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# ARE DEMOCRACIES MORE OR LESS LIKELY TO ABROGATE ALLIANCES?

by

ERIC HARRISON

Under the Direction of Dr. John Duffield

## ABSTRACT

This thesis examines the impact of democracy on alliance abrogation. It serves as an extension of the current literature that examines democratic commitments and merges that with alliance studies. The data used consists of alliances from 1816-1991 and has been composed using EUGene from Leeds and Anac (2005), Correlates of War, and Polity IV. Using a standard probit model, this thesis examines the relationship between democracy and alliance commitments in a systematic approach and finds little evidence to support existing theoretical justifications on how democracies behave in an alliance.

INDEX WORDS: Alliances, Democratic peace, Democratic commitments

ARE DEMOCRACIES MORE OR LESS LIKELY TO ABROGATE ALLIANCES?

by

ERIC HARRISON

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

in the College of Arts and Sciences

Georgia State University

2013

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2013

ARE DEMOCRACIES MORE OR LESS LIKELY TO ABROGATE ALLIANCES?

by

ERIC HARRISON

Committee Chair: Dr. John Duffield

Committee: Dr. Michael Fix

Dr. Aaron Rapport

Electronic Version Approved:

Office of Graduate Studies

College of Arts and Sciences

Georgia State University

May 2013

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To everyone that knew me and put up with me during this process, thank you.

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## 1 INTRODUCTION

As political science has progressed, democracy has become a more directed and popular field of study. Consequently, this interest has led to the development of many different international relations theories and proposals about how democratic regimes behave in the international system and how they influence the international system. Democratic Peace Theory (DPT) is a foundational theory that has come out of this area of study. Initially, DPT posited that democracies would not go to war with each other (Kant 1795), but it has since grown into its own body of literature to examine economies, international interactions, and state behavior. A second key interest in international relations is that of alliances. Many scholars have looked at how alliances form and whether democracies are more likely to form them. The alliance literature has looked at why states abrogate their alliances, why alliances form and with whom states form alliances. While there have been some studies (Cowhey 1993; Martin 2000; Lipson 2003) that suggest democracies are more reliable allies, this proposition has not been fully evaluated empirically or systematically. More concisely, are democracies better allies? This issue is key for both policy makers and academics as it can lead both to a more nuanced understanding of regime behavior and also a sharpened examination of alliance commitments.

Since DPT has developed its own body of literature to incorporate more than simply whether or not democracies go to war with each other, this project adds to that body of knowledge by examining further how democracies behave in the international system. The goal of this examination of DPT is an empirical test of the general claim that democratic states make more reliable alliance partners. Outside of academia, these findings could lead to better and more informed policy considerations by all powers in the international system, when they are considering treaty and alliance proposals. Previously, it was assumed that any alliance's end was due to opportunistic abrogation. Leeds and Savun (2007), however, show that opportunistic abrogation is, in fact, the case only about a third of the time. While not overly

prevalent, the rate is still a frequent enough occurrence to probe the issue to determine what factors influence treaty abrogation. Are democracies less likely to be opportunistic abrogators and why?

This project differs from previous scholarship in several ways. First, this project seeks to take the previous literature's conclusions on democratic commitments and see if they hold after a systematic examination. While qualitative analysis is useful for theory development and determining the intricacies of a particular kind of causal relationship, a quantitative analysis provides the opportunity to see if that same relationship still holds more broadly. While Mattes (2012) uses a systematic approach to look at democratic commitments after 1945, she is primarily looking at how democratic governments constrain future leaders. Although tangentially related to this study, the main question in her work is not whether democracies are less likely to abrogate their alliance commitments. Secondly, the work that has been done, often only uses small case studies to examine the complex relationship that makes up democratic commitments. Cowhey (1993) and Martin (2000) look at a single two-way relationship. In both cases, one of the contracting partners is the United States. In Cowhey's study the other partner is Japan, and in Martin's the other is the EU as a whole. This factor, a relationship with the global hegemon, could strongly influence the conclusions that each draws, given the hegemonic position that the US occupies.

In order to see if these conclusions are valid more broadly, this study will look across time and power distributions. The data used is a combination of the Correlates of War, Polity IV, the Alliance Treaty Obligation and Provisions project, and some information from the Leeds and Savun (2007) data set, and includes data from 1816 until 1991. This data includes alliances between democracies and the United States as well as democratic alliances to which the United States is not a party to see if these conclusions still hold without the hegemonic power. Thirdly, this project takes a more strict definition of abrogation. Instead of looking at alliances that have simply been violated, here an alliance will be considered abrogated only after treaty invocation when the other treaty party fails to abide by its treaty commitments. This is to further isolate reliability as a testable condition. By being specific in the defini-

tion, it is possible to reduce spurious results.

## 2 LITERATURE REVIEW

DPT can be traced back to the father of Liberalism, Immanuel Kant, and it is understood that democracies possess certain desirable qualities in the international system. Kant (1795) argues that there are three conditions that will lead to perpetual peace. First is the establishment of governments based on a republican constitution. Kant describes the republican constitution as one that preserves juridical freedom with a clear separation of powers with a representative government. His second pillar is the idea that these liberal republics will, over time, unite into a pacific union. This federation would be of free states and would maintain the rights of each. Finally, his third pillar is essentially the establishment of international human rights law. As each of these pillars is realized and expanded, the world would eventually enter into a state of perpetual peace. Alexis de Tocqueville (1863) offers a contrarian view in his study of the American experiment. Here, he notes because of the rate at which the government changes due to elections, American style democracy was unfit for consistent and long term foreign policy and international agreements. In terms of democracy and international agreements, Cowhey (1993) examines the intersection of domestic institutions and international agreements with the use of two case studies, the US and Japan. He determines that there are three factors that determine whether the domestic institutions will support international commitments. These are: the nature of the electoral system, the division of governmental powers, and the transparency of the political system.

Though these same ideas are reiterated in later scholarship, Cowhey's work is limited in its focus on the United States and Japan, and it is more interested in comparing the two countries' ability to augur support for multilateral regimes, instead of looking at how democratic commitments work and behave as a whole. While there is evidence that suggests that democracies behave differently from other governmental types in the international system, this different behavior extends to the commitments

and agreements they make with other states, institutions and organizations. In this literature, it is examined why and how democracies act the way they do in the international arena. We must look beyond Cowhey and to more recent scholarship to discover how these agreements are created and how they function.

Lisa Martin (2000) examines democratic commitments in more detail. Here, she examines the role of domestic legislatures in relation to the executive to determine their role in the outcomes of international commitments. Her primary case studies come from the United States and the European Union. She finds that overall, while institutional procedures may differ, increased institutionalization of the legislature and increased legislative influence yields better and more credible international commitments. Martin provides four main categories of hypotheses for testing, though of most interest to this study is the credibility hypothesis. This hypothesis is Martin's main attempt to counter the arguments of the de Tocquevilleian school of thought. She posits that greater institutionalized legislative participation can increase the credibility of international commitments. In her conclusion, she finds that the tighter the constraints that are placed on the executive, the better the track record of implementation of the commitment will be.

While Martin is specifically looking at how democratic commitments function via domestic legislatures, and has a broader focus than Cowhey (1993), her research is characterized by a relatively narrow scope. Her book consists of only a case study of two units: the United States and the European Union. Due to its hegemonic stature the United States may be unique and may skew interpretation. Thus inferences drawn from the U.S. legislature may not be generalizable to other legislatures because of this unique position. Also, the E.U. is still trying to figure out how European integration is to actually take place. While her case study was done before the Treaty of Lisbon (2009), there still has not been a significant amount of integration among the European states. The Greek, Italian, and Spanish debt crises of

2011-2012 seem to only be exacerbating the issues of this lack of integration. Thus, like the United States, the European Union is a unique case that may not be generalizable to other legislatures.

Lipson (2003) takes a slightly different, but more specific, avenue in his study of international commitments. His is a theoretical work that examines what should make democracies more reliable allies in comparison to non-democracies. Rather than looking solely at the legislative-executive interaction over a broad policy spectrum, Lipson focuses on the structure of the state as a whole in relation to security agreements. Lipson offers four main reasons for the behavior of democracies in alliances. First, the high transparency that exists within stable democracies allows for interested individuals and organizations to view and dissect policy choices made by government. This transparency provides a constraint for governments to make “better” decisions. Transparency is related to his second point: high audience costs which are associated with democracy. Should a democratic leader make a decision that is outside the policy preferences of his constituents, there are significant costs that will be paid by that politician. These costs include significant drops in approval/public opinion and can range from losing reelection to removal from office. Some recent scholars, Snyder and Bourhard (2011) and Trachtenberg (2012), have recently challenged the existence of audience costs and their effects. A third trait that Lipson provides is the continuity of governance. Democracies, given the constraints of government, have clear rules for how policy changes and how leaders and senior bureaucrats are selected. Within these constraints, policy does not change significantly over short periods of time. Lipson’s fourth trait of established democracies is that of constitutional governance. A constitutional system of governance provides for a clear delineation of powers and responsibilities that governments have in relation to agreements with citizens and other countries.

Mattes (2012) looks into the reliability of democratic partners in alliance commitments. In this study, she looks at democracies after 1945 and the choice between a defense treaty (an alliance as commonly understood) versus a consultation pact. A consultation pact, as she defines it, is something in

between an entente and a defense pact. It is a formal agreement that the two states will meet and discuss an issue and to formulate a joint response to that issue. She uses a quantitative analysis to show that Martin's (2000) qualitative analysis holds on a large scale for many different democracies in different security arrangements.

While Mattes (2012) takes a significant step and demonstrates how democratic leaders hold future leaders accountable to their original agreements, this study - or research note as she refers to it - is narrow in scope. While constraining future leaders and alliance reliability are related, her primary focus is on the mechanisms in place to constrain leaders. Understanding the mechanisms and causal factors for how leaders constrain future governments is only one part of alliance reliability. Second, it does not compare democracies to non-democracies. Consequently, it does not allow us to compare democracies and non-democracies to determine which is more reliable since autocracies are left out of the sample. Third, her study is also limited to how democratic leaders constrain future leaders. A final interesting part of Mattes' article is the case selection. By using only cases after 1945, it suggests that this way of constraining leaders is a relatively new phenomenon, and does not allow us to see the effects prior to the creation of the United Nations. Though, the choice of selecting cases only after 1945 may be due to Gibler and Wolford (2006) suggesting that alliances come first and then those states become democracies.

The previous literature is related mostly to that of structural arguments for why democracies behave as they do. The discussion leads one to ask if there are also cultural or normative factors that influence how a state's domestic level influences the international level in the form of international agreements. If we look to Doyle (1986), Maoz and Russett (1993), Owen (1994), and Kant (1795), we can find the cultural and normative explanations for DPT, but we can also use these explanations to evaluate democratic commitments. The normative argument specifies "States, to the extent possible, externalize the norms of behavior that are developed within and characterize their domestic political processes and

institutions” (Maoz and Russett 1993 p 625). It is easy to see this in relation to conflict, but we can also look at this statement to explain democratic international commitments. Modern democracies often emphasize the idea of the rule of law. In a democratic system, typically, contracts are binding and the rule of law is valued and obeyed. There are also mechanisms in place to adjudicate differences as well as punish violators. The repetition of such an idea, that contracts are binding, should show outwardly in the international agreements that democracies make.

Continuing a normative/cultural line of thought, the nature of political conflict in a democratic system leads to expectations that conflicts will be resolved peacefully. Winning does not mean the eradication of the opponent, and the losing party can reorganize and try again in the next election. This system/culture leads to a peaceful transition between governments. Consequently, in a state’s dealings with another democratic state, there is already a history of ending disagreements with compromise (Maoz and Russett 1993). From a more international/systemic perspective, the norm of *pacta sunt servanda* has created a situation where it is frowned upon to violate the treaties that one has signed, and in some cases there may be an avenue of punishment for broken agreements. As an example of punishment for violating this norm, we can look to the current and unfolding case of Iran and its nuclear program. Here, a member state to the nonproliferation treaty appears to be violating the rules of that treaty. Consequently, a number of states have issued sanctions against its economy. There have also been other states and some influential politicians that have called for a military intervention to cease Iran’s ability to enrich uranium. Thus, an enforcement mechanism is somewhat in place to ensure *pacta sunt servanda*. With such a mechanism in place, states (and especially democracies) should be more inclined to follow their agreements since there is an international cost in conjunction with the domestic costs.

A more empirical look at the cultural and normative arguments for why democracies behave differently can be found in Mousseau (2003). Here, it is examined through United Nations General Assem-



bly (UNGA) roll call votes whether or not there are common values between market democracies. His reasoning for using the UNGA votes from 1950-1991 is because the UNGA provides a way to see both salient issues such as security and human rights, and less salient procedural issues in the UNGA. This variety of issues, Mousseau argues, is able to provide a large sample to look for patterns amongst market democracies. Mousseau specifically sets market democracies apart from other democracies due to previous research finding a connection between market economies and democratic peace, though the research he cites is all his own. He finds evidence that these states vote similarly in the UNGA and that this phenomenon is due to the shared cultural traits of market economies. This study, though it contains two classes of democracy, helps to illustrate at a systematic level where democracies behave consistently with each other and differently from other governmental forms.

### 3 THEORY

As can be seen, the literature has touched on this particular intersection of DPT and alliance theory, but there is a lacuna where one would expect to see an empirical evaluation of the theories that Lipson, Martin, and Cowhey have provided. While Leeds, Savun, and Mattes have all conducted some form of empirical testing of certain hypotheses involving alliances, none of them have tested the more general idea that democracies make better allies. There are many reasons to believe that democracies will behave differently. Structural constraints like regular elections and a large electorate as well as a high degree of transparency should cause different behavior. As argued by Bueno de Mesquita (2003) and Lipson (2003), leaders are constrained to certain actions. When they are constrained by a constitutionally based government, leaders are further bound to their commitments. In addition to Martin and Lipson, other authors have also proposed that democracies are less likely to have quick and erratic policy changes. (Gaubatz 1996 and Leeds 1999). Finally, there are the cultural arguments where we can see even more evidence for democratic states' behavior. Democracies tend to externalize their norms of

behavior. Since at the domestic level they are forced to abide by their agreements, this tendency to abide by agreements should extend to the international level. The constraining factors that Lipson illustrates make the most intuitive sense, though the institutionalization that Martin has discovered in the U.S. and the E.U. also carries some intuitive value. If any of these sets of ideas do have an effect, one should be able to see a statistically significant effect of democracies behavior in an alliance. If a democracy makes more credible commitments and is a more reliable partner, an empirical analysis should be able to observe this phenomenon throughout history.

Given these theoretical underpinnings for the Democratic Peace and the behavior of democracies in international commitments, my hypothesis is thus:

**H1:** Democracies are less likely than non-democracies  
to violate alliance treaties when they are invoked.

If any of the constraints proposed by Lipson, Cowhey, and Martin are true, then testing this hypothesis should be able to discern the validity of the role of democracy in an alliance. The hypothesis is simultaneously more constrained and more relaxed than other work that has become before it. The general precept of the hypothesis is to test the idea that democracies are more reliable alliance partners rather than to test a specific aspect of a theory from Martin (2000) or Lipson (2003). At the same time, using a more strict definition for abrogation causes the scope to narrow. Here, abrogation is contingent upon a state failing to abide by its alliance commitment if a militarized interstate dispute breaks out. This leaves out issues like revolutionary governments that may nullify a treaty obligation or misunderstandings in behavior that may result in violation of a treaty by a technicality, which do not represent the same drastic failure/betrayal of a state to abide by its commitment to back up an ally in a militarized interstate dispute (MID). In this hypothesis, I am relying on the Polity IV index's definition of democracy. Polity IV uses three factors: "[First,] is the presence of institutions and procedures through which citizens can express effective preferences about alternative policies and leaders. Second, is the existence of institu-

tionalized constraints on the exercise of power by the executive. Third, is the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation” (Marshall and Jagers 2011). From these factors any state that scores a 6 or higher on a scale of -10,10 is a democracy.<sup>1</sup> Violation occurs when the partner does not fulfill the terms of the agreement.

#### **4 METHODOLOGY**

This project has not been designed to show whether one of Lipson’s (2003) or Martin’s (2000) factors determine why democratic commitments prevail. Instead, the purpose, as noted previously, is to test the conclusions of previous studies to see if in fact they are true at the macro level. This way it is possible to see if Martin (2000) and Lipson (2003) are indeed generalizable. In order to look at the effect of democracy on alliance abrogation, this project utilizes a quantitative analysis incorporating data from several existing data sets. Given the previous qualitative research that has been done on the matter, one would expect that these same ideas should hold systematically across cases. The number of cases is such that it would be inappropriate and near impossible to use a qualitative method to examine each of the observations. Given these constraints, a quantitative approach is more appropriate for testing the theory. I use a mix of data from the Alliance Treaty Obligations and Provisions project, the Correlates of War project, and the Polity IV index as well as information from Leeds and Anac’s (2005) and Leeds and Savun’s (2007) data sets. These were brought together using the EUGene program as well as some input manually after EUGene combined the relevant variables from the various data sets. The data has been structured so that the unit of analysis is the alliance in the year that it was invoked. 136 of the 137 invoked treaties from 1815-1991 that were identified by Leeds and Anac (2005) are in the data set. Some of the alliances were multilateral treaties which will be explained further in the data section.

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<sup>1</sup> For further description of the scale see the Data section.

For this thesis a probit model was selected, given the dichotomous nature of the dependent variable, as well as the probit model's efficiency and consistency. All observations which were not part of an invoked treaty were removed from the data set. This left only 137 (one of which was deleted)<sup>2</sup> observations, of which 45 were violated and 91 were non-violated invoked treaties, a roughly one third – two thirds split. From this point the multilateral alliances were disaggregated into their constituent parts all directed towards the treaty invoker. This expanded the number of observations to 284 with 79 observations being violated treaties and 205 being honored treaties.<sup>3</sup>

## 5 DATA

EUGene<sup>4</sup> allowed me to merge the needed variables from Correlates of War, Polity IV, and The Alliance Treaty Obligations and Provisions Project. EUGene was needed in order to efficiently merge the data with minimum error. In order to take use of all of Leeds and Anac (2005) the data had to include all possible dyads. In addition, a contiguity variable and s-score variable also included to later help control for distance between states and foreign policy positions respectively. The alliances involved in the data set include defensive and offensive alliances as well as non-aggression pacts and consultation pacts. After using EUGene to create a large data set that included s-scores, contiguity and some identifier variables, it was then appended to the original Leeds and Anac (2005) data set. Also added to this data set were a duration variable, a variable for whether or not the state that has the obligations to respond to the invoked treaty is a democracy, a contiguity variable, and a variable representing a bilateral or multilateral treaty.

All of the data were selected based on the criteria that one of the parties of a treaty had invoked the treaty. This gives the opportunity to test whether democracy can have an influence on treaty abro-

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<sup>2</sup> This observation was deleted because it could not be verified as to which conflict invoked the treaty as well as several other details.

<sup>3</sup> This is explained further in the Data section

<sup>4</sup> <http://www.eugenesoftware.org/>

gation. In addition to this selection based on invoked treaties from Leeds and Anac (2005) one treaty was dropped because it could not be validated from other data sources. From this point the multilateral treaties were broken up into individual dyads directed towards the state that invoked the treaty to match the coding of the bilateral treaties that already had this construction. This leads to the dependent variable; abrogation. This came from the ATOP project and Leeds and Anac (2005) and is coded as a 1 if the alliance ended due to a state abrogating the alliance and a 0 if it did not. To represent democracy as a testable concept, it was manually determined if the remaining members of the treaty (members other than the invoking state) were democracies that were being asked to respond. A dummy variable was created where a 0 meant that the target of the request was not a democracy or a 1 where the target was a democracy. Following Leeds and Savun (2007) and others, a state was considered a democracy if on the Polity IV scale it scored a 6 or higher. This construction allows one to test the reliability of a democracy when it is asked by a constituent party to a treaty to respond to an invoked treaty.

As for control variables, I will be using one for alliance duration (in years). Alliance duration is theoretically appropriate as a control variable because Lai and Reiter (2000), and other institutional theorists, have demonstrated and argued that the presence of an alliance in the previous year have an influence on the likelihood of a continued alliance. The higher likelihood is due to the costs associated with changing the alliance or renegeing. This variable was created by subtracting the beginning year of the alliance from the year the alliance was invoked. Contiguity is another control variable used in the model. States that are closer in geography are likely to aid each other in time of conflict. The idea being that it is much easier for Egypt to bail out Jordan because they are neighbors than it is for Egypt to aid Venezuela because of the large distance between the two. This is coded as a categorical variable ranging from land borders to different distances by sea to no contiguity and is a 0-6 scale. The S-Score is the final and a particularly important variable. This variable ranges from -1,1 and is a reflection of the foreign policy interests of the states involved. A -1 signifies that the states are entirely different in terms of

foreign policy goals and a 1 means that two states are in complete agreement. This score was created by Signorino and Ritter (1999) and is the unweighted global score and lagged one year. Thus for a treaty between England and Poland that is invoked in 1939, then the S-score between the two for 1938 is used. This temporal construction is used because the policy alignments closer to the invocation date will be more important than those of years past. A final control variable is a dummy variable that is coded as 1 if the treaty is bilateral and a 0 if the treaty is multilateral.

The following table provides standard summary statistics about the data. While it only contains the basic summary statistics, one is still able to ascertain the distributions of different variables and see why their theoretical justifications are as such previously.

Table 5.1 Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Treaty Violation	284	0.278	0.449	0	1
Democratic Target	284	0.194	0.396	0	1
S-Score Lag	282	0.833	0.195	0.042	1
Duration	284	8.366	10.240	0	41
Lesser Commitment	284	0.144	0.352	0	1
Contiguity	284	3.919	2.376	1	6
Bilateral Treaty	284	0.373	0.485	0	1

## 6 RESULTS

The results of the probit analysis paint a surprising and counterintuitive picture. Contrary to the literature and the theories tested here, the results show that there is no statistically significant increase in reliability of democracy in an alliance. This would suggest that there is a limit to the difference in behavior by democracies in the international system. Though this particular model does not allow us to see the magnitude of the effects of each variable, it does allow us to see the direction and significance of the effect. Instead of democracy being a significant variable for any alliance, we can look at the P-value and

see that it is not. Another intriguing result is the sign of the coefficient for democracy. Whereas theoretically we would expect democracy to have a negative direction because it lessens the possibility of violation; instead we see a positive coefficient. This would suggest - especially if the variable was statistically significant - that if the target of a request is a democratic state, that may actually increase the likelihood of violation. This is an especially odd result given the theory around the DPT.

Table 6.1 Results of Probit Analysis

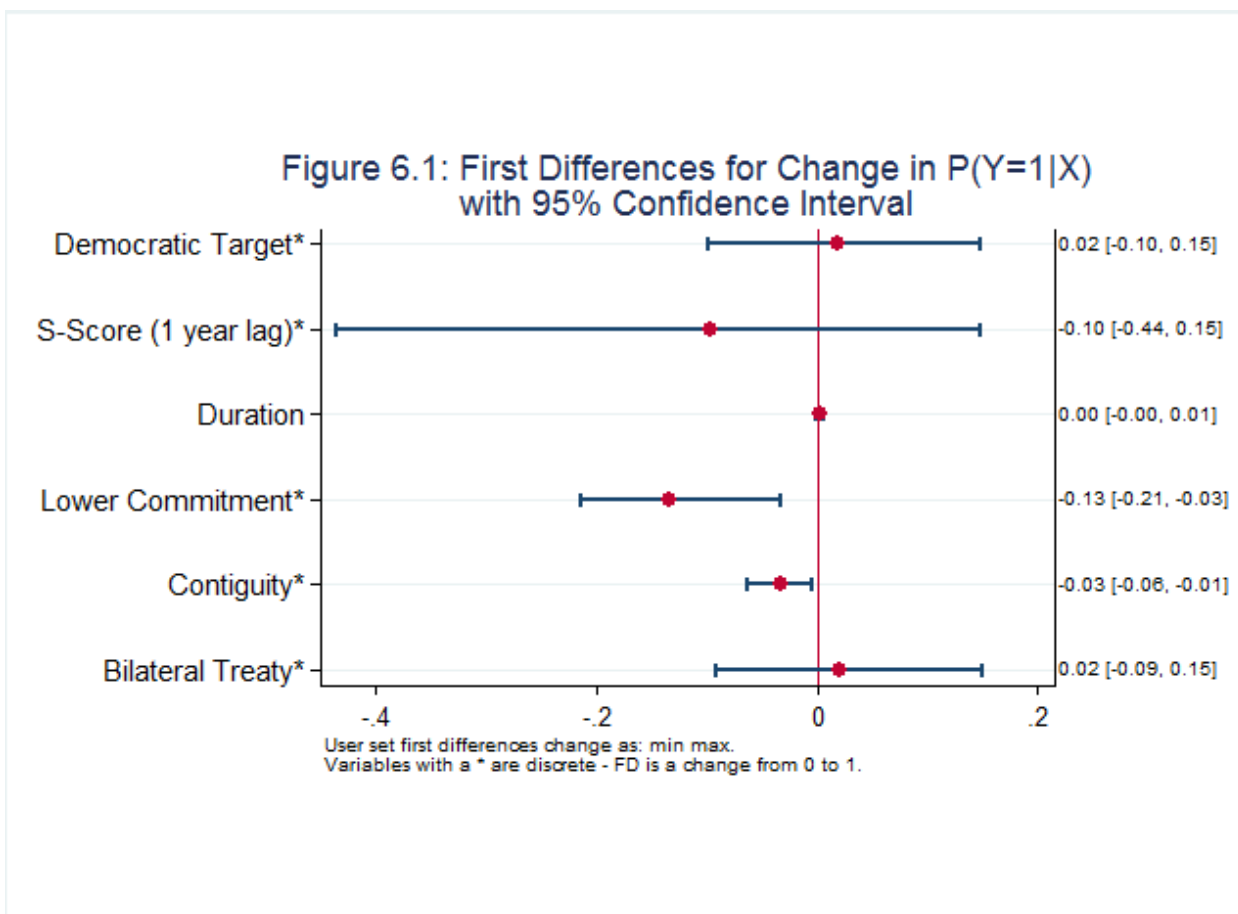
	Coefficient	S.E.	p - Value
Democratic Target	0.056	0.221	0.800
S-Score Lag	-0.267	0.488	0.584
Duration	0.012	0.008	0.146
Lesser Commitment	-0.718	0.300	0.017
Contiguity	-0.089	0.038	0.019
Bilateral Treaty	0.063	0.211	0.764
Constant	-0.088	0.499	0.860
N =	282		
LR $X^2$ =	12.790		
$X^2$ =	0.046		
Log likelihood =	-158.931		

As for the control variables, the commitment and contiguity variables are the only ones with significant results. This suggests that both geographic proximity and the level of commitment involved in an alliance are two important factors. In terms of the level of commitment, it is much easier to abide by a nonaggression or consultation pact than it is to abide by an offensive or defensive treaty. In terms of contiguity, this may result from a temporal bias when it was much more difficult to support a partner around the world, where in modern times this is much easier. Simply looking at the difference in mobilization between WWI and the Persian Gulf War can illustrate this further. Both of these results are rather intuitive and unsurprising. Duration, S-Score, and whether or not the treaty is bilateral are not significant. These are all surprising results. One would expect a foreign policy alignment to be an important factor in determining the likelihood of honoring a commitment. If two states are in complete foreign policy agreement, then the reasons for violating a commitment begin to dwindle. As for duration, previ-

ous research suggests this should be a significant variable do to the costs associated with keeping an alliance established, and the costs of renegeing on a long term alliance.

In order to see the magnitude of the effect of democracy, a first differences approach was taken using Clarify (Tomz Wittenberg and King 2001). To further examine the relationship between democracy and treaty abrogation, the change in the predicted probability of abrogation as each variable is moved from its minimum to its maximum value, holding all other variables constant at their mean values, was calculated. This was also done for each variable to see the magnitude of the effect. As we can see from the first differences, the effect of changing from a non-democracy to a democracy does not have a large effect on violation. Table 6.2 shows that the probability of violation is still small when we look at the change from an alliance of non-democracies to one of all democracies. In terms of the theory, it is still supported that democracy (specifically) and government type (in general) do not have a significant effect on determining whether a treaty is going to be violated.





These surprising results lead one to question why these are different from the theoretical basis supplied by scholars like Lipson and Martin. This is not the first time that DPT has been questioned or shaken. Though this project is not attacking the foundation of DPT, only an extension of DPT, it still has ramifications for other scholars. This continues the scholarship that shows that there are limits to DPT, and that alliance violation is one of those limits. After a systematic approach, democracy does not have the impact that case studies, anecdotes, and theory would have suggested. This problem would suggest that we need to re-evaluate DPT as a whole to determine whether or not it is as extensive as previously believed.

There are several recent works that doubt the power and effect of democracy. McDonald (2010) builds on a growing movement of capitalist peace, arguing that rather than democracy being the lynchpin for peace, it is capitalism instead. This theory would be an attractive spot for future scholarship to begin in further evaluating alliance commitments. In an even more recent article, Downes and Sechser

(2012) re-evaluate the ability of democracies to issue more credible threats. Here, they find that democracies issue threats that are no more successful or forceful than those of non-democracies. Gartzke and Gleditsch (2004) also take on the idea that democracies may not be more reliable allies and come to a similar conclusion, that democracies may not be any better than non-democracies. However, Gartzke and Gleditsch (2004) do not have the same odd result of a possible correlation between democracy and violation.

## **7 CONCLUSION**

This study is not the first to analyze this phenomenon. There have been several inquiries into the behavior of democracies in the international system, and there have been almost as many inquiries into the behavior of alliances. What differentiates this study is that it attempts to look into the alliance and its constituent parties to determine if democracy has an effect on the level of alliance commitments. After consulting the literature, one would tend to believe that the effects of democracy would extend into the realm of alliance commitments. After consulting the data, this is not the case. The data analysis suggests that instead of democracy having an impact on commitments and treaty violation, that there is no statistically significant effect that democracy has on alliance abrogation. Taking these conclusions to their logical extension, DPT is not the all-encompassing theory that some suggest it to be. While democracies may not be inclined to go to war with each other, the extensions of the theory to the behavior of democracy need to be re-evaluated in order to reflect what the data shows.

It is entirely possible that these results exist because the theories that the hypothesis is based upon are biased. The bias that exists is that most studies that look at this particular phenomenon are small n case studies that use the U.S. or the E.U. as one of their constituent cases. The U.S. has been in a unique position since 1945. Since the U.S. was one of the few states that sustained little damage to its infrastructure during World War II, it was in a unique position with its industrial capability to become

the next hegemon. It is entirely possible that this status as hegemon is what has actually caused previous scholars to conclude that the behaviors exhibited by the US can be applied universally to established democracies. As for the EU as a case study, here there are 27 somewhat separate states that have somewhat decided on a political and economic union. Though European integration is progressing, it is still not yet fully integrated. As the recent financial issues posed by Greece, Spain, Italy, and Ireland have demonstrated, there is not a universal opinion as to how complete European Integration is in practice, as well as the gaping holes in integration left by the various treaties and the lack of a common European constitution. The uniqueness of the European Union may also influence some of the previous scholarship. The history of the continent as well as the incomplete, though attempted, integration may also have an effect on influencing previous theorists.

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## APPENDIX

Before the probit analysis was performed, a Heckman Probit model was run to determine if a selection bias was present. The Heckman Probit controls for the fact that a random process does not generate the population of invoked treaties. Instead, the process that selects the invoked treaties is the, assumingly, systematic and strategic decision by state leaders. Using the Heckman Probit, it is first estimated whether or not the alliance is invoked. This first selection equation is done because the underlying assumption is that violation is first reliant upon invocation. The second stage is a second probit model that uses the estimates from the first model to estimate the coefficients of the constrained model (here the model's dependent variable is violation instead of invocation) and then we can interpret the statistical significance of democracy on the alliance's outcome. This allows for the least biased and most efficient model given the constraints of the assumptions made. Of the 16,606 observations there are 12,276 observations where nothing is violated or invoked, there are 56 that not violated but invoked, 4,238 that are not invoked but violated and 36 that are both invoked and violated.

Table A.1 – Cross Tabulation

	Not Violated	Violated	Total
Not Invoked	12,276	4,238	16,514
Invoked	56	36	92
Total	12,332	4,274	16,606

The following table provides the results of the Heckman Probit. This model has similar results to the probit model, though the model as a whole is not significant. This shows that it is unnecessary to use a selection model to test H1. The data used for this analysis is a directed dyad and includes all alliances from the ATOP project. It is similar to the data used in the main analysis of this paper, though this represents both sides of the dyad and consists of the life of the alliance.

Table A.2  
Results of Heckman Probit Analysis

	Stage 1		Stage 2		
	Coefficient (S. E.)	P-Value		Coefficient (S. E.)	P-Value
Conflict Originator	0.593 (0.146)	0.00	Capability	0.288 (5.042)	0.96
Asymmetry	0.052 (0.101)	0.61	Major Power	-0.218 (0.656)	0.74
Regime Durability	-0.003 (0.002)	0.17	Contiguity	-0.078 (0.075)	0.29
S score	-0.618 (0.127)	0.00	Conflict Originator	1.313 (1.089)	0.23
Duration (years)	-0.022 (0.004)	0.00	Democracy	0.438 (0.446)	0.33
Constant	-1.285 (0.123)	0.00	S score	-2.882 (1.157)	0.01
			Duration (years)	-0.033 (0.044)	0.46
			Constant	1.703 (4.197)	0.69
$\rho$	0.068 (2.224)				
Prob> $\chi^2$ =	0.975				
n =	5844				
Censored obs =	5756				
Uncensored obs =	88				
$\chi^2$	0.00				

As for the observations for each variable the following table provides the basic summary statistics.

Table A.3 - Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Invoked	16606	0.006	0.074	0	1
Violated	16606	0.257	0.437	0	1
Capability	16606	0.043	0.070	0	0.384
Major Power	16606	0.349	0.477	0	1
Originator of Conflict	16606	0.036	0.186	0	1
Democracy	16606	0.428	0.495	0	1
S-Score, Region	16606	0.848	0.258	-0.646	1
Duration (years)	6936	30.916	18.189	0	51
Asymmetry	16606	0.111	0.315	0	1
Regime Durability	15067	37.969	49.834	0	180