denmark, Luxembourg, Estonia, Latvia, and Lithuania during World War Two in Europe. Czechoslovakia, Albania, and Austria were not included as they were occupied prior to the onset of World War Two in Europe. Thailand was not included as the Japanese occupation of Thailand during World War Two in the Pacific was done with the acquiescence of the Thai government and Thailand remained independent throughout the war. Luxembourg was not included during World War One as COW does not consider Luxembourg to be a member of the state system until 1920.

¹⁵ Ideally, the measure would capture expectations about future power shifts (Bell and Johnson 2015), rather than actual power shifts, but alas such data simply are not available for statistical analysis.
quantifiable. Incidentally much of the literature on general wars, without referencing commitment problems, suggests that power shifts are likely to proceed and cause general wars (Gilpin 1981; Kennedy 1987; Organski and Kugler 1980; Thompson 1988). While incentives to preempt could also create commitment problems (Fearon 1995), Reiter (1995) has shown that preemptive wars are exceedingly rare, meaning power shifts should be capturing most commitment problems.

The shift between the primary belligerents was used rather than the initial belligerents because in many wars changes in relative power between the initial belligerent pairing is not what concerns outside states. For instance, in World War One Britain had far more reason to be concerned about shifts in relative power between Germany and France rather than between the states which were the initial belligerents: Austria-Hungary and Serbia. In the vast majority of wars, the primary belligerents are among the initial belligerents. However, in the Crimean War, World War One, World War Two in Europe, World War Two in the Pacific, and the Gulf War one or more of the primary belligerents intervened after the war’s initial outbreak. In these cases, the power shift between the two most powerful opposing states in the war prior to entry of the state in question is used for states which intervened prior to or simultaneously with the last member of the primary dyad intervening. This is done because these states could not have known for certain that the primary belligerents would subsequently intervene and therefore their motives for intervention are more likely to be related to power shifts between states already in the war

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16 This is not to suggest that measure of power in the National Materials Capabilities dataset is flawless. Its flaws are widely documented. Yet, it is the most widely used measure of power in statistical analyses of military conflict and alternative measures have substantial flaws as well. See Weisiger (2013, 62 n18) for a discussion of the dataset’s strengths and flaws.

17 This work uses Weisiger’s (2013) list of primary belligerents.
than by power shifts between potential interveners. The shift between the primary belligerents is used in those wars for states which either did not intervene or which intervened after both of the primary belligerents had entered the war. Likewise, the primary belligerents were used rather than power shifts between all belligerents as states’ interventions could offset and obscure the shift which caused the commitment problem in the first place. Indeed, that is often the point of interventions. Also, the final roster of belligerent states cannot be known with certainty by states when they intervene—though of course states do try to anticipate if additional states are likely to join—therefore looking at the power shift across the final belligerent coalitions is inappropriate.

This variable was created using Weisiger’s (2013, 62) methodology which quantifies power shifts in relative capabilities as $1 - k$ where for a pair of states $\{A, B\}$ at times $\in [1,2]$:

$$k = \frac{capA_1 \cdot capB_2}{capA_2 \cdot capB_1}$$

State B is always the state that has experienced relative decline which ensures that $k$ is between zero and one and well behaved. The quantity, $k$, is subtracted from one so that a rising value of the variable indicates an increasing degree in the power shift. Data on pre-war power shifts exist for the primary belligerents for 79 of the 94 interstate wars in COW.  

Of the fifteen wars

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18 The wars dropped are the Anglo-Persian War (1856), the First Central American War (1876), the First and Second Balkan Wars (1912–13 and 1913), the Russo-Polish War (1919–20), the Hungarian Adversaries (1919), the Lithuanian-Polish War (1920), the First Kashmir War (1947–49), the Arab-Israeli War of 1947–48, the Off Shore Islands War (1954–55), the Ifni War (1957–58), the War over Angola (1975–76), the War of Bosnian Independence (1992), the Azeri-Armenian War (1993–94), and Badme Border War (1998–2000). Most of these wars involve newly independent states for which data were not available in the National Materials Capabilities dataset going back the requisite five years. This means the findings reported below may not translate well to wars involving newly independent states as such wars have been systematically excluded from the analysis because of data limitations.
dropped from the analysis three experienced intervention: the Second Balkan War; the Hungarians Adversaries War; and the Ifni War.\(^{19}\)

Several control variables are included. First, greater geographic proximity to the war increases the odds a state will intervene (Raknerud and Hegre 1997; Richardson 1960; Siverson and Starr 1991; Shirkey 2009). This concept is captured by a pair of dummy variables: whether or not a state was contiguous by land to the conflict and whether or not a state is in the same region as the war.\(^{20}\) Second, states with allies in the war have been found to be more likely to intervene (Leeds 2005; Raknerud and Hegre 1997; Siverson and Starr 1991; Shirkey 2009). Therefore, whether or not a non-belligerent state has a defense pact, neutrality pact, or entente with a belligerent power are each indicated by a dummy variable. These variables are taken from COW’s alliance dataset, version 4.1 (Gibler 2009). Third, some prior research suggests that wars involving great powers are more likely attract outside military intervention than are other wars (Kim 1991; Yamamoto and Bremer 1980). Likewise, great powers are more likely to intervene in ongoing wars (Alfeld and Bueno de Mesquita 1979; Richardson 1960; Siverson and Starr 1991; Shirkey 2009). These factors are each captured by dummy variables. Both are taken from COW

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\(^{19}\) A fourth war, The War in Angola (1975–76), could be listed here. COW counts Angola as intervening as its forces did not enter combat until a few days after the forces of its Cuban ally did. The war was fought in Angola over the nature of the Angolan regime and logic suggests Angola was a belligerent from the outset.

\(^{20}\) The states, by COW country code, in each region are as follows: North America (2–95); South America (100–165); Europe (200–395 and 640 until 4/1913); West Africa (402–484); Southern and East Africa (490–591); Middle East and North Africa (600–698); Southern and Central Asia (700–705 and 750–790); Northeast Asia (365 and 710–740); Southeast Asia (800–850); Oceania (900–990).
(Correlates of War Project 2011). Fourth, a dummy variable indicates whether or not a non-belligerent state had an enduring rival in the war as the presence of such a rival could be an incentive to intervene as some prior research has found a connection between rivalry and military intervention (Colaresi, Rasler, and Thompson 2007; Lee and Thompson 2015; Rasler and Thompson 2000). This variable was created from Klein, Goertz, and Diehl’s (2006) list of enduring rivalries.21 Fifth, dummy variables record both whether or not a non-belligerent state was a democracy and if a potential intervener and at least one state already in the war were democracies as democracies may be more likely to intervene and more likely to intervene in the wars of other democracies. These were derived from Polity IV with a state being considered a democracy if the democracy minus autocracy score was six or greater (Marshall, Jaggers, and Gurr 2011). Sixth, a variable records whether or not the war occurred in the post-1945 era as Zacher (2001) suggests territorial realignment has been rare in this era. This may reduce incentives to bandwagon thereby lowering the rate at which states join wars. Last, a dummy variable records whether or not the United Nations was acting as a collective security organization during the war as collective security can potentially widen wars (Betts 1992). Obviously, prior to the founding of the UN this variable always equals zero. Since its founding, the UN has acted as a collective security organization in only two interstate wars: the Korean War and the Gulf War.22 This variable does not test the proposition that collective security

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21 It was extended beyond 2001 to 2003 by counting all of the enduring rivalries that were active as of 31 December 2001 as continuing through the 2003 Invasion of Iraq so that that war could be included in the analysis. Excluding the 2003 Invasion of Iraq from the analysis has no effect on the rivalry variable.

institutions cause wars to spread, but rather acts as a control variable for the UN’s role in these two wars. Descriptive statistics for all of the variables can be seen in in Tables 1a and 1b.

[Tables 1a and 1b here]

Results

Given that the dependent variables are dichotomous, a binominal model is appropriate. Furthermore, as there is no reason to assume the standard errors are normally distributed
generalized linear models are appropriate. For these reasons, the data were analyzed using
generalized linear models with a logit specification.23 Coefficients and robust standard errors are reported. Each case represents a state which began a given war as a non-belligerent power.

World War Two is disaggregated into two wars: one in Europe and one in the Pacific. The latter is treated as a continuation of the Sino-Japanese War (1937–45).

The results provide clear support for two of the hypotheses (see Table 2). First, Model 1 shows that wars preceded by substantial power shifts—an indication of commitment problems—are correlated with and likely causal of military intervention in interstate wars (H1). Increasing the power shift by one standard deviation from its mean while holding all the other variables at their medians raises the odds of military intervention by nearly three-quarters—from 0.07% to 0.12%. The overall likelihood remains quite low, but this is because the likelihood represents the odds that a given state will intervene in a given war. Intervention, rather like war itself, is a somewhat rare phenomenon. Even in wars with multiple interventions, such as the Korean War, most states remain non-belligerents. The overall likelihood is further depressed by the fact that the median for all of the control variables except for the post-1945 era is zero. In other words, the

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23 As outcomes of intervention—such as if the intervening states end up on the winning side—are not being considered, a selection model is not necessary.
reported likelihood is the odds that a geographically remote, minor power would intervene in a given war. Given that positive values of these controls increase the odds of intervention (except for the post-1945 era when intervention is rarer for a given state), these results suggest a smaller substantive effect than would be the case for a political relevant state. If instead, the controls are set to reflect politically relevant states, the odds are substantially higher. For instance, a one standard deviation increase in the power shift increases the odds that a contiguous great power in the same region will join by nearly half from 6.83% to a now substantively significant 11.01%. In the pre-1945 era the odds go from 32.70% to a very large 45.04%. These results show that power shifts—a proxy for commitment problems—are both statistically and substantively significant predictors of military intervention into interstate wars.

[Table 2 here]

Second, Model 2 shows pre-war power shifts are also significantly correlated with non-belligerents states being attacked or occupied. Holding all the other variables at their median, a one standard deviation increase in the power shift more than doubles the odds of involuntary intervention and occupation from 0.004% to nearly 0.010%. Obviously, as suggested by the very low likelihood, such blatant disregard for the rights of neutrals is exceedingly rare. It tends to happen only in exceptionally severe wars and generally only geographically proximate non-belligerent states are in danger of occupation or attack. Where these conditions are met, however, the danger is real. This can be seen by looking at the odds of a contiguous, non-great power state in the same region as the war being attacked or occupied during a war involving a great power. In such a scenario, a one standard deviation increase in the power shift more than doubles the odds of being attacked or occupied from 2.01% to a now more substantively significant 4.74%. Obviously, such blatant violations of international law and norms happily remain rare even in the
more likely scenario. This finding matters to the broader argument because it is suggestive that
wars caused by commitment problems do have more expansive war aims than other wars. This is
why such gross violations of neutrality occur at a higher rate, but it is also why states militarily
intervene in wars caused by commitment problems. These findings in Model 2 indicate that the
results in Model 1 are being driven at least in part by the fact that belligerents in wars caused by
commitment problems have more expansive wars aims and not just by the fact that such wars
tend to last longer thereby providing more time for states to intervene.

Last, Models 3 and 4 show that both early and late intervention are significantly
correlated with ante bellum power shifts, though the statistical significance is stronger for late
intervention. Holding all other variables at their median, a one standard deviation increase in the
power shift raises the odds of early intervention from 0.01% to 0.02%. For a contiguous great
power in the same region, a similar shift increases the odds from 0.80% to 1.36% in the post-
1945 era and from 5.77% to 9.48% in the pre-1945 era, 70% and 64% increases respectively.
Likewise, a one standard deviation increase in the power shifts raises the likelihood of late
intervention from 0.06% to 0.10%. For a contiguous great power in the same region, a one
standard deviation increase in the power shift raises the likelihood of late intervention from 4.39%
to 6.95% in the post-1945 era and from 24.19% to 34.18% in the pre-1945 era, respective
increases of 58% and 40%. Thus, the effect for early intervention is larger in percentage terms,
but smaller in absolute terms. In other words, neither hypothesis is clearly correct as power shifts
are strongly correlated with both early and late intervention. More will be said about this below.

The results for the control variables are interesting as well. As expected, great powers and
geographically proximate states are significantly more likely to intervene militarily in ongoing
wars than are other states. This is consistent with a great deal of prior research. The one
exception is for great powers and involuntary intervention. Great powers are not significantly more likely to be attacked than other states. This is intuitive given the ability of great powers to resist invasion and respond to attacks. Indeed, it is rather surprising that they are not less likely to be attacked. This may be an indication that the unattractiveness of attacking great powers is offset by their tendency to intervene diplomatically in the wars of others, thereby prompting attacks. Also, the UN acting as a collective security institution is correlated with intervention in general and late intervention in particular, but not with involuntary or early intervention.

Democracies appear to be more likely to intervene than other regime types (Models 1–3) and possibly more likely to intervene if there is another democracy already in the war, though that relationship holds only in Model 1. Finally, intervention is less likely in the post-1945 period. This is driven less by an actual lower rate of intervention per war post-1945 than by the fact there are far more states in the state system making the percentage of states that intervene much lower.24

More surprising perhaps are the negative results for some of the other control variables, especially alliances. Though defense pacts are positively and significantly correlated with early intervention, they are not correlated with military intervention in general, late intervention, or involuntary intervention. This is broadly consistent, however, with prior research which finds that the effect of defense pacts on intervention is concentrated in the early phases of wars (Joyce, Ghosn, and Bayer 2014; Melin and Koch 2010; Shirkey 2009). There is likely a selection effect at work where by the mid and latter stages of wars reliable defense pacts have already been honored, leaving mainly those defense pacts which were less likely to ever be honored. Therefore, the drop-off in alliance reliability over the course of a war is not particularly

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24 Prior to 1946, there are 59 instances of military intervention. From 1946 onward, there are 45.
surprising. Likewise, neutrality pacts are correlated only with involuntary intervention. This is consistent with the notion that such pacts can be indications of enmity rather than amity (Kadera 1998), and therefore, should be good predictors of future invasions. Ententes are for the most part not correlated with military intervention, though they are significantly correlated with late intervention. The general absence of a relationship between ententes and intervention is consistent with prior research (Shirkey 2009). Finally, neither the presence of an enduring rival nor the presence of great power in the war—outside of involuntary intervention—increased the odds of intervention. Again, both negative results are consistent with some prior research (Shirkey 2009), though the positive correlation between the presence of a great power in a war and involuntary intervention is novel.

Several robustness checks were performed. First, 20 and 40 day cutoffs as opposed to 30 days were used to distinguish between early and late intervention. In practice, this change affects only three interventions. Using a 20 day cutoff, Japan becomes a late intervener in World War One. Using a 40 day cutoff, Finland becomes an early joiner in the War of Estonian Liberation and Canada becomes an early joiner in the Invasion of Afghanistan. These changes do not have a significant effect on the results. Second, checks were performed on the sensitivity of the results to the five year lag for the power shift variable. Lags of one year longer and shorter were used. The results are again essentially unchanged. Third, the great power variable was replaced with CINC scores. This does not substantially affect the results for the power shift variables in any of the models, but higher CINC scores, unlike great power status, are not significantly correlated

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25 The null results for rivalry hold if an interaction term between rivalry and contiguity is substituted for the rivalry variable as suggested by Lee and Thompson (2015).

26 This changes the population of the cases somewhat. With the shorter lag, data become available for the Second Balkan War (1913), the Off-Shore Islands War (1954–55), and the Badme Border War (1998–2000).
with late intervention. They are significantly correlated with involuntary intervention, early intervention, and military intervention in general. Finally, outlier values of the power shift variable were dropped and the analysis rerun. Most pre-war power shifts cluster towards the lower end of the variable’s scale, with 90% of the wars having a shift of less than 0.45. Three wars, the Franco-Turkish War (1919–21), the Vietnamese-Cambodian War (1977–79), and the Invasion of Afghanistan (2001), have shifts of over 0.7. If they are excluded from the analysis the results again hold. Outliers, therefore, are not driving the results. Thus, the results are quite robust overall.

Conclusion

The results show that pre-war power shifts are significantly correlated with military intervention. This strongly suggests that wars caused by commitment problems are more likely to expand. Ante bellum power shifts are associated with states deciding to join wars via military intervention (H1) and increase the chances that belligerents will decide to attack or occupy neutral powers (H2). These two findings support both claims that certain causes of war should lead to larger conflagrations than others and the bargaining framework’s view that the same processes, in this case commitment problems, can be used to explain both war initiation and war expansion.

This support for the bargaining framework’s ability to explain which wars are more likely to experience military intervention is important. The bargaining framework claims to be able to explain all stages of a war: initiation; war fighting and expansion; and termination. While many studies have supported the bargaining framework’s explanations for initiation and termination—and even for war fighting strategies—few studies have looked at the framework’s ability to explain expansion. If the bargaining framework’s mechanisms had been unable to aid in the
understanding of military intervention and war expansion, it would have cast doubt on the framework’s ability to explain the totality of wars and to serve as a general model for understanding international conflict. Thus, the findings have implications beyond military intervention as they lend confidence to the bargaining framework’s explanations in general.

When combined with the strong support for the relationship between late intervention and commitment problems (H3b) and early intervention (H3a), the findings suggest the mechanisms suggested by the bargaining framework and its critics are both at work. In other words, at times the factors which produce large, multilateral wars are distinct at the outset at other times events within wars after they have begun are important in causing them to expand. Also, it could be that while it is apparent to some states that they are affected by the initial bilateral dispute causing them to join quite quickly, the fact that the war will impact further states is not immediately obvious. Both world wars for instance had an initial wave of intervention followed by additional states intervening one by one as the wars continued for months and years. Thus, commitment problems do seem to set general wars and other wars which experience military intervention apart from the larger body of conflicts through both faster and slower moving processes.

It is equally important to understand what the findings do not imply. In no way do they suggest that wars caused by commitment problems will always attract outside military intervention. Nor do they suggest that commitment problems are the only pre-war factor indicative of wars which will experience military intervention. For instance, multiparty wars, of which wars experiencing military intervention are a subset, tend to be preceded by the formation of alliance ties (Valeriano and Vasquez 2010; Vasquez and Rundlett 2015). Determining whether such alliance formation is driving commitment problems or has its own distinctive logic would prove a profitable avenue of future research.
On the whole, the findings suggest that some wars may be more likely than others to draw outside states into the conflict. The findings also indicate which wars those are—wars fought over commitment problems as suggested by significant shifts in the relative balance of power ante bellum. Whether policy makers can take advantage of this knowledge is less clear as the findings also suggest that not all wars caused by commitment problems will lead to military intervention. Further research into the causes of military intervention could potentially shed light on if certain types of power shifts are more likely to lead to military intervention than others and could potentially identify further causes of war which tend to lead to expansion. Doing so would be of use as such findings could possibly act as a guide to policy and diplomatic efforts.

Bibliography


### Table 1a: Descriptive Statistics—Continuous Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>Min Value</th>
<th>Max Value</th>
<th>Skew</th>
<th>Kurtosis</th>
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<td>0.7231</td>
<td>1.4623</td>
<td>4.6922</td>
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### Table 1b: Descriptive Statistics—Dichotomous Variables

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<td>Involuntary Intervention and Occupation</td>
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<td>Intervened Early</td>
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<td>Intervened Late</td>
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<td>Entente</td>
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<tr>
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<td>Democracy</td>
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<tr>
<td>Joint Democracy</td>
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<td>920</td>
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<tr>
<td>Post-1945</td>
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<td>United Nations</td>
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### Table 2: Results

<table>
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<tr>
<th></th>
<th>Model 1 (H1) All Intervention</th>
<th>Model 2 (H2) Involuntary Intervention and Occupation</th>
<th>Model 3 (H3a) Early Intervention</th>
<th>Model 4 (H3b) Late Intervention</th>
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<tbody>
<tr>
<td>Power Shift</td>
<td>2.872*** (0.599)</td>
<td>4.875*** (1.030)</td>
<td>2.951* (1.183)</td>
<td>2.674*** (0.671)</td>
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<td>Defense Pact</td>
<td>0.552 (0.386)</td>
<td>---------</td>
<td>2.476*** (0.704)</td>
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<td>Neutrality Pact</td>
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<td>Entente</td>
<td>0.904 (0.479)</td>
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<td>0.546 (0.719)</td>
<td>1.232* (0.572)</td>
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<tr>
<td>Same Region</td>
<td>1.300*** (0.297)</td>
<td>1.942** (0.718)</td>
<td>1.291** (0.452)</td>
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<td>Contiguous</td>
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<tr>
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<td>Post-1945</td>
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<td>-2.010** (0.734)</td>
<td>-1.939*** (0.455)</td>
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<td>United Nations</td>
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<td>0.971 (1.199)</td>
<td>4.883*** (0.513)</td>
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<tr>
<td>Constant</td>
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<td>N</td>
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<td>6375</td>
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* p ≤ 0.05; ** p ≤ 0.01; *** p ≤ 0.001