Permanent Friends?
Dynamic Difference and the Democratic Peace*

Erik Gartzke† Alex Weisiger‡

4 October 2010

Abstract

Perhaps the simplest explanation for conflict is the presence of an “other.” Difference divides and similarity unites. Yet, similarity and difference are also dynamic, evolving in response to changing population characteristics or a new reference point. We offer a simple explanation for conflict and peace in which the effect of similarity or difference varies with the prevalence or capabilities of groups. We illustrate and test our argument using the dyadic democratic peace. When democracies are scarce or weak, and autocracies plentiful and powerful, democracies face a common threat. As the democratic community strengthens, however, the threat from autocracies declines and differences among democracies appear more salient. Our findings contrast with standard expectations about how democratization is likely to shape international affairs.

*The authors thank participants at seminars at the University of California, Los Angeles, the Texas A&M University and the Swiss Federal Institute of Technology (ETH) for their comments. An earlier version of this paper was presented at the Midwest Political Science Association, April 12-15, 2007, Chicago, IL, where it was awarded “Best IR paper.” Data, a STATA “do” file, and code for the theoretical model will be available upon publication.

†University of California, San Diego. e-mail: egartzke@ucsd.edu, web: http://dss.ucsd.edu/~egartzke.

‡University of Pennsylvania. e-mail: weisiger@sas.upenn.edu, web: http://www.polisci.upenn.edu/~weisiger.
1 Introduction

The world is a dynamic place; change is unending even as the continuity of change creates knowable patterns of cause and effect. Yet, to say that change is constant is not to say that change is a constant. Such may be the case with international hostilities across the divide of domestic politics. Regime type differences may be one source of international conflict. There is substantial evidence that mixed regime dyads are much more dispute prone than homogenous dyads (Rousseau et al. 1996; Hegre et al. 2001). However, the assumption has been that these differences do not change, that regime heterogeneity is about as conflict-inducing at one moment in history as another, that tensions within dyads remain unaffected by the proportion of democracies in the world system.

Lord Palmerston’s famous dictum suggests the need to assess the permanence of friendships in international relations. Affinities may endure, but they should not be assumed to do so. We relax the assumption that conflict propensity is a static attribute of dyads and instead treat the effect of regime difference or similarity as a dynamic product of the international ecology of regime types. In so doing, we allow for the possibility that the impact of regime type as an organizing principle or focal point evolves with secular changes in distribution. Conflict among democracies is pathological when democracies are scarce and vulnerable. As democracies become more common, however, preference heterogeneity increases, even as the salience of democratic cooperation declines.

Biologists note that intra-species competition ebbs with increasing threats from other species (Zuk and Kolluru 1998). Railroad collusion increased with the emergence of other forms of transit (Conant 1962). Alliances and identities form or collapse conditional on an “other” (Walt 1987; Wendt 1999). The effect of difference in world politics varies in other ways. As democracies become more common, cooperation among democracies may be declining. Our analysis has implications for the broader logic of cleavages and the activation of political identities. States, like groups and individuals, have numerous identities. Regime differences will be more or less salient depending on ecological conditions and on the identity and behavior of other states. Our research also reflects growing interest in integrating systemic and dyadic theories and empirical models (Harrison 2002).
2 Literature Review

The initial impetus for this study was to reconcile the democratic peace with the “autocratic peace.”

2.1 The Democratic Peace

That democracies do not fight each other, or that they fight only rarely, is now one of the most widely accepted empirical findings in political science.\(^1\) Discovery of what later came to be known as the democratic peace (Babst 1964; Small and Singer 1976) encountered initial skepticism as the finding was incompatible with the structural realist precept that the second image is irrelevant to international politics. Early challenges to the democratic peace, both qualitative (Layne 1994) and quantitative (Spiro 1994; Farber and Gowa 1997; Gowa 1999), were informed by realist scholarship. Over time, however, more extensive quantitative research, most notably a series of studies by Russett, Oneal, and their co-authors (Maoz and Russett 1992, 1993; Oneal, et al. 1996, 2003; Oneal and Ray 1997; Oneal and Russett 1997, 1999a, 1999b, 1999c; Russett 1993; Russett and Oneal 2001), have addressed many methodological concerns with prior studies, creating a consensus within the field that the empirical relationship between joint democracy and peace is genuine.\(^2\)

An intense but increasingly one-sided debate has occurred between those who treat democratic peace as a dyadic observation (Maoz and Abdoladi 1989; Bremer 1992; Morgan and Campbell 1991; Maoz and Russett 1993; Oneal and Russett 1997; Russett and Oneal 2001) and those who argue that democracies are generally more peaceful (Benoit 1996; Ray 1995; Rummel 1996; Rousseau, et al. 1996). This dispute has clear normative implications, even as its results sharpen theoretical insight: an explanation for the monadic relationship is typically unable to account for the dyadic observation, and vice versa. For example, Kant’s assertion that citizens in a republic are naturally loath to spill their own blood (Kant 1972[1795]), implies a monadic, not a dyadic phenomenon.

With evidence mounting that the democratic peace is primarily a dyadic phenomenon, attention has increasingly focused in recent years on theoretical arguments designed to explain why democracy

---

\(^1\)Many scholars cite Levy’s (1988) claim that the democratic peace is “as close as anything we have to an empirical law in international relations” (page 662), or Russett (1990), who calls the democratic peace “one of the strongest non-trivial and non-tautological generalizations that can be made about international relations” (page 123).

\(^2\)Consensus but not unanimity (Gartzke 2007; Gowa 2010). Ambiguity also continues about causal mechanisms.
inhibits conflict only in dyads. Substantial agreement on empirics has not been paralleled by consensus about why such a relationship should exist. In this “second generation” of democratic peace research, scholars face a major obstacle to theoretical advancement. Since efforts to theorize the democratic peace are largely inductive, the central empirical prediction of any new theory is something that is known, not predicted. Assuming that theoreticians have done a competent job, it becomes increasingly difficult to select among competing democratic peace theories based on the theory’s ability to explain the democratic peace (Bueno de Mesquita, et al. 1999, 2003; Huth and Allee 2002, 2003). In this context, a premium must be placed on the generation of novel theoretical predictions. Extending the empirical domain of democratic peace theories is the only way to adjudicate among multiple explanations, all of which nominally account for the democratic peace observation. Partly for this reason, the initially heterodox assertion that peace among like regimes may not be limited to democracies has attracted increasing attention (Oren and Hays 1997).

2.2 The Autocratic Peace

The “autocratic peace” involves a class of arguments about the conflictual consequences of regime similarity and difference. Theories disagree over whether democratic and autocratic relations are distinct or equivalent. Early studies of the autocratic peace were qualitative and typically focused on certain geographic regions. Despite having little democracy, low levels of economic development, arbitrary national borders, and widespread civil conflict, Africa experiences surprisingly little interstate war. Several studies attribute the “African peace” to historical norms and to the strategic behavior of insecure leaders who recognize that challenging existing borders invites continental war while encouraging secessionist movements risks reciprocal meddling in the country’s own domestic affairs (Jackson and Rosberg 1982; Herbst 1989, 1990). However, these arguments still fail to address tensions between state/leader interests and international goods. The security dilemma implies that states act aggressively despite ambiguous internal incentives and social harm (Jervis 1978).

---

3 Given their inductive origins, the deductive basis for many democratic peace theories is open to challenge (Gates, et al. 1996; Bueno de Mesquita, et al. 1999, 2003). Yet, the strength of available evidence has lead to the conviction that some explanation links democracy with peace. Theoretical critiques thus face an uphill battle (Rosato 2003).

4 Along similar lines, Martín (2006) argues that the surprising dearth of interstate conflict in twentieth-century South America is a consequence of shared interests among military dictatorships that all faced internal threats.
Initial statistical evidence of an autocratic peace emerged in a negative form with the observation that mixed democratic-autocratic dyads are more conflict-prone than either jointly democratic or jointly autocratic dyads (Gleditsch and Hegre 1997; Raknerud and Hegre 1997). Several studies in the last decade have sought to further explore systematic evidence for or against an autocratic peace. Oren and Hays (1997) evaluate several datasets, finding that autocracies are less war prone than democracy-autocracy pairs. Indeed, they find that socialist countries with advanced industrialized economies are more peaceful than democracies. Werner (2000) finds an effect of political similarity that coexists with the widely recognized effect of joint democracy. She attributes the result to shared preferences arising from a reduced likelihood of disputes over domestic politics. Peceny, et al. (2002) break down the broad category of autocracy into multiple sub-groups and find evidence that shared autocratic type (personalistic dictatorships, single-party regimes, or military juntas) reduces conflict, although the observed effects are less pronounced than for joint democracy. Henderson (2002) goes further by arguing that there is no empirically verifiable democratic peace, but that political dissimilarity causes conflict. Souva (2004) argues and finds that similarity of both political and economic institutions encourages peace. In the most sophisticated analysis to date, Bennett (2006) finds a robust autocratic peace, though the effect is smaller than for joint democracy and limited to coherent autocratic regimes. These findings are not universal. Petersen (2004) uses an alternate categorization of autocratic regimes and finds no evidence that similarity among autocracies prevents or limits conflict. Nonetheless, a growing body of evidence suggests that domestic political similarity is associated with relative peace, even among non-democracies.

The autocratic peace poses unique challenges for democratic peace theories. Given that the democratic peace finding highlighted apparently unique characteristics of joint democracy, many explanations are predicated on variables found only in democratic regimes. To the extent that it exists, an autocratic peace implies that scholars should be focusing not on features of democracy but on some corollary or consequence of shared regime type. In this context, arguments about democratic norms (Maoz and Russett 1993; Dixon 1994), improved democratic signaling ability (Fearon 1994; Schultz 1998, 1999, 2001), the peculiar incentives imposed on leaders by democratic institutions (Bueno de Mesquita, et al. 1999, 2003), and democratic learning (Cederman 2001a) all
invite additional scrutiny. While explanations for the democratic peace that do not rely on features of democracy exist (Gartzke 2007), and while it is theoretically possible that a democratic peace and an autocratic peace could arise from independent causal processes, the empirical similarities inherent in the importance of shared regime type, and logical elegance, provide good reason to investigate the validity of theoretical arguments that spring from regime similarity in general.\textsuperscript{5}

Another source of novel empirical variation for second generation democratic peace research is potential temporal dynamics in the relationship between regime type and conflict behavior. Cederman (2001\textsuperscript{a}) raised this possibility in arguing that an appropriate interpretation of Kant required viewing the democratic peace as a macro-historical learning process in which the effects of the democratic peace strengthened over time. Indeed, criticisms of the democratic peace often focus on “near misses,” most of which occur in the nineteenth century (Layne 1994; Elman 1997). At the same time, there is also some indication that the democratic peace may have weakened after the Cold War (Sobek, et al. 2006). Of course, such dynamic effects may be spurious, arising from failures to control for variables that trend with democracy over time (Gartzke and Weisiger 2009) or even more prosaically from deficiencies in standard measures of democracy that may overstate the prevalence of democracies in earlier time periods.\textsuperscript{6} To the extent that they exist, however, temporal dynamics in the relationship between shared regime type and conflict behavior provide another novel empirical relationship that can be used in refining theories of regime type and peace.

A final empirical characteristic of democracy that deserves mention is its distinctly non-random distribution. Today, Europe is almost entirely democratic; Africa and the Middle East are predominantly autocratic. Indeed, it is impossible to fully explain transitions to and from democracy without reference to the regional mix of regime types (Gleditsch and Ward 2006). This clustering in turn influences the democratic peace: a country may be more likely to democratize (Gleditsch 2003), and a new democracy may be more likely to survive, if the country finds itself in a democratic neighborhood (Cederman and Gleditsch 2004). Clustering by regime type is certainly appealing in the context of conventional democratic peace theory; given the costs of war, countries should prefer to

\textsuperscript{5}Ray (2005) maintains that estimating the effect of democracy and autocracy simultaneously is problematic.

\textsuperscript{6}Thus, for example, the Polity IV dataset codes the United States as a full democracy (polity = 10) in the second half of the 1840’s despite the presence of legalized slavery and the exclusion of women from political suffrage.
have neighbors with whom they are unlikely to fight. However, regime type clustering does not emerge in an organic fashion from conventional democratic peace theories, since none of the most common arguments (norms, constraints, information, identity) incorporate geography. It would certainly be appealing if these geographic and temporal characteristics arose organically from a theory that also accounts for at least some of the apparent pacifying effects of shared regime type.

Constructivist approaches in particular seek to incorporate social characteristics of international relations (Ruggie 1998; Finnemore and Sikkink 2001; Hopf 2002). Wendt (1995) argues that nations respond to norms promulgated by the international community. As more countries become liberal, international norms become more Kantian and less Hobbesian. Risse-Kappen (1995) explicitly connects the evolution of an international democratic identity to the democratic peace. Others tie implications of constructivist theory to predictions about the systemic effects of democratization (Huntley 1996; Mitchell 2002; Harrison 2006), or have begun to link systemic transformation to the externalization of dyadic effects (Kadera, et al. 2003; Crescenzi, et al. 2005; Kadera and Mitchell 2005). Our effort here differs in at least two ways. First, we view the impact of the system on states as more likely to result from innate characteristics (similarities or difference), rather than from socially formed identity. Whether identities form in a social context, or whether preferences and identities are largely exogenous factors that are then triggered differently by an evolving strategic environment, is of course a subject worthy of considerable debate. We note simply that either is logically tenable and so each possibility should be explored vigorously by the research community.

Second, we give more weight to the possibility that system effects may not be benign or progressive. Rather than assuming that world politics will become more cooperative as nations become increasingly democratic, we consider the possibility that systemic change can impact dyads in positive or negative ways. Theories of social identity formation that depend on an “other” imply that sameness must be reevaluated as difference declines. If enemies can become friends as context evolves and differences evaporate, then friends can also become enemies as similarities become ubiquitous and remaining differences seem more salient. Democracy has not made the world any less finite. Resources must be distributed and prerogatives allocated, and so frictions remain. Whether these frictions can be resolved peacefully by democracies (or not) is a worthy subject for debate.
3 A Dynamic Theory of Difference and Disputes

A general theory of regime type and international conflict should possess several characteristics. First, such a theory should be able to account for any connection between shared regime type (not just democracy) and peace. Second, it should be able to explain ways in which the relationship between regime type and conflict might change over time. Third, it should be compatible with the tendency of neighboring countries to share a given regime type. No existing theory does all of these things simultaneously: explanations for the autocratic peace are typically dyadic, ignoring system dynamics, while arguments about systemic regime dynamics focus more narrowly on democracy.

3.1 Regime Similarity and Peace

We begin from the atomistic environment of all-against-all that is anarchy. An unexpected consequence of this environment is that it prompts cooperation and collective action; individuals in a “self help” world are drawn together for protection and to produce public goods (Hobbes 1962). Waltz (1959) applies this logic of insecurity to international relations, arguing that nations form expedient alignments to counter threats or to capitalize on opportunities. Left unresolved, however, are questions of coalition selection: Who should join with whom, against whom? In the Waltzian view the only rationale for allying is power; weaker nations band together to form coalitions to balance a more powerful state (Walt 1987). Yet, there are bound to be numerous combinations of states that address the security concerns expressed by power balancing (Schweller 1994). Given nominal equivalence among many coalitions of similar power, why favor one group over another?

Moving beyond the specific question of alliance formation to the more general issue of identifying friends and enemies, we can refer to the supply and demand for affinities. States presumably prioritize security objectives, just as they prioritize spending on social programs, or investment in economic or political reforms. Nations are bound to confront their biggest or most immediate threats first. As primary threats are addressed, secondary challenges must become a higher priority. However, this does not mean that the level of threat remains the same. Objective or subjective factors may vary the intensity of opposition. Terrorism has long been a concern for the United States, but the collapse of communism meant that terrorism could be viewed as the main threat,
even as fighting Fascism had required an alliance with the Soviet Union. Indeed, the threat from Al Qaeda is almost certainly less critical than earlier systemic threats from fascism or communism.

The supply side can be conceived of in terms of a theory of “natural allies.” States that want similar things can cooperate and ignore remaining differences as long as fewer compromises are necessary in order to collaborate. If all states have incompatible goals, then no natural allies exist. Multiple coalitions can be formed to achieve the same nominal security objectives, and thus it is not clear why certain countries ally while others do not.\(^7\) However, if states vary in what they want, then some states should more naturally participate in a given coalition than others. As the objectives of the coalition are met or are superseded, member states may then find tensions within the group. This is especially likely in political coalitions that are successful and that then need to “divvy up the spoils” of victory. Thus, success leads to new tensions and a shift in security priorities that may then see formal partners at loggerheads, and possibly lead to new conflicts.

The ambiguity of equivalent coalitions is resolved if states consider differences or similarities beyond respective security (defensive) or power (offensive) criteria. We can think of social “cues,” indicators of affinity that are used in the absence of full information about preferences (Tajfel 1981). If one can accept that states find natural affinity in nations with similar goals, then states probably prefer coalitions with like polities, ceteris paribus. Empirically, democracies are more likely to co-ally (Siverson and Emmons 1996; Lai and Reiter 2000).\(^8\) More generally, we observe a variety of affinity behaviors among democracies that are absent between democracies and non-democracies.

Of course, regime type is only one dimension along which countries might be arrayed and identities might be formed or activated. Historically, the Concert of Europe was essentially an alliance of the major powers against potential challengers that cut across lines of regime type (Cronin 1999; Hall 1999).\(^9\) In the Cold War, a professed commitment to socialism or capitalism often trumped similarity or difference in political structure in determining interstate cooperation (Mearsheimer 1990; Kissinger 1994; Gaddis 2005). More recently, debates on the Doha Round

---

\(^7\)Defensive realism poses a logical conundrum in advocating collective action (balancing), while at the same time disparaging most other forms of international cooperation as inconsistent with egoistic incentives (Schweller 1996).


\(^9\)Slantchev (2005) argues that preference change is not necessary to explain the Concert of Europe.
of WTO negotiations have been characterized by cleavages according to region (Mansfield and Reinhardt 2003) and along levels of economic development (Thies and Porche 2006). Huntington (1996) argues that the post-Cold War world is characterized by a clash of civilizations in which racial and religious identities (culture) are emphasized over other bases for cooperation or conflict. Scholars face difficulties explaining behavior in the presence of overlapping identity claims (Gartzke and Gleditsch 2006). It may be debated, then, whether shared regime type is a particularly potent basis for conflict or cooperation, or simply one among many cues for creating a political divide.\footnote{The autocratic peace literature contains some speculation about why similarity might reduce conflict, focusing on congruent preferences (Werner 2000; Peceny, et al. 2002; Souva 2004). None of these studies provide a compelling explanation for why preferences cluster by regime type, although Werner’s position is most compatible with our own.}

That said, we view regime type as unusual in terms of its combination of malleability and staying power.\footnote{We offer several explanations for the salience of regime type without relying on any particular argument.} On the one hand, political structures can change. A foreign power can readily alter a nation’s form of government, so that efforts at regime change appear on some level more practical than, say, espousing linguistic, religious, or especially ethnic change. On the other hand, regime type is durable. A country’s form of government does not change often. If political structure and norms influence the policies nations adopt, then the transition of regime type in another nation can lead to friendlier relations. This dynamism is of course a large part of the normative appeal of democratic peace theory; if democracies are less warlike, then regime change can propagate peace.

Indeed, the very malleability of regime type may render it a more salient cue in international politics. War over identity attributes that cannot be changed logically cannot end until either both sides stop using identity as the basis for conflict or one identity is utterly destroyed.\footnote{Conflicts over ethnic, religious, or linguistic differences—as opposed to conflicts over other issues that involve identities instrumentally—may be much less common than casually perceived (Gartzke and Gleditsch 2006).} By contrast, regime type may be changed both internally and externally, with the result that abandoning an allied government may not only cost you a friend but net you an enemy when a new regime takes over. To the degree that individual people and interest groups have similar wants and expectations everywhere, the construction of similar political decision making apparatus should lead to similar results. Adopting socialism built greater solidarity with other socialist nations, opened up markets and access to technology, etc. Moreover, leaders of similar regimes are likely to face similar threats.\footnote{In regions with few democracies, democratization increases difference and may exacerbate interstate conflict (Peceny et al. 2002). Attempts to use democratic peace theory to argue that regime change in Iraq could lead to...}
Similarity is not a guarantee of absolute or permanent friendship, however. To the degree that local conditions vary, or when issues have strong distributional implications, political similarity may not always be enough. Tito and Mao eventually decided that they could not cooperate with Moscow, even under the banner of socialism. Affinity for democracy has not lead the United States to embrace leftist or fundamentalist governments, no matter how popular their mandates. Thus, while similar politics can make countries more alike on one dimension of potential conflict, it cannot make them identical on other dimensions, and even identical objectives often lead to conflict when payoffs cannot be shared. The tradeoff between malleability and incomplete transformation mean that the propagation of similar regimes will at most only partially affect the affinity of nations. Other forces, including the zero-sum nature of resource distribution in any political system, will lead to a change in the focus on a given set of cues of difference as these cues become less capable of differentiating categories of actors. Race or ethnicity are not salient in societies with homogeneous populations, but competition remains a part of politics, and so other cleavages are propagated. It is the need to authoritatively allocate limited resources or prerogatives that causes differentiation.

### 3.2 Dynamic Difference and the Democratic Peace

As with any cue or motive for cooperation, regime type also relies on the threat to align against. When a cue becomes ubiquitous, it loses much of its informational value. The proliferation of democracy means that democracy is less of a distinguishing characteristic, even as other cues, identities, or determinants of preference variability increase in salience. It is at least conceivable that democracies will cooperate less as there is a diminishing “other.” As democratization progresses, this logic implies that some democracies will form alignments that exclude other democracies, or even that some democratic coalitions will come into conflict with other democratic coalitions.\(^\text{14}\)

Combining sources of identity, the dynamism of natural allies, and the demand for security, one can begin to see how the impact of regime type on conflict and cooperation might evolve over time. Initially, the few democracies in the world possessed few opportunities for direct conflict. Even

\(^{14}\)Note, for example, the new concept of illiberal democracy (Bueno de Mesquita and Downs 2005; Zakaria 1997).
more important in an insecure world, democracies had enough in common that cooperating, or at least not opposing one another, was prudent. As democracy proliferated, however, the interests of democratic countries became more diverse even as the threat from non-democracies declined. While autocratic threats remain, many of the most powerful countries are democracies. Differences that were patched over, or overlooked, in fighting fascism and communism have now begun to surface. These differences are not major or fundamental, but they appear more salient than in the past. This process appears likely to continue in the future; nations with similar regime types but different preferences may increasingly find that they are unable to justify glossing over their differences.

For early Americans, democracy was an essential element of national security, a bulwark against conflict among member states and also a means by which to integrate additional territory into the federation (Shaw 1917). To the European powers, it was a quixotic experiment in an essentially irrelevant backwater (May 1959). Over a century later, the United States was ready to move beyond a defensive stance with respect to Europe and enter into a war to make the world “safe for democracy.” That effort failed, but the list of democratic powers now included all the clear victors of the First World War, and, despite divisions, they constituted a force that their rivals could only challenge in combination, under the terms of the Tripartite Pact. Today, the great democracies manage the world’s affairs, while embattled autocrats band together, whether in the chambers of the United Nations Human Rights Council or in the global arms market. Whereas in the 18th Century, autocracies freely played the game of power politics while the democrats meekly stood to one side, today increasingly democracies squabble over places like Iraq while autocrats show signs of coordinating to survive. This dynamic change in fault lines is a natural and logical consequence of social interaction, and may prove a factor in the future of international affairs. Whether tensions within the democratic community will increase, while autocrats manage to patch over their differences, is an empirical question that we next begin to answer, if only tentatively.

4 Modeling Dynamic Difference

Our proposition about the relationship between regime type and conflict follows basic intuitions about social and environmental behavior from allied fields in human and animal biology, sociology,
economics, and political science. The more actors that share a given trait, the less distinguishing that trait is, and the less the trait matters as a cue for differentiating “us” versus “them.” In the extreme, when every member of a species or group shares a given trait, the trait cannot form the basis for differentiation within the species or group. This proposition has the advantage of parsimony. Difference divides and similarity unites, up to the point that similarity becomes ubiquitous and uninformative. But can this proposition explain interstate conflict? We offer a simple agent-based model to illustrate the dynamics we envision and to assist us in deriving hypotheses about the relationship between dyadic and systemic regime type and the likelihood of disputes.

In the model, actors are endowed with ideal points on two dimensions, a dichotomous regime dimension and a continuous second dimension. For convenience, we will refer to this second dimension as economic, but it could capture any other salient difference or identity. Each actor receives utility that is a function of similarity to other actors in the system, subject to a weight that decreases the relative significance of the regime dimension as the actor’s regime becomes more common in the system. Specifically, given dimensions $r$ (regime) and $s$ (economic) along which ideal points vary, actor $i$ receives utility $u_i(R, S) = -\sum_{j \neq i}(r_i - r_j)^2 - \alpha \sum_{j \neq i}(s_i - s_j)^2$, where $\alpha$ is a monotonically increasing function in the proportion of the system sharing $i$’s regime type. In each round of interaction, one actor is randomly selected and permitted to conquer one other and replace its existing regime, thus substituting the conqueror’s ideal point for the target’s prior preference.$^{15}$ All actors then experience a random shock to their ideal points in both dimensions, after which the next round of action begins with the selection of a new conflict initiator. A central assumption of this model is that democracies and autocracies are identical to each other except in the label that they apply to themselves. This specification thus intentionally abstracts away from characteristics of regime type that have been used in other theories to account for interstate peace.

The model is obviously a simplified version of reality. The critical question is whether the model captures the dynamics of dyadic liberal peace. We present the results from representative runs of the model in graphs below. The democratic peace has been observed in an empirical world that has varied between roughly 3% and 46% democratic; we thus focus on a similar range in the model.

$^{15}$A variant of the model in which actors target opponents (fight) similarly, but ideal points are not endogenous to conflict—instead changing only in response to exogenous shocks—produces substantively similar results.
Table 1 presents results for a representative run of the model within the specified range of
democracy values.\textsuperscript{16} Prior research reveals that democratic dyads experience less violence than
autocratic dyads, but that jointly autocratic dyads fight less than mixed dyads (c.f. Bennett 2006).
The results from the model conform to this expectation: a jointly democratic dyad is likely to
experience conflict only 0.57\% of the time, while a jointly autocratic dyad experiences conflict 0.83\%
of the time. In short, the model predicts results that are quite similar to observed reality, despite
the fact that regime type is simply a label around which otherwise identical actors sort themselves.
The role of regime type as a cue becomes apparent when comparing the relative probability of
conflict across different dyad combinations for the entire sample (i.e., including rounds in which
democracies comprise either less that 3\% or more than 46\% of the system). Across the whole sample
from this representative run, jointly democratic dyads experience conflict in 0.77\% of interactions,
as compared with 0.78\% of interactions in jointly autocratic dyads.\textsuperscript{17} Once the full range of values
is considered, jointly democratic dyads behave no differently than jointly autocratic dyads.

Table 1: Model Predicted Probability of Conflict by Regime Type and System Status

<table>
<thead>
<tr>
<th>Regime Type</th>
<th>3% to 46% Systemic Democracy</th>
<th>Full Range of Democracy Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Democracy</td>
<td>0.0057</td>
<td>0.0077</td>
</tr>
<tr>
<td>Joint Autocracy</td>
<td>0.0083</td>
<td>0.0078</td>
</tr>
<tr>
<td>Mixed Dyad</td>
<td>0.037</td>
<td>0.038</td>
</tr>
</tbody>
</table>

A closer investigation of the data reveals additional patterns of interest. In particular, we
highlight two relationships not predicted by prior research, which are captured in Figure 1. First,
and consistent with the proposition that regime similarity will decrease in significance as a regime
type becomes more common, jointly democratic dyads are more likely to experience conflict as
democracy becomes more common in the system. To be precise, this result is conditional on the
selected actor being democratic: given that a democracy is chosen to act, the probability that it

\textsuperscript{16}These values come from runs of the model with 50 actors interacting over 25,000 rounds. Values in Figure 1
are from a run using 75 actors interacting over 20,000 rounds, with the per-round probability of autocratization set
higher than democratization so that the system remains predominantly autocratic, which is of interest for the graphs.
\textsuperscript{17}In the restricted sample, a Mann-Whitney U test yields a z-statistic of 6.063, significant at better than the .001
level. In the full sample, the same test gives a z-statistic of 0.547, insignificant at conventional levels.
targets another democracy increases as the system becomes more democratic. Second, and less obviously, an increase in the proportion of the system that is democratic is associated with a decrease in the probability that a given mixed dyad experiences conflict. In other words, as we move from a system dominated by autocracies to one with a more equal mix between autocracies and democracies, the model predicts that the probability of inter-regime conflict declines. These are novel predictions from a simple model of international politics amenable to empirical tests.\(^\text{18}\)

---

\textbf{H 1} The probability of conflict in democratic dyads grows as the system becomes more democratic.

\textbf{H 2} The probability of conflict in mixed dyads decreases as the system moves from being mostly autocratic to one in which democracies and autocracies are found in roughly comparable proportions.

\(^{18}\)Previous studies noted that the prevalence of conflict at the system level was likely to vary in response to changes in the numbers of democratic, heterogeneous and autocratic dyads. However, the probability of conflict in any given type of dyad was still assumed to be unchanging (Gleditsch and Hegre 1997; Ray 2000). In contrast, we anticipate that the probability of conflict in dyads will be affected by the systemic distribution of regime types generally.
5 Research Design and Analysis

Our assessment of relationships between dyadic and systemic regime type and interstate conflict covers the period 1816-2000. While our argument incorporates systemic variables, it ultimately makes predictions at the dyadic level: relations between democracies become more conflictual as the system becomes more democratic. We thus work at the dyadic level of analysis. To ensure comparability with existing research, we adapt a research design and variables that have been used extensively in democratic peace research (Bremer 1992; Oneal and Russett 1999a). Independent variables are lagged by one year to address endogeneity. We correct standard errors for clustering in dyads and use the Beck, et al. (1998) method of splines to control for duration dependence.19

5.1 Data

A great many covariates of conflict have been proposed in the literature. It is not practical to examine all, or even most of them.20 Methodologists also emphasize the value of keeping statistical models simple (Achen 2005; Clarke 2005; Ray 2005). We therefore focus on the “bare essential” variables, those that consistently appear in relevant studies in the democratic peace literature.21

- **Militarized Disputes**: The dependent variable in most studies of democratic peace is some version of the Militarized Interstate Dispute dataset (MIDs). MIDs involve threats, displays, uses of force, or war (Gochman and Maoz 1984; Jones et al. 1996). We code a dummy for MID “onset” as defined by Maoz (1999), where (1) is a dispute, and (0) is no dispute.22

19 Given the potential for bias induced by the large disparity between events (“1’s”) and non-events (“0’s”), we also estimated coefficients using rare events logit, which produced comparable results (King and Zeng 2001a, 2001b).

20 Most of our variables are generated using the EUGene software program (Bennett and Stam 2000). Other sources are detailed where relevant. A Stata “do” file is available from the authors that replicates all aspects of the analysis.

21 We omit other legs of the Kantian “tripod,” though we explore them further elsewhere. IGO membership generally has very limited effects on conflict that shift depending on somewhat arbitrary changes in model specification (c.f. Boehmer, et al. 2004). Adding trade dependence drops the sample size by almost 40% (to 387,706). More importantly, it substantially reduces the time period covered by the study (to 1950-2000). Our argument focuses on the change in the size of the democratic community over time. Still, as a robustness check, we added a standard trade dependence (low) variable to model 4 from Table 2. Of the key variables, regime type difference is significant at the 5% level, while the proportion of democracies in the system is significant at the 10% level. Democracy (low) and the interaction term between difference variables are not statistically significant. All key variables retain their appropriate signs.

22 MID onsets are the most appropriate sample in terms of our theory (which predicts MID onset, not how long MIDs last), methodology (temporal splines minimize the impact of subsequent dispute years), and past practice. Some studies prefer to focus on fatal MIDs. The substantial number of non-fatal MIDs are of particular interest here. If democracies stop cooperating, the first indication of this change probably appears among the most minor disputes.
• **Democracy**: The standard Polity IV data provide two eleven-point indexes of formal constraints on the executive (\(\text{AUTOC}\)) and institutional support for democracy (\(\text{DEMOC}\)) (Gurr et al. 1989; Jaggers and Gurr 1995). We compute monadic values as follows: \[ \frac{\left(\text{DEMOC}_i - \text{AUTOC}_i\right) + 10}{2} \] (where \(i \in \text{[State A, State B]}\)). *Democracy (Low)* reports the lower of the two democracy values in the dyad/year, while *Democracy (High)* lists the higher value.

• **Dyadic Difference**: Using the same Polity IV dataset, we code regime difference as the absolute value of the difference in constructed monadic polity scores for dyad members. The maximum value of the resulting variable occurs when one state is a “pure” autocracy (democracy score of zero), while the other dyad member is a “pure” democracy (democracy score of ten).\(^{23}\) Dyad members with the same Polity statistics result in a *Dyadic Difference* score of zero.\(^{24}\)

• **Systemic Difference**: There are several ways to measure systemic regime type heterogeneity. *Proportion of Democracy (Prop. Dem.)* offers a ratio of the number of states with a threshold democracy score, divided by the total number of system members, according to the Correlates of War (Mitchell, et al. 1999; Cederman 2001). A system with no democracies produces a *Prop. Dem.* score of zero, while a system of all democracies produces a score of one. A second way to measure systemic difference is to consider the portion of global capabilities controlled by a given regime type. *Dem. Power* also produces a value in the unit interval indicating the potency of the democratic community (Kadera, et al. 2003). While both measures are widely used, each measures difference from the perspective of a particular regime type. Analytical neutrality is enhanced by measuring variation in regime type, rather than differentiation from some reference (such as whether a state is a democracy). *Dem. Std. Dev.* reports the standard deviation in country democracy scores for the international system in a given year. It is important to note that all three measures produce equivalent results in our analyses.

• **Geographic Distance and Contiguity**: Neighbors are generally more likely to fight than states that are geographically distant. In part, this can be explained by opportunity. Neighbors

\(^{23}\)The democracy scores are scaled Polity scores, so a democracy score of 0 corresponds to a Polity score of -10.

\(^{24}\)Bennett (2006) offers a more elaborate coding of dyadic regime type difference, using the product of democracy scores, as well as the product of this product. Since the Polity data are ordinal, it is not clear how to interpret higher order effects. Further, squaring the product of democracy scores also inflates the apparent impact of extreme values.
have easier access to each other. Yet, there is a greater likelihood of fighting among contiguous dyads independent of distance, suggesting higher tensions or motives for conflict. Given the tendency for regime type to cluster geographically (Gleditsch 2003; Cederman and Gleditsch 2004), ignoring contiguity or distance risks conflating the effects of regime type with geography. *Contiguity* is an ordinal variable for six categories of decreasing physical proximity, from shared land border to separated by more than 500 miles of water, either directly or through colonial possessions. *Distance* is the natural logarithm of the great circle distance between national capitals, or of the closest major cities for some large countries.\(^{25}\)

- **Allies**: Alliances are formed with the intention of influencing interstate conflict. Research suggests a relationship between regime type and alliance ties (Siverson and Emmons 1996; Simon and Gartzke 1996; Lai and Reiter 2000). Studies of the democratic peace commonly include a dyadic alliance dummy (Oneal and Russett 1997; Russett and Oneal 2001). *Alliance* codes the presence of a defense pact, neutrality pact, or entente in the dyad based on the COW Alliance Dataset (Singer and Small 1966; Small and Singer 1990; Gibler and Sarkees 2004).

- **Capabilities**: Capabilities determine the ability of states to project power and conduct warfare. We assess the balance of capabilities in the dyad using the COW Composite Indicators of National Capabilities (CINC) score. CINC is computed as the weighted average of a state’s share of total system population, urban population, energy consumption, iron and steel production, military personnel and expenditures. *Capability Ratio* measures the CINC owned by the least powerful state, divided by the sum of CINC’s in the dyad $\left(\frac{CINC_{\text{low}}}{CINC_A+CINC_B}\right)$.

- **Major Power Status**: If major powers are also more (or less) likely to be democracies, then this could potentially bias our results. We include a dummy variable, *Maj. Power*, that is coded “1” if at least one state in a dyad is a major power as specified by the COW criteria.

- **Temporal Dependence**: Finally, we control for temporal dependence using the Beck, Katz and Tucker (1998) technique. We construct four spline variables using *Stata* (Tucker 1999).\(^{25}\)

---

\(^{25}\)Research suggests that contiguity and distance are *not* measuring the same things (Hensel 2000; Senese 2005). Neighbors fight more often either because they are near (opportunity), or because they have more grievances (willingness). As is conventional, including distance at least partially separates the effects of proximity from preferences.
5.2 Results

We report the results of statistical tests in two tables and three figures. Table 2 lists four regressions detailing the relationship between dyadic regime type difference, systemic democracy, and MIDs.\textsuperscript{26} For reference, Model 2.1 replicates the basic democratic peace result. We next estimate the effects of dyadic difference. However, note that \textit{Democracy (high)} contains both democracy and difference:

\begin{equation}
\beta_1 \times \text{Democracy (low)} + \beta_2 \times \text{Democracy (high)} = \\
\beta_1 \times \text{Democracy (low)} + \beta_2 \times [\text{Democracy (low)} + \text{Dyadic Difference}] = \\
(\beta_1 + \beta_2) \times \text{Democracy (low)} + \beta_2 \times \text{Dyadic Difference}
\end{equation}

As the identity above reveals, we cannot estimate the two democracy variables and regime type difference together, since \textit{Democracy (high)} contains both democracy and difference. The identity also illustrates a point of concern about existing approaches to estimating the democratic peace. \textit{Democracy (high)} conflates the “weak link” effect of threshold democracy thought to characterize the democratic peace (Dixon 1998; Dixon and Goertz 2005) with the effect of regime type heterogeneity, of interest here. This effort also biases the “true” impact of threshold democracy, since some of the effect of regime type is captured along with regime difference by \textit{Democracy (high)}.

Fortunately, democratic peace researchers often omit \textit{Democracy (high)} and we will do the same. Model 2.2 provides estimates equivalent to the last line of the identity above, separating the effects of threshold democracy and regime type difference. This approach is superior analytically, though it yields results that are bound to surprise scholars accustomed to the standard democratic peace finding. The difference variable is positive and highly statistically significant. As expected, with the exception of threshold democracy, coefficients and standard errors in Model 2.2 are identical to Model 2.1. Left to represent the \textit{distinctive} effect of threshold democracy, \textit{Democracy (low)} becomes positive and modestly significant, though this relationship does not persist in later models.\textsuperscript{27}

\textsuperscript{26}The agent based model uses quadratic loss utilities to simplify exposition. While linear regression is consistent with weak concavity, a strict approach to testing the model implies the need for a quadratic difference variable. Adding squared terms to the regressions reported in Table 2 actually strengthens our results. However, this more baroque specification complicates presentation. We limit discussion here to the more general linear model.

\textsuperscript{27}The Polity IV data contain many missing values. We follow the scheme recommended by the codebook to replace these values. We also examine the entire period of the MIDs data (1816-2000). Oneal and Russett use the standard
Table 2: Effects of Systemic and Dyadic Difference on MIDs

<table>
<thead>
<tr>
<th>Variable</th>
<th>2.1</th>
<th>2.2</th>
<th>2.3</th>
<th>2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democracy (low)</td>
<td>-0.071***</td>
<td>0.038*</td>
<td>0.040†</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.017)</td>
<td>(0.021)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Democracy (high)</td>
<td>0.109***</td>
<td>0.111***</td>
<td>0.255***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.017)</td>
<td>(0.031)</td>
<td></td>
</tr>
<tr>
<td>Dyadic Difference</td>
<td></td>
<td>0.109***</td>
<td>0.111***</td>
<td>0.255***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.015)</td>
<td>(0.017)</td>
<td>(0.031)</td>
</tr>
<tr>
<td>Systemic Diff.</td>
<td>-0.154</td>
<td>1.704***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.436)</td>
<td>(0.498)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyadic × Systemic</td>
<td>-0.513***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.094)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance (ln)</td>
<td>-0.394***</td>
<td>-0.394***</td>
<td>-0.394***</td>
<td>-0.394***</td>
</tr>
<tr>
<td></td>
<td>(0.017)</td>
<td>(0.017)</td>
<td>(0.017)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Contiguity</td>
<td>-0.298***</td>
<td>-0.298***</td>
<td>-0.297***</td>
<td>-0.295***</td>
</tr>
<tr>
<td>Alliance</td>
<td>0.059</td>
<td>0.059</td>
<td>0.062</td>
<td>0.070</td>
</tr>
<tr>
<td></td>
<td>(0.111)</td>
<td>(0.111)</td>
<td>(0.112)</td>
<td>(0.110)</td>
</tr>
<tr>
<td>Capability Ratio</td>
<td>1.355***</td>
<td>1.355***</td>
<td>1.350***</td>
<td>1.357***</td>
</tr>
<tr>
<td></td>
<td>(0.371)</td>
<td>(0.371)</td>
<td>(0.373)</td>
<td>(0.365)</td>
</tr>
<tr>
<td>Major Power</td>
<td>1.386***</td>
<td>1.386***</td>
<td>1.378***</td>
<td>1.404***</td>
</tr>
<tr>
<td></td>
<td>(0.151)</td>
<td>(0.151)</td>
<td>(0.156)</td>
<td>(0.154)</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.791*</td>
<td>-0.791*</td>
<td>-0.768*</td>
<td>-1.245***</td>
</tr>
<tr>
<td></td>
<td>(0.351)</td>
<td>(0.351)</td>
<td>(0.360)</td>
<td>(0.362)</td>
</tr>
</tbody>
</table>

N: 634684 634684 634684 634684
Log-likelihood: -10886.9 -10886.9 -10886.66 -10858.813
χ²(11,11,12,13): 2117.645 2117.645 2156.348 2250.805

Significance levels: †: 10%  *: 5%  **: 1%  ***: 0.1%
Adding systemic regime type difference in Model 2.3 does not seem to have a significant direct impact on whether states fight. However, democracy now becomes only a marginal contributor to dispute onset (at the 10% level). The effect of systemic regime type heterogeneity changes considerably when we introduce the interaction term between dyadic and systemic difference. As Model 2.4 demonstrates, both dyadic and systemic political difference significantly increase MID propensity. In contrast, the interaction between dyadic regime affinity and systemic democracy is negative, while the effect of threshold democracy is now statistically insignificant.\footnote{Removing threshold democracy has no effect on these findings. Results hold for the pre-World War II sample. Green, et al. (2001) advocate conditional (fixed) effects to address “dirty” pooled cross-section time-series data. Democratic peace advocates and other methodologists point out that fixed effects regressions are a heavy-handed solution to spatial dependence (Oneal and Russett 2001; Beck and Katz 2001; King 2001). We replicated Table 2 with fixed effects (dyads). Though as expected, results are generally weaker, all key relationships persist. Finally, it is possible some omitted variable might account for the dynamic changes attributed to regime type difference. Adding the year as an independent variable in Model 2.4 leads Systemic Diff. to become insignificant, while the dyadic difference variable and the interaction term remain highly significant and democracy remains insignificant.} Similar regimes are less likely to fight, but this effect is diminishing in the relative abundance of similar polities in the system. Difference divides, but it does so dynamically, with regime affinity within a dyad becoming more or less salient for conflict behavior as the level of democracy varies systemically.

Figure 2 details the substantive effects of systemic regime type variability on conflict for a democratic dyad. The horizontal axis contains the full observed range of values of Proportion of Democracy, starting at roughly 3% and increasing to a maximum of 46% of the system democratic. The vertical axis lists the probability of a MID, as predicted by Model 2.4.\footnote{The graph was generated using Clarify, setting both countries to full democracy (lower democracy score of 10 and no difference), setting other variables to their medians, and varying systemic democracy across the range of historical values. While the results follow from an analysis of all dyads, predicted probabilities focus on fully democratic dyads.} The democratic peace implies that democracies are very unlikely to fight amongst themselves. Democratic peace research can be interpreted as anticipating that the rise in global democracy will lead to a temporary increase in conflict at the systemic level (Ray 1995; Gleditsch and Hegre 1997). However, this is clearly not the same as arguing that conflict in democratic dyads will increase as more nations become democratic. Even autocratic peace theories, while arguing that the low probability of conflict among like regime types is not unique to democratic dyads, fail to contemplate dynamism in democratic conflict propensity. The probability of a MID among democracies almost triples over the observable

Polity data with transitions treated as missing. In most studies, they also limit their analysis to the post-World War II sample. With either of these changes, Democracy (low) in Model 2.2 becomes statistically insignificant.
domain from no democracy in the system to short of half of all states as nominally democratic. This finding appears uniquely consistent with our theory of dynamic difference. These results suggest that the unusual peace among democracies may be diminishing as democracy proliferates.

Figure 2: $P(MID) \ [\text{Dem (low)} = 10, \ \text{Dyadic Diff.} = 0]$

Figure 3 reports the complementary image, where the sample now consists of dissimilar dyads. Again, the horizontal axis varies the proportion of democracies in the international system, while the vertical axis reports the probability of a MID. The likelihood of conflict among dissimilar regimes is much higher than among democracies. Yet, interestingly, the lowest estimated point in Figure 3 (roughly 0.07% chance of a MID) is almost identical to the current highest probability of dispute behavior in Figure 2 (approximately 0.06% probability of a MID). The difference in conflict behavior between democracies and heterogeneous dyads diminishes as the proportion democracies in the system increases so that the difference may approximate zero when roughly half of the world’s countries are democratic.\(^\text{30}\) This result is consistent with, and helps to account for, recent evidence that the democratic peace has weakened in the post-Cold War period (Sobek, et al. 2006; Gowa 2010). Rather than democratization simply making the world more peaceful (Mitchell 1997; Crescenzi and Enterline 1999), it appears that increasing democracy may be shifting the locus of conflict from inter-regime to intra-regime disputes. Again, the symmetry of our dynamic difference

\(^{30}\)Disputes among autocracies also climb in system democracy, though they are lower than among democracies.
argument implies that democratic and autocratic dyads will appear most similar in their conflict behavior when each regime type represents approximately half of all of the states in the system.

![Figure 3: P(MID) (Dem (low) = 0, Dyadic Diff. = 10)](image)

At first blush our argument seems to sit a bit oddly with the conventional wisdom that the democratic peace was weakest in the nineteenth century. This is because there are two distinct kinds of “weakness” involved in the analysis. Our predictions concern changes in the size of coefficients for democracy and dyadic and systemic difference, and their interactions. Yet, the size of standard errors are also changing over this time. In the nineteenth century, democracy was rare, and so according to our argument democratic dyads were particularly unlikely to fight. The democracy coefficient is quite large, but the small number of observations necessitates greater caution about whether the effect differs from zero. In the contemporary world, there are many more democracies, so one can have more statistical confidence in a non-zero effect for the measures of democracy and difference, even if, consistent with our argument, the size of the effect of liberal democracy has shrunk. Thus, the effect of democratic peace can appear weakest in the nineteenth century in conventional studies (i.e., large confidence intervals), while we report a large impact in this period.

Finally, Table 3 offers additional tests of the relationship between dyadic and systemic regime type and the onset of militarized disputes, using different measures of systemic regime difference. Model 3.1 and Model 3.2 measure systemic difference using Dem. Power, the proportion of global
capabilities controlled by democracies. Models 3.3 and 3.4 rely instead on the standard deviation of polity scores in the international system. Dem. Std. Dev. has the advantage that it does not rely on an arbitrary threshold for democracy. Models 3.1 and 3.3 estimate the impact of dyadic and systemic regime type similarity and difference, while Models 3.2 and 3.4 add the interaction term between dyadic and systemic difference variables. All of the coefficients and standard errors are as anticipated, though here Democracy (low) while again positive, is never statistically significant.

The regressions in Table 3 provide similar substantive results to those reported in Figures 2 and 3. To a surprising degree, it appears that the special relationship of democratic dyads, or even of similar regime types, is contingent on the global distribution of political similarity and difference.
As the number of democracies in the international system changes so too does the relationship of democracies with other democracies, and of democracies with autocracies. As democracy becomes less exclusive, there is a tendency for democracies to find more reason to differ, to dispute, and possibly eventually to fight amongst themselves.\textsuperscript{31} Conversely, declining autocracies may have more reason to cooperate, and less incentive to provoke conflict with increasingly powerful democracies.

6 \textbf{Will We Ever “All Just Get Along?”}

Analysis in the previous section provides evidence that the likelihood of war among like polities has varied in proportion to the prevalence of the regime type in the international system. Given the worldwide trend towards greater democracy, research on the democratic peace has concluded that the world may eventually benefit from a substantial and durable lessening of international conflict (Weart 2001). It is precisely this extrapolation from democratic peace research that accounts for much of the excitement about the observation. Even autocratic peace research, which views static dyadic difference as the cause of conflict, predicts that conflict should subside as democracy becomes the predominant form of polity. If instead the strength of the democratic peace subsides as democracy proliferates and becomes the norm, then these expectations may prove overly optimistic.

What scenario for a fully democratic system most clearly follows from our findings? As the world has never been more than partially democratic, our data cannot address this question directly. Out-of-sample extrapolation from our statistical analysis provides the best available insight into an evolving future, but given the complexity of the international system, readers will want to treat this portion of the analysis as speculative. Still, optimistic predictions are equally speculative, if not more so, given the same need for out-of-sample projections. We thus offer what we hope is a reasonable “best guess,” given available data and the insights highlighted in the last section.

Figure 4 depicts the estimated probability of a militarized dispute for the entire range of dyadic and systemic regime type heterogeneity. The $x$ axis measures the proportion of the countries of the world that are presumed to be democracies. The $y$ axis measures the Polity IV regime score of

\textsuperscript{31}There are other reasons why developed countries are less prone to warfare than in previous times. These factors may prove sufficient in themselves to maintain peace in the developed world (Gartzke 2007; Gartzke and Rohner 2009).
the least democratic state in a given dyad. The resulting relationship forms a saddle function, with high probabilities of MIDs among democratic-autocratic dyads when most states in the system are autocracies and among democratic dyads when most members of the system are democratic. Beginning with a democratic dyad (lower democracy score near 10) in an autocratic system, we can see that the probability of a contest in a given dyad is very low, but increases as more states in the system become democratic. This is precisely the prediction made from the dynamic difference argument; differences among democracies become more salient (and may in fact be larger) as more states join the democratic club. In contrast, differences across regime type become less salient (and may even decline) as the number of autocracies diminishes. The probability of conflict for different regime types is not a constant but changes with the proportion of the system that is democratic.

Figure 4: Predicted Probabilities of MIDs for Values of Dyadic and Systemic Democracy
7 Conclusion

Democratic peace research offers a vision of the future of politics here on earth that has tremendous normative appeal. We all hope that the countries of the world can continue to form a more cooperative system. However, the role of scholarly research is not to enunciate our hopes and dreams (or our fears), but to focus as nearly as possible on what we can derive from logic and infer from available evidence. If the results of such an inquiry are not so optimistic as we should like, we may at least be forewarned. News that the world is not necessarily going to become more peaceful with the fruition of democracy may even mobilize efforts to achieve normative change by other measures, efforts that may not materialize if we become complacent in our optimism. Today and in the recent past democracies exhibit higher levels of cooperation, and less conflict, than other regime types (Doyle 1997). Our research suggests the need to treat democratic peace as conditional.

No endeavor as important and tenuous as world peace should be allowed to rest on a single support. Certainly no one wants to abandon democracy. Instead, researchers should be helping to bolster existing positive insights about the causes of peace, an effort that will no doubt also impact normative initiatives as well. If there are many paths to peace, or possibly even synergies or complementarities in promoting international cooperation, the discovery and elucidation of such relationships is one of the most important contributions international relations researchers can contribute to improving the human condition. While we no doubt raised more questions than we answered, we hope that our efforts serve as a stimulus to “think outside the democratic peace box” which has informed but also constrained so much of resent research in international relations.

One implication of this study is the need to pay much greater attention to system-level influences on the behavior of dyads. Research of a generation or two ago was dominated by systemic theories, models, and empirical work. The system fell out of favor as theory and evidence pointed to the critical role of the dyad as the locus of interstate conflict. Rather than advocating a return to systemic analysis, we believe that the maturation of dyadic theory and statistical analysis may afford an opportunity to begin to re-examine systemic influences in the context of dyadic analysis, as we have done here. Dyads do not function in isolation. Dyadic behavior, properly understood, includes the system. Indeed, “bringing the system back in” is a logical next step for international
relations researchers, as it is system level effects which uniquely characterize international politics.

A second, related implication involves identity. Debates about the self, community, and the other are endemic to the study of politics on all levels because politics is social. The dyad is too small a unit to contain everything of relevance in international relations, just as ignoring or downplaying dyadic “micro-foundations” is a mistake. Dyadic research will increasingly find it necessary to draw on insights of constructivist theory to explain the origin of affinities even as constructivists can benefit from using incentive-based dyadic models as a framework to examine how identity becomes behavior. Our findings suggest that a growing democratic community need not lead to reduced conflict among democracies, while increasing cooperation among autocracies is perhaps best explained by a growing sense that they are under threat by powerful democracies. The development of antagonisms may be based on socially-constructed categories, but this is not the same as saying that no such antagonisms exist. Competition may persist, even as the specific structure of friendships and enmities is likely to evolve. Nations will continue to compete in a material world. Yet, who is “us” and who “them” will depend on malleable notions of the other. Recognizing that social identity is not itself a remedy for the security dilemma should help to focus attention on where fissures are likely to develop, and what kinds of fault lines are most pernicious.

This in turn leads to a third implication of our research. Difference is most likely an important proximate determinant of conflict. Following Fearon (1995) and the bargaining school of war causation, it would be incorrect to say that difference “causes” disputes, since states or other opponents will often forge bargains by mutual consent. Instead, difference provides the basis for conflict and serves to define the realm where force becomes an option. Regime type difference is only one of many possible bases for difference. Realist theory emphasizes power disparities as a cause of conflict. While in our view power relations are less salient as a precipitant than other factors, it is important that realist theory has captured one other possible basis for tension among states. Other differences (ethnic, religious, linguistic, ideological, cultural) can serve to create groups with different interests. These relationships may operate in similar ways to that reported here for dynamic changes in the distribution of regime type. Future research may explore these possibilities, mindful that reality is invariably more complex and surprising than we can anticipate.
References


32


