Abstract:

One of the most striking findings in political science is the absence of war between democracies. However, scholars continue to debate whether democracy causes peace and, if so, how. Three obstacles have prevented researchers from resolving these controversies: endogeneity, multicollinearity, and over-aggregation. We overcome these obstacles by conducting experiments in the U.S. and the U.K. Our experiments, embedded in surveys, show that individuals are substantially less supportive of military strikes against democracies than against otherwise identical autocracies, an effect that is most pronounced among elite-like segments of society. Moreover, using a unique experimental design and new methods for studying causal mechanisms, we find that democracy contributes to peace by changing perceptions of threat and morality, not by raising expectations of costs or failure. Together, these findings shed light on a debate of enduring importance to scholars and policymakers.
1. Introduction

Few findings in political science have received as much attention as the “democratic peace,” the discovery that democracies almost never fight other democracies (Doyle 1986, Russett 1993). To some, the absence of military conflict among democracies is so consistent that it approaches the status of an “empirical law” (Levy 1988). Nonetheless, scholars continue to debate two fundamental aspects of the democratic peace.

First, skeptics argue that the apparent correlation between democracy and peace is spurious. They maintain that peace among democracies is not a consequence of democracy itself, but is instead a product of other factors that happen to coincide with democracy, such as military alliances (Farber and Gowa 1995), economic interdependence (Gartzke 2007), American hegemony (Rosato 2003), or the absence of territorial disputes (Gibler 2007). The inter-democratic peace may, therefore, be a happy historical accident, rather than the result of a causal relationship between political institutions and war.

Second, even among those who believe that democracy causes peace, disagreement remains over the mechanisms driving this relationship. Some argue that democracies remain at peace because democracies do not fear each other (Russett 1993, Risse-Kappen 1995). Others say that democracies refrain from attacking each other because wars against democracies would be particularly costly or unsuccessful (Bueno de Mesquita et al. 1999, Reiter and Stam 2002). Finally, material costs and benefits aside, people in democracies may have moral qualms about attacking other democracies. Despite volumes of research about the democratic peace, little consensus has emerged about the importance of these and other causal mechanisms.

Three obstacles have prevented previous researchers from resolving these controversies satisfactorily. The first obstacle, endogeneity, has vexed both proponents and opponents of the democratic peace. Although proponents contend that democracy causes peace, the relationship
may (also) run in reverse: peace may contribute to the creation and maintenance of democratic regimes. And although critics attribute peace to shared interests, the alignment of economic and political interests among democracies could, in fact, be a consequence of democracy. These and other problems of endogeneity have made it difficult to separate cause from effect.

The second obstacle is collinearity. To test hypotheses about the democratic peace, we need datasets in which democracy is not strongly correlated with other pacifying factors. Over the past century, though, democracy has coincided with other prospective sources of peace. Recognizing this problem, Farber and Gowa (1995) turned to data from the nineteenth century, a time when democracies did not have a shared interest in containing communism. Critics respond that the nineteenth century, when democracies were unstable and rare, tells us little about the world today. Researchers need what nature has not delivered: modern-day data in which democracy is not highly correlated with potentially confounding variables.

The third obstacle is aggregation. Existing data about the democratic peace are highly aggregated: the unit of observation is typically the country or the dyad, measured over time. We need complementary data about the individuals who shape policy. Other factors equal, are voters and elected leaders less willing to use force against a democracy than against an autocracy? Under what conditions would citizens support military action against a democracy, and for what reasons? Existing datasets are not well suited to answering these questions.

In this paper we shed new light on the existence of the democratic peace and the mechanisms explaining it. Using survey-based experiments, we directly measure the preferences and beliefs of actors in democracies, while avoiding problems of endogeneity, collinearity and over-aggregation that have impeded previous research. Our experiments, administered to nationally representative samples of British and American citizens, including subsets of the population that resemble elites, involve a situation in which a country is developing nuclear
weapons. When describing the situation, we randomly and independently varied four potential sources of peace: the political regime, alliance status, economic ties, and military power of the potential adversary. After describing the situation, we asked individuals whether they would support or oppose a preventive military strike against the country’s nuclear facilities.

Consistent with the democratic peace hypothesis, participants in our experiments were substantially less supportive of military strikes against democracies than against otherwise identical autocracies. The effect existed across a wide range of situations and was most pronounced among elite segments of the population. Moreover, because we randomly and independently manipulated the regime type of the adversary, the observed preference for peace with other democracies was almost certainly causal, rather than spurious.

In addition to estimating the overall effect of democracy, we investigated the mechanisms through which democracy contributes to peace. Our findings, based on a unique experimental design and new techniques for causal mediation analysis (Imai, Keele, and Yamamoto 2010, Imai et al. 2011), were most consistent with theories that emphasize threat perception and morality. Individuals who faced democratic rather than autocratic countries were less fearful of the country’s nuclear program and harbored greater moral reservations about attacking. Those perceptions, in turn, drove a significant part of the democratic peace. In contrast, respondents did not think that attacking a democracy would entail significantly higher costs or less success than attacking an autocracy. Thus, our data help arbitrate between existing theories of the democratic peace, while also identifying morality as an important but surprisingly understudied mechanism.

In the remainder of the paper, we revisit existing theories of the democratic peace and derive their overlooked implications for the preferences and perceptions of individuals. We then explain why collinearity, endogeneity, and aggregation have impeded research on the democratic peace, and we discuss how experiments can overcome these obstacles. The subsequent sections
present our findings about the effect of democracy and the mechanisms behind it. We conclude by discussing the implications of our findings for scholars and policymakers.

2. Theories of the Democratic Peace

We begin by situating existing theories of the democratic peace within a general framework about the causes of war. Most theories of war presume that, before engaging in violence, leaders and their constituents weigh the expected costs of war against the anticipated benefits. Perceptions of costs and benefits are crucial in classic texts about war (Thucydides, Morgenthau 1948, Jervis 1978), modern game-theoretic models (Fearon 1995, Bueno de Mesquita et al. 1999, Kydd 2005), psychological theories of conflict (Herrmann et al. 1997, Hermann and Kegley 1995), and even constructivist theories, which argue that beliefs about costs and benefits are socially constructed (Wendt 1992, Finnemore 2003).

From this body of theory, we highlight four inputs into calculations about the costs and benefits of war. First, states form perceptions of how threatening other countries are. Conflict is more likely when states perceive high levels of threat, because states that feel threatened may attack in the interest of self-preservation (Jervis 1978, Kydd 2005). Second, states consider the material costs of using force. All else equal, using force is more attractive when the economic, human, and diplomatic costs of war are perceived to be low. Third, states consider the likely success of the military operation. They are reluctant to waste resources on impossible missions but may support operations they expect to succeed (Gelpi, Feaver, and Reifler 2006). Fourth, moral considerations could influence decisions about whether to fight and how leaders justify war (Welch 1993, Price 1998, Hermann and Shannon 2001).

Existing theories of the democratic peace, we show below, can be categorized according to the claims they make about how democracy affects these four inputs into the calculus for war. Viewing the leading theories of the democratic peace this way, it becomes clear that they make
important but largely untested assumptions about the preferences and beliefs of individuals.\(^1\) By highlighting the micro-level implications of the different theories, we lay the foundation for our experimental approach.

2.1 The Threat Perception Mechanism. The first input into the war calculus is threat perception. Many theories of the democratic peace suggest that democracies view fellow democracies as less threatening than autocracies, i.e., less likely to have malicious intent and to take military action.

Perceptions of threat play a crucial role in “normative” theories of the democratic peace. These theories begin with the premise that democracies are normatively opposed to violence. People in democracies solve domestic disagreements peacefully, and they try to apply those same nonviolent norms internationally, at least in relations with democratic states. Democracies expect other democracies to externalize their norms in the same way, and therefore trust that they will not be attacked by fellow democracies (Doyle 1986, Maoz and Russett 1993, Russett 1993, Dixon 1994, Owen 1994, Risse-Kappen 1995).

Perceptions of threat also play a crucial role in “institutional” theories. Some argue that democratic institutions reduce fear by constraining the executive, thereby slowing the process of mobilization and reducing the likelihood of surprise attack (Russett 1993). Others claim that democratic institutions contribute to peace by conveying information (Fearon 1994, Schultz 2001), thereby increasing confidence that inter-democratic disputes will be resolved through peaceful bargains, rather than wasteful military conflicts. Finally, democracy could reduce fear by creating expectations of shared interests. Oneal and Russett (1999), for example, argue that democratic institutions increase “affinity,” measured by similarity of voting patterns in the U.N. If democracies believe they have common interests, they may not feel threatened by each other.

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\(^1\) For an important exception to scholars’ inattention to the individual-level implications of democratic peace theories, see Hermann and Kegley (1995).
In sum, several prominent theories of the democratic peace imply that democratic leaders and their constituents view other democracies as less threatening than autocracies. Testing this claim is crucial to establishing the plausibility of existing theories. It is also important to see how much of the democratic peace is driven by threat perception, as opposed to other mechanisms.

2.2 The Deterrence Mechanism (Costs of Fighting and Likelihood of Success). While some theories of the democratic peace generate predictions about threat perception, others imply that democracy affects two other inputs into the war calculus: the costs of fighting and/or the likelihood of success. Selectorate theory (Bueno de Mesquita et al. 1999), in particular, argues that wars against democracies would be especially costly, because democratic leaders have strong incentives to win the wars they start (see also Reiter and Stam 2002). Autocracies are less forbidding opponents. If autocrats think they can lose wars without suffering much domestic punishment, they will spend fewer resources on the war effort. Following this logic, countries should be deterred from using force against democracies because of the high costs of war and a low probability of victory. If we found little evidence that democracy affected perceptions of cost and success, this would contradict selectorate theory.

2.3 The Morality Mechanism. Finally, shared democracy could produce peace by raising the moral costs of using military force. Perhaps democracies avoid attacking other democracies because they believe it would be morally wrong.2 If, for example, the foreign and domestic policies of democracies reflect the will of the people, then waging war against a democracy could be seen as an illegitimate assault on the freedom of individuals. People might have fewer moral qualms about attacking autocracies, especially ones in which dictators impose their will

2 Discussions of morality are surprisingly rare in existing scholarship on the democratic peace. If morality is mentioned, it is usually in passing, e.g. Doyle 1983, p. 230 and Russett 1993, p. 40.
instead of respecting their subjects’ rights to autonomy and self-determination.

This moral argument, which focuses on freedom, is different from the existing “normative” theory of the democratic peace, in which the opponent’s domestic norms shape beliefs about military threats. It is also distinct from moral arguments about self-defense. If morality is an independent driver of the democratic peace, we would expect to find a moral aversion to attacking fellow democracies, separate from perceptions of threat, cost, and success.

In sum, theories of the democratic peace have often-overlooked implications for the beliefs and preferences of the individuals who affect policy in democracies. The theories not only imply that democratic actors should be less inclined to use force against a democracy than against an autocracy, but they also make different claims about why actors would hold these preferences. In the next section we identify several problems with using existing datasets to test claims about the democratic peace and its mechanisms.

3. Obstacles to Studying the Democratic Peace and its Mechanisms

Numerous studies have documented that democratic dyads are more peaceful than other types of dyads (e.g., Maoz and Russett 1993, Ray 1995, Oneal, Russett, and Berbaum 2003), but skeptics remain unconvinced that the relationship is causal, and proponents disagree about the mechanisms behind it. Three obstacles—collinearity, endogeneity, and aggregation—have prevented previous researchers from resolving these questions satisfactorily.

The first obstacle is collinearity. For much of history, democracy has overlapped with other potential sources of peace. This fact has raised suspicion that the democracy-peace correlation might be spurious. Some attribute peace between democracies to shared political interests that fortuitously coincided with democracy, particularly during the Cold War (Farber and Gowa 1995). Others claim that inter-democratic peace is due to capitalism, not democracy (Gartzke
Still others attribute the democratic peace to the post-World War II distribution of material power, particularly American hegemony (Rosato 2003). Given that democracy is highly correlated with other pacifying factors, it is difficult to estimate the contribution of democracy with a high degree of confidence.

Collinearity causes problems not only for estimating the effect of democracy, but also for parsing its causal mechanisms. Some theories of the democratic peace emphasize noncoercive norms; others stress checks and balances, regular elections, or the presence of opposition parties. The problem for researchers is that these features have coexisted historically. It is, for example, rare to find democracies with strong democratic institutions but weak democratic norms. This makes it difficult to use historical evidence to infer how democracy causes peace.

A second obstacle to studying the democratic peace is endogeneity. Some authors claim that the relationship between democracy and peace runs in reverse, i.e., that peace contributes to the emergence and maintenance of democracies (Layne 1994, Thompson 1996, Gleditsch 2002, Rasler and Thompson 2004, Gibler 2010). Moreover, although critics of the democratic peace attribute the absence of war among democracies to shared interests (Gartzke 1998, Gowa 1999), democracy may cause economic and political interests to align (Oneal and Russett 1999). Unless we can disentangle these endogenous relationships, it will be difficult to evaluate competing theories of the democratic peace.

A third obstacle is aggregation. The leading theories of the democratic peace have implications for individual-level beliefs and preferences. Nonetheless, existing scholarship has focused on states, rather than individuals, as units of analysis. The observations are typically countries or dyads, measured over time, and the dependent variable is usually a binary indicator.

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4 For examples of studies using observational data to parse causal mechanisms about the democratic peace, see Maoz and Russett 1993, Schultz 1999 and Lektzian and Souva 2009.
of whether military force was used. These kinds of datasets tell us about interstate outcomes, but they do not offer direct evidence about the underlying preferences of individuals. Macro-level data also tell us little about the beliefs of decision makers, including perceptions of threat, cost, success, and morality. To understand how the adversary’s regime type matters, we need data about the preferences and beliefs of individuals.

4. Using Experiments to Learn about Mass and Elite Opinion

Given the difficulties with using historical data to infer how democracy affects the war calculus, we take an experimental approach. Through the careful design of survey experiments, we can ensure that key explanatory variables (such as the political regime of the target state) are assigned randomly and imposed exogenously. We can also guard against collinearity and omitted variable bias by independently varying factors that would otherwise coincide in observational data. Finally, our experiments have unique advantages for shedding light on causal pathways. We can measure how democracy affects individual perceptions of threat, cost, success, and morality, and thereby adjudicate among theories of the democratic peace.

4.1 Studying Mass and Elite Opinion. The two most important sets of actors in democracies are voters and elites. We directly studied the preferences and beliefs of the first group, voters, by embedding experiments in public opinion surveys and administering them to representative samples of adults in the U.K. and the U.S. In the process, we also gained indirect evidence about the second group, elites. Public opinion polls teach us about elites for two reasons. First, in a democracy, elites have strong incentives to follow public opinion, lest they lose popularity and

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possibly even lose office. Second, even if elites were unmoved by public opinion, we could still use public opinion polls to infer the attitudes of elites, by analyzing the subset of respondents who most closely resemble foreign policy leaders. We now develop these points.

First, in a democracy, elites have powerful incentives to respect the opinions of citizens. Leaders know that citizens care about foreign policy, that foreign policy plays an important role in electoral campaigns, and that foreign policy mistakes can be electorally costly (Aldrich, Sullivan, and Borgida 1989, Gronke, Koch, and Wilson 2003, Gelpi, Reifler, and Feaver 2007). Leaders also understand that, by remaining popular, they can accomplish more during their time in office. In the U.S., for example, popular presidents have more influence over Congress (Krosnick and Kinder 1990, Edwards 1997, Howell and Pevehouse 2007). They also wield more international influence, since leaders who enjoy the backing of the public find it easier to persuade other countries that their promises and threats are credible. Countless studies have concluded that, in decisions about using force, democratic leaders pay close attention to public opinion (Rosenau 1961, Mueller 1973, Russett 1990, Foyle 1999, Sobel 2001, Baum 2004, Holsti 2004, Canes-Wrone 2006, Baum and Potter 2008). Studying the public can, therefore, tell us much about the political incentives that elites face.

Second, even if elites did not heed public opinion, mass surveys could help us learn what elites themselves think. While early research claimed that public opinion on foreign policy was uninformed and incoherent (Almond 1960), this view has been supplanted by numerous studies showing that mass opinion is informed, coherent, and structured, and often resembles elite opinion. For many years, the Chicago Council on Foreign Relations asked similar questions to masses and foreign policy elites, including members of the U.S. House and Senate, assistant secretaries, and senior administrative staff with authority over foreign policy.

Using CCFR data and related polls, some scholars have found a close match between
mass and elite opinions, despite demographic differences between the two groups. Herron and Jenkins-Smith (2002), for example, concluded that the public and elites had highly similar beliefs about the risks posed by nuclear weapons. Other scholars have found a match between elite and mass opinions about the use of force, after adjusting for demographic differences between the two populations. Wittkopf and Maggioto (1983), for instance, show that after controlling for race, gender, political orientation, party ID, and age, there are no remaining differences between elites and masses in their views about militant internationalism. Similarly, Wittkopf (1987) shows that politically active citizens—those with high levels of education and interest in the news—are quite “elite-like” in their opinions about foreign affairs. Finally, evidence is accumulating that leaders and masses have comparable foreign policy opinion structures, meaning that the correlations between foreign policy opinions and other variables are about the same for the two groups (Holyk 2011).

In summary, studies of public opinion offer a double benefit: they not only reveal the thinking of voters but also help us infer the attitudes of elites. Thus, mass surveys can advance our understanding of the democratic peace, even if the democratic peace is entirely an elite-driven phenomenon. To argue otherwise, critics would need to name specific demographic variables that moderate the effect of democracy on foreign policy opinion; show that those moderators are distributed differently among elites than among the masses; and explain why it would not be possible to control for those demographic differences (Druckman and Kam 2010).

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6 Researchers who have emphasized disagreement between masses and elites about the use of force typically have not adjusted for demographic differences between the groups, as their interest is usually in assessing how the two populations compare to each other as a whole (e.g., Oldendick and Bardes 1982, Page and Barabas 2000, Holsti 2004).

7 In addition to interviewing members of the mass public, it would of course be informative to interview government officials. However, it is difficult to gain access to members of Congress and the Executive branch, and to conduct enough interviews for statistical analysis. Moreover, when they do agree to talk with researchers, government officials generally prefer to be interviewed in person, substantially increasing the cost of the research. For these reasons, the
4.2 Past Experimental Approaches to the Democratic Peace. Only a handful of studies have used survey experiments to investigate the democratic peace. In a pioneering article, Mintz and Geva (1993) carried out a survey experiment on three small samples: American college students, American adults, and Israeli college students, with a total of 117 respondents across the three groups. The investigators described a crisis in which one hypothetical country has invaded another, and randomly varied whether the invader was a stable democracy with a newly elected parliament, or a military dictatorship with a puppet parliament and fierce police. Respondents were then asked to express their level of approval for various policy options, including whether to use military force to stop the invader. In each of the three samples, subjects were more likely to favor using force when the invader was a dictatorship than when it was a democracy.

Rousseau (2005) ran a similar experiment on 141 American college students. Each student played the role of chief political advisor to the president of a fictional, democratic country, which was involved in a territorial dispute with a southern neighbor. Rousseau randomly varied three features: the southern neighbor’s political regime (democratically elected government versus single-party dictatorship); the balance of military forces (strong versus weak); and the domestic political position of the president the student was advising (strong versus weak). The students were then asked whether they would advise the president to use military force to settle the dispute. Participants were less likely to recommend using military force against a democracy than against a dictatorship.

Finally, new research by Johns and Davies (2012) analyzes experiments on nationally representative samples in Britain and the U.S. In their scenario, the British/American government had uncovered evidence that a country was secretly developing nuclear weapons,
which it intended to use against its neighbors. The study randomized three features: regime type (democratically elected president vs. unelected dictator), whether the foreign country was predominately Christian or Islamic, and how many civilian casualties would result from air strikes against the nuclear production facilities. The study found higher public support for air strikes against the unelected dictator than against the democratically elected president, and higher support for strikes against an Islamic as opposed to Christian country.

These studies, while path-breaking, are open to several critiques. First, they did not investigate the mechanisms behind the democratic peace.\textsuperscript{8} Second, with the exception of Johns and Davies (2012), the studies were carried out on small samples, usually of university students. Third, the studies did not control for other factors that, according to critics, explain the correlation between shared democracy and peace. When respondents read that the country was a democracy, for example they might have assumed that the country was also an ally, a major trading partner, or a powerful adversary.\textsuperscript{9} Thus, we cannot know whether the effect of democracy in these experiments was due to democracy itself, or to other pacifying factors that are known to coincide with democracy.

We built on previous experiments in several important ways. First, we designed our experiments to illuminate not only whether but also why shared democracy produces peace. Second, by carrying out surveys on larger, more representative samples, we could quantify the effect of democracy on different subsets of the population, including the highly educated and

\textsuperscript{8} The one possible exception is Rousseau 2005, who explored moral reservations about attacking democracies. Rousseau asked whether respondents would support the use of force if it could be kept secret, asserting that only moral qualms could explain reluctance to use covert force against democracies. However, other mechanisms—such as a reduction in threat perception when the target is a democracy—would predict the same response.

\textsuperscript{9} In the literature on experiments, this problem is called “information leakage.” Johns and Davies (2012) leaked additional information by telling British and American respondents that their government favored air strikes and was making the case to the United Nations. By implying that leaders deemed it wise to attack, even though the adversary was democratic, these phrases may have reduced the estimated effect of democracy.
politically engaged individuals who resemble elites and are most likely to affect policy. Third, we randomly varied whether the country in our scenario was an ally, a major trading partner, and/or a military power. This not only allows us to distinguish the effect of democracy from potential confounders, but also to estimate the roles of alliances, trade and power as independent sources of peace.

5. Experimental Design and Procedures

We fielded two major surveys: one in the U.K. and one in the U.S. YouGov, an internet-based polling firm, administered the U.K. study to 762 adults in April–May 2010, just before the British national election, and fielded the U.S. study on 1,273 adults in October–December 2010, before and after the U.S. Congressional elections.

Participants in both studies were told: “There is much concern these days about the spread of nuclear weapons. We are going to describe a situation the [U.K./U.S] could face in the future. For scientific validity the situation is general, and is not about a specific country in the news today. Some parts of the description may strike you as important; other parts may seem unimportant. After describing the situation, we will ask your opinion about a policy option.” Respondents then received a series of bullet points with details about the situation. The first bullet point explained, “A country is developing nuclear weapons and will have its first nuclear bomb within six months. The country could then use its missiles to launch nuclear attacks against any country in the world.”

U.K. respondents received information about three factors: the country’s political regime, military alliances, and military power. We randomly and independently varied these factors, each of which had two levels. Thus, in half the interviews, the country had signed a military alliance with the U.K., but in the other half the country had not. Likewise, half the respondents read that the country “is a democracy and shows every sign that it will remain a democracy,” whereas the
other half read that the country “is not a democracy and shows no sign of becoming a
democracy.” Finally, we told participants that the country’s nonnuclear forces were either “as
strong” or “half as strong” as Britain’s.

The U.S. survey was nearly identical but randomized information about trade. Respondents
learned whether the country had, or did not have, high levels of trade with the U.S. As in Britain,
we also varied whether the country was a democracy, and whether it had signed a military
alliance with the U.S. Unlike in Britain, we held the country’s conventional military strength
constant at half the U.S. level, because it seemed unrealistic to portray an adversary that was at
conventional parity with the U.S. Thus, each study involved three random factors, resulting in
fully-crossed 2x2x2 experimental designs.

We concluded with several bullet points that were identical for everyone. Respondents
were told that “the country’s motives remain unclear, but if it builds nuclear weapons, it will
have the power to blackmail or destroy other countries.” Additionally, they learned that the
country had “refused all requests to stop its nuclear weapons program.” Finally, the scenario
explained that “by attacking the country’s nuclear development sites now,” they could “prevent
the country from making any nuclear weapons.” After presenting this information, we asked
whether respondents would favor or oppose using their country’s armed forces to attack the
nuclear development sites.

The U.S. study contained two additional features that were not part of the British survey.
First, the U.S. survey measured each person’s perceptions of threat, cost, success, and morality,
with the goal of shedding light on causal mechanisms. To gauge perceptions of threat, we asked
which of the following events had more than a 50 percent chance of happening if the U.S. did not
attack: the country would build nuclear weapons; threaten to use them against another country;
threaten to use them against the U.S. or a U.S. ally; launch a nuclear attack against another
country; or launch a nuclear attack against the U.S. or a U.S. ally. Respondents could select as many events as they thought probable or indicate “none of the above.”

To assess perceptions of cost and success, we asked which, if any, of the following events would have more than a 50 percent chance of happening if the U.S. did attack: the country would respond by attacking the U.S. or U.S. ally; the U.S. military would suffer many casualties; the U.S. economy would suffer; U.S. relations with other countries would suffer; the U.S. would prevent the country from making nuclear weapons in the short and/or the long run. Finally, to measure perceptions of morality, we asked whether it would be “morally wrong for the U.S. military to attack the country’s nuclear development sites.”

The U.S. study was unique in another way: we interviewed participants twice, before and after the November 2010 election. The post-election questionnaire, administered after a delay of about four weeks, repeated the scenario from the pre-election questionnaire but switched the political regime of the target: people who had previously considered a democracy were asked about an autocracy, or vice-versa. All other features of the adversary, including its alliance status, trade relations, and military power, were held constant across both waves. The U.S. study was, therefore, a crossover experiment. Of the 1,273 people who completed the pre-election survey, 972 (76%) completed the post-election survey, as well. For each of those individuals, we measured perceptions and preferences not only when the country was a democracy, but also when it was an autocracy.

6. Evidence about the Main Effect of Democracy

Table 1 summarizes the overall effect of democracy on support for military strikes. The top panel gives the effect among all respondents, and the bottom panel gives the effect among an elite-like subset (people who were at least 35 years old, had college degrees, and expressed a high level of interest in politics). We generated between-subject estimates for the U.K. and the
U.S. by comparing the average responses among people who read about a democracy to those who read about an autocracy. We also generated within-subject estimates for the U.S., where people completed two questionnaires, by noting how each person’s preferences changed when we switched the adversary from democracy to autocracy, or vice-versa.

[Table 1 about here]

As Table 1 shows, citizens in both countries were much less willing to attack another democracy than to attack an otherwise equivalent autocracy. Approximately 34.2% of respondents in the U.K. supported a military strike when the country was not a democracy, versus 20.9% when the country was a democracy. Thus, democracy reduced support for a military strike by more than 13 percentage points, with a 95% confidence interval of -19.6 to -7.0. The baseline level of militarism was much higher in the U.S., where at least half the respondents wanted to strike an autocracy. Nonetheless, democracy exerted a similarly large effect in the U.S.: the between-subject and within-subject estimates concur that democracy reduced enthusiasm for a military strike by about 11.5 percentage points. In both countries, democracy produced substantively large and statistically significant effects on preferences.

We also extracted a subsample of elite-like respondents: people who were at least 35, had college degrees, and were highly interested in politics. To assess how closely this subsample could mimic elite opinion, we turned to data from the Chicago Council on Foreign Relations. In 2004, the last year in which the CCFR interviewed both masses and elites, they asked both groups, “Do you think that a country, without U.N. approval, should or should not have the right to use military force to prevent a country that does not have nuclear weapons from acquiring them?” Support for military force was 38% among foreign policy elites, versus 41% among members of the mass public who met our elite-like criteria (and 53% among the mass public as a whole). The CCFR data confirm that, by subsetting according to age, education, and interest in
politics, we can bring mass opinion in line with elite opinion on the topic of our experiment.

When we reanalyzed our experiment using only the answers of the elite subgroup, the effect of democracy jumped to around 18% in the U.K. and 15–16% in the U.S. Thus, on both sides of the Atlantic, the impact of democracy was even bigger among elite-like respondents than among the public as a whole.

These findings provide strong microfoundations for the democratic peace. A large literature, cited earlier, shows that average citizens care about foreign policy and that their preferences matter to leaders. But even if decisions about war were made entirely by elites, without any attention to the mass public, our data imply that the regime of the adversary would matter. The most educated, mature, and politically interested members of society are far less willing to strike a democracy than to strike an otherwise equivalent autocracy.

In our experiment we did not name the country that was developing nuclear weapons, nor did we identify its location. We intentionally omitted this information in order to test general hypotheses about the effects of democracy, rather than claims about specific leaders, nations, or regions. Nonetheless, one might wonder whether participants reacted strongly because they assumed the autocracy in our study was either Iran or North Korea. In January 2002, U.S. President George W. Bush claimed that both countries were sponsoring terrorism and pursuing weapons of mass destruction, and he dubbed them—along with Iraq—as the “axis of evil.” If respondents thought we were asking about Iran or North Korea when we described a non-democratic proliferator, they might have been especially inclined to strike.

This seems unlikely for three reasons. First, we explicitly told respondents that our scenario was “not about a specific country in the news today.” Second, most respondents received additional information that distinguished the target from Iran or North Korea. In the U.S. study, for example, three-quarters of participants read that the country had a military alliance and/or
high trade with the U.S. The effect of democracy was at least as large given those scenarios as when target was, like Iran or North Korea, neither an ally nor a major trading partner.

Third, the effect of democracy did not weaken when, in a follow-up experiment, we put the country that was pursuing nuclear weapons on a different continent from Iran or North Korea. For this follow-up study, we recruited 2,393 U.S. adults via an online service called Amazon Mechanical Turk and interviewed them between October 2010 and November 2011. MTurk subscribers are younger, more likely to be female, and more liberal than the national population. Nevertheless, Berinsky, Huber, and Lenz (forthcoming) show that experiments on MTurk produce roughly the same treatment effects as experiments on nationally representative samples.

Some participants in our MTurk experiment received no information about the country’s location; others were told that the country was in Africa. When we did not specify the location of the target, democracy reduced support for a military strike by 11.7 percentage points, essentially the same as the 11.5 point effect in our nationally representative sample. When we told respondents that the country was in Africa, the effect of democracy was 15 percentage points, somewhat larger than the effect for a generic country but not statistically different at conventional confidence levels.\(^{10}\) Thus, using MTurk, we replicated the core findings in Table 1 and confirmed that our conclusions did not change when we specified a location for the target that excluded countries such as Iran or North Korea.\(^{11}\)

In addition to showing the importance of democracy, our experiments revealed the effect of alliances, power, and trade (Table 2). As expected, respondents were substantially less willing to

\(^{10}\) Under the null hypothesis that the treatment effects are equal, we would, due to chance, observe a difference this large about 40% of the time.

\(^{11}\) We also confirmed that our findings were not sensitive to the order in which the questions were posed by fielding a follow-up study that measured perceptions before asking whether respondents would support for a military strike. When we administered this questionnaire to 797 members of MTurk in February 2011, the effect of democracy did not budge: support for a strike remained 11.7 percentage points lower when the country was a democracy.
strike allies than non-allies. Among the mass public, the existence of an alliance reduced support for military action by 5.7% in Britain and 5.1% in the United States. The analogous numbers for elite-like respondents were 10.8% and 9.2%. Although substantial, the estimated effects of alliances were smaller than the ones for democracy, and not always statistically significant.

[Table 2 about here]

Respondents took military power into account, as well, but regarded it as less important than democracy. In the U.K., where we varied military power, 29% of the public wanted to strike a country as strong as Britain, whereas 26% stood ready to attack when the target was at conventional parity with Britain. The effect, therefore, was 3 percentage points. The pattern was similar among elites. Overall, enthusiasm for attacking was lower against strong adversaries than against weak ones, but the differences were small and not statistically significant.

Finally, our experiments provided micro-level evidence for a commercial peace. In the U.S., where our vignette included information about trade, only 45% of the public endorsed preventive strikes against major trading partners. In contrast, 50% approved of attacking targets that did not trade extensively with the U.S. The swing in public opinion was, therefore, 5 percentage points. The effect was stronger among elite-like respondents, for whom trade shifted preferences by around 8 percentage points. In short, our studies provided experimental evidence for the democratic peace, while also documenting the influence of alliances, power, and trade on attitudes toward military intervention.

It bears emphasizing that, due to randomization, the political regime of the target in our experiment was not correlated with its alliances, power, or trade. Thus, the effects in Table 1 were not spurious. Our experiments revealed the independent contribution of democracy, above and beyond the effects of alliances, power, and trade.

Moreover, democracy reduced support for strikes not only on average, but also for each
combination of alliances, power, and trade. One must tread carefully here, because subdividing the data in this way results in small cell sizes. In the U.K., for example, we had 762 observations in total, implying fewer than 100 cases of democracy (and fewer than 100 cases of autocracy) for each combination of power and alliances. Nevertheless, the estimated effect of democracy always exceeded 8 percentage points, regardless of whether the target was strong or weak, and regardless of whether it had or had not signed an alliance with Britain. In the U.S., democracy always reduced support for military strikes by at least 6 percentage points, no matter what the combination of alliances and trade.

7. Evidence about Causal Mechanisms

We designed the U.S. survey to shed light not only on the effect of democracy, but also on the mechanisms through which it operates. Earlier, we showed that prevailing theories of the democratic peace imply four core pathways through which the target’s regime type could affect the inclination to strike: by changing perceptions of threat, costs, success, and/or morality. We refer to these perceptions as mediators, because they mediate the relation between the treatment variable (democracy) and the final outcome (support for a military strike).

To facilitate the analysis of causal mechanisms, we ran a panel study in which people were interviewed twice. For every individual who completed both waves of the panel, we observed both the final outcome and the mediators, not only when the adversary was a democracy but also when it was an autocracy. Had we run a purely cross-sectional study, with each individual randomly assigned to either a democracy or an autocracy, half the measures of outcomes and mediators would have been missing.

Our investigation proceeded in three steps. First, we estimated the effect of democracy on each of the mediators. This step required no elaborate statistical modeling. We simply computed how each person’s perceptions of threat, costs, success, and morality changed when we switched
the adversary from democracy to autocracy. Second, we estimated the effect of each mediator on support for a military strike. This step was more intricate because we observed the mediators instead of randomizing them. We used probit regressions to estimate the contribution of each mediator, controlling not only for other mediators but also for variables that could confound the estimated relationship between the mediators and the outcome. Finally, we combined the findings from these two steps, in order to infer how much of the total effect of democracy (from Table 1) was transmitted via each of the mediators.

7.1. The Effect of Democracy on Each of the Mediators. We begin by discussing how democracy affected each of the four mediators. Table 3 summarizes the impact of democracy on the first mediator, perceptions of threat. For both the mass public and the elite subsample, the first column shows what participants expected when the scenario involved an autocracy; the second column tells how expectations changed given an identical scenario involving a democracy. A star indicates that the effect was statistically significant at the .05 level.

[Table 3 about here]

The first row, labeled “build nuclear weapons,” shows that democracy did not substantially affect beliefs about whether the country would finish building nuclear weapons. Three-quarters of the mass public predicted that the autocracy would build a bomb, but the percentage who expected the democracy to go nuclear was only 3 points lower. Members of our elite-like subsample responded in much the same way: 75% expected a nuclear-armed autocracy, but only 5% fewer expected a nuclear-armed democracy. These effects were substantively small and, in the case of elites, statistically indistinguishable from zero.

Hence, democracy did not promote peace by allying fears that the country would build nuclear weapons. To some extent, this null result may have stemmed from the information we
provided. Respondents read that the country had refused all requests to cancel its nuclear program. This information may have encouraged respondents to conclude both types of countries were equally likely to cross the nuclear threshold. Future surveys could introduce more uncertainty about the country’s intentions and test whether, given those conditions, people think nuclearization is more likely under autocratic regimes than under democratic ones.

The next two lines in Table 3 summarize beliefs about nuclear threats. In the sample as a whole, 52% thought the autocracy would not only build the bomb but also threaten to use it against another country. When those same respondents considered an equivalent democracy, anticipation of nuclear threats was 14 points lower. Similarly, 45% predicted that an autocracy would issue nuclear threats against U.S. or its allies; those fears dropped by 11 percentage points when the country was a democracy. Elite-like respondents drew essentially the same conclusions: they perceived democracies as 13 percentage points less likely to threaten other countries and 18 percentage points less likely to threaten the U.S. and its allies.

Moving further down the table, we see that democracy also reduced fears of an actual nuclear attack. In both the full sample and the elite subgroup, around one-third of respondents thought the autocracy would not only obtain nuclear weapons but also fire them against a foreign target. Substantially fewer thought the democracy would use its nuclear arsenal. Here, the effect of democracy was 6–8 percentage points in the mass sample and 9–11 percentage points in the elite subgroup. The bottom row of Table 3 gives the mean of the five items. On average, democracy reduced perceptions of threat by 9 points in the sample as a whole and 11 points among the elite subsample. In summary, democracy mattered not by lowering the expected probability of getting nuclear weapons, but by changing perceptions about how the country would use them.

Although democracy reduced perceptions of threat, it had surprisingly little effect on the
second causal pathway: expectations about the costs of fighting (Table 4). We asked what would happen if the U.S. struck the country’s nuclear facilities. Thirty-nine percent of the mass public and 42 percent of the elite subsample thought the autocracy would retaliate against the U.S. or a U.S. ally, but neither group thought a democratic target would behave much differently. Similarly, around a third of respondents said the U.S. military would suffer many casualties and that the U.S. economy would decline as a result of the strike. These perceptions did not depend on whether the target was a democracy or an autocracy.

Democracy did affect forecasts about the cordiality of U.S. relations with other countries. Roughly half of the respondents thought that striking an autocracy would hurt U.S. relations with other nations. That prediction was 4–7 percentage points more common in response to scenarios involving democratic targets. In general, though, the effect of democracy on the predicted cost of fighting was weak: only 1–2 points on average. These findings contradict selectorate theory, which claims that nations refrain from attacking democracies because they expect democracies to fight harder.

Next, we studied how democracy affected a third mediator: beliefs about the probability of success of military action (bottom half of Table 4). Given an autocracy, around two-thirds of respondents thought a U.S. strike would prevent nuclear proliferation in the near future, and roughly a third thought the strike would stop proliferation over the long run. Respondents were slightly less sanguine about striking democracies: expectations of success were around 5 points lower against democratic targets than against autocratic ones. These effects were fairly small, however, and not statistically significant in the elite subsample.

Finally, democracy had a pronounced effect on the fourth mediator: the moral intuitions of respondents. About a third deemed it immoral to strike an autocracy, but when respondents read
about a democracy, the moral reluctance to strike grew by 7 points among the public as a whole and by 11 points among elites. Thus, our survey provides micro-level evidence that democracy affects the moral calculation for war. Other factors equal, people have more moral reservations about attacking a democracy than about attacking an autocracy.

In summary, democracy affected some but not all of the hypothesized mediators. Democracy substantially reduced perceptions of threat but had almost no effect on the expected cost of launching a preventive military strike. Respondents were a bit less optimistic about their chances of success against a democracy, and they were significantly more likely to regard attacking as immoral when the adversary was a democracy than when it was an autocracy. The patterns were about the same, if not stronger, among respondents who most closely resembled elites.

7.2. The Effect of the Mediators on Support for a Military Strike. Next, we estimated the effect of each mediator on support for military strikes. Having observed the mediators instead of randomizing them, we needed a statistical model with control variables. Given the binary nature of our dependent variable—1 if the respondent supported a strike and 0 otherwise—we used probit regression.

The key independent variables for these analyses were the four mediators: threat, cost, success, and immorality. To summarize perceptions of threat, we counted the number of adverse events (listed in Table 3) that respondents marked as probable if the U.S. did not strike the country’s nuclear facilities. Threat ranged from 0 to 5, with a mean of 2.1. Similarly, we summarized perceptions of cost by counting the number of negative consequences—military retaliation, high casualties, economic damage, and deteriorating relations—that the respondent anticipated if the U.S. carried out the operation. Cost ranged from 0 to 4, with a mean of 1.5. To gauge perceptions of success, we asked whether respondents thought the mission would stop the
country from getting nuclear weapons. *Success* was 2 if respondents thought the mission would succeed both in the short and in the long run, 1 if it would prove efficacious only in the short run, and 0 if it had less than a 50–50 chance of working even in the near term. Finally, *Immorality* was coded 1 if respondents thought it would be morally wrong to strike (35%) and 0 otherwise.

We then added dummy variables for each of the randomized treatments: *Democracy*, *Ally*, and *Trade*. Finally, we included demographic and attitudinal control variables. For example, we controlled for whether the respondent was *Male* (50%) and *White* (78%). We also controlled for the respondent’s *Age* in years (mean of 53) and level of *Education*. Finally, to control for baseline attitudes toward the use of military force, we included indices of *Militarism*, *Internationalism*, *Religiosity*, *Ethnocentrism*, and identification with the *Republican* party. Each of these indices had a mean of zero and a standard deviation of about 0.8; details on the construction of these variables are available in an online appendix.

Table 5 confirms that, when deciding whether to use military force, people weighed the threat the adversary posed, the expected cost of taking military action, the perceived likelihood of success, and the morality of employing violence. *Threat*, *Cost*, *Success*, and *Immorality* all worked in the hypothesized directions and were statistically significant at the .05 level.

[Table 5 about here]

To judge the importance of these four variables, we simulated how support for a strike would change if we shifted each mediator from its minimum to its maximum, while holding the other variables at their means. The effects were massive. If perceptions of threat rose from low to high, support for military action would increase by 54 points in the mass public and by 50 points in elite circles. Similarly, a groundswell of optimism about the chances of success would boost mass support by 18 points and elite support by 22 points. Conversely, if the expected cost changed from low to high, the popularity of military action would decline by 30 points among
masses and by 34 among elites. Finally, if people came to view the operation as immoral, mass enthusiasm would drop by 39 points and elite enthusiasm would decline by 51.

7.3. Overall Estimates of Causal Mechanisms. We have now estimated the effect of democracy on each mediator, and the effect of each mediator on support for military strikes. By joining these parts of the causal chain, we can see how perceptions of threat, cost, success, and morality mediate the relationship between democracy and strikes (Imai, Keele, and Yamamoto 2010, Imai et al. 2011), and thereby assess the mechanisms behind the democratic peace.

Recall that every individual received two scenarios, one in which the target was a democracy and another in which the target was an autocracy. The role of any particular mediator can be quantified by measuring a person’s willingness to strike when the mediator takes on its democracy value, and subtracting that same person’s willingness to strike when the mediator takes on its autocracy value, with all other factors held constant.

More precisely, for each individual $i$ who completed both waves of the survey, let $T_i$ be a treatment indicator that takes a value of 1 when $i$ was asked about a democracy, and 0 when $i$ was asked about an identical scenario involving an autocracy. Use $Y_i(t)$ to denote $i$’s support for a military strike under treatment condition $T_i = t$. Because each panelist considered both a democracy and an autocracy, we observed both $Y_i(1)$ and $Y_i(0)$ for every $i$.

Our analysis focused on four mediators, which we will index as $k = \{1,2,3,4\}$. For each person in our panel, let $M^k_i(1)$ represent the value of mediator $k$ when the target is a democracy, and let $M^k_i(0)$ represent the value of that same mediator when the country is an autocracy. Due to the special design of our survey, we observed both $M^k_i(1)$ and $M^k_i(0)$ for every $i$ and every $k$.

For any given individual, the effect of democracy transmitted via mediator $k$ is
\[ v_i^k = Y_i \left( 1, M_i^k(1), M_i^{-k}(1) \right) - Y_i \left( 1, M_i^k(0), M_i^{-k}(1) \right). \]

The first term on the right hand side is \( i \)'s support for a military strike when the target is a democracy, mediator \( k \) takes on its democracy value, and all the other mediators (\( -k \), meaning “not \( k \)) take on their democracy values. The second term is identical, except that mediator \( k \) takes on its autocracy value.\(^{12}\)

\[ v_i^k \] is the difference between an observable quantity and a counterfactual one. The minuend, \( Y_i \left( 1, M_i^k(1), M_i^{-k}(1) \right) \), simplifies to \( Y_i(1) \), which we measured for every person in our panel. The subtrahend, \( Y_i \left( 1, M_i^k(0), M_i^{-k}(1) \right) \), on the other hand, is hypothetical. It represents the preference \( i \) would have expressed if he or she were considering a democracy but perceived mediator \( k \) as if the country had been an autocracy. Because the subtrahend is a counterfactual, \( v_i^k \) is not directly observable.

Fortunately, one can estimate \( v_i^k \) and the sample-wide average, \( v^k = \frac{1}{n} \sum_{i=1}^{n} v_i^k \), by applying the following algorithm:

1. Using all \( 2n \) cases (since each of the \( n \) respondents received both the democracy and the autocracy treatment), estimate a probit model of support for a military strike. In this model, \( Y_i \sim \text{Bernoulli}(\pi_i) \) and \( \pi_i = \Phi(\alpha T_i + \beta M_i + \gamma X_i) \), where \( \Phi \) is the cumulative normal distribution, \( T_i \) is the treatment indicator with coefficient \( \alpha \), \( M_i \) is a vector of mediators with coefficients \( \beta \), and \( X_i \) is a vector of control variables with coefficients \( \gamma \). \( X_i \) includes not only demographic and attitudinal variables, but also indicator variables for ally and trade. We estimated this model in section 7.2.

\(^{12}\) Equation (1) gives the effect of democracy via mediator \( k \) for the treatment condition. Alternatively, one could estimate the effect for the control condition, \( Y_i \left( 0, M_i^k(1), M_i^{-k}(0) \right) - Y_i \left( 0, M_i^k(0), M_i^{-k}(0) \right) \). When we did so, our conclusions remained the same.
2. For each $i$,
   
a. Use the parameter estimates from the probit model to predict the probability of supporting a military strike, given $T_i = 1; M_i = M_i^k(0), M_i^{-k}(1)$; and $X_i$, where $M_i^k(0)$ is the observed value of mediator $k$ when $i$ read about an autocracy, and $M_i^{-k}(1)$ is the observed values of the other mediators when $i$ read about a democracy. Denote this prediction as $\hat{r}_i$.
   
b. Draw $\tilde{Y}_i \sim \text{Bernoulli}(\hat{r}_i)$.
   
c. Compute $\tilde{\nu}_i = Y_i(1) - \tilde{Y}_i$.

3. Compute the sample-wide average, $\bar{\nu}^k = \frac{1}{n} \sum_{i=1}^{n} \tilde{\nu}_i^k$.

This algorithm produces one sample-wide estimate for each of the four mediators. One can approximate the sampling distributions of the $\tilde{\nu}^k$’s by repeating the algorithm many times, with each iteration based on a different bootstrap resample of the original data.

Using this algorithm, we estimated how much of the total effect of democracy (from Table 1) was transmitted via each of the four mediators. Recall that, in our panel study of the public as a whole, democracy reduced support for a military strike by 11.5 percentage points. Table 6 shows that democracy exerted about 35 percent of this effect by changing perceptions of threat, and an additional 15 percent by altering perceptions of morality. The mediating roles of cost and success were much weaker, and not always statistically significant. In the elite-like subsample, democracy lowered the inclination to strike by 14.6 percentage points. Threat and morality each mediated about a quarter of the total effect, whereas perceptions of cost and success played no significant role in the causal chain.

[Table 6 about here]

We found little evidence that democracy promotes peace by changing perceptions of cost and success. This does not mean that citizens disregarded the expected cost of fighting and the
probability of success. On the contrary, Section 7.2 showed that respondents were much less enthusiastic about military action when they thought strikes would be costly or unsuccessful. Rather, the reason that cost and success did not mediate the effect of democracy is because democracy had only a negligible effect on perceptions of costs and success (Table 4).

Morality appeared to be a far more important mediator. But did people regard preventive strikes as morally wrong because they thought the target posed little threat, the attack would involve significant costs, and/or military action would fail? To find out, we carried out a more complicated analysis in which we modeled morality not only as an independent force, but also as a potential consequence of the other mediators.

Having estimated this more complicated model, we credited morality as a mediator only the extent that democracy changed perceptions of morality directly. Where democracy influenced morality indirectly—by altering other mediators that, in turn, affected morality—we allocated credit to the other mediators, and not to morality itself. Even with this conservative method of scoring, morality mediated more than 10% of the total effect in the mass sample and nearly 20% of the total effect in the elite subsample.

### 8. Implications for the Democratic Peace

Using survey experiments, we found clear micro-level evidence of a democratic peace. Individuals in the U.S. and U.K were substantially less willing to attack democracies than to attack otherwise equivalent autocracies. Moreover, the target’s regime type mattered by altering perceptions of threat and morality, not by raising expectations of costs or failure. Thus, our data showed a strong causal relationship between democracy and peace, while also illuminating

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13 Alternatively, one could give morality credit as a mediator, not only when democracy affects morality directly, but also when democracy affects morality indirectly via changes in perceptions of threat, cost, and success (see, e.g., Imai and Yamamoto 2012). Had we taken this approach, we would have inferred an even larger role for morality, and concomitantly smaller roles for threat, cost, and success.
several mechanisms that drive this relationship.

We now consider four questions about the interpretation of our findings. First, do our surveys of the mass public shed light on the preferences and actions of policymakers? We believe they do, for two reasons. First, a large body of research has shown that public opinion greatly influences state policy. Democratic leaders pay attention to public opinion out of concern for re-election, to maintain political influence while in office, and to enhance the credibility of their threats and promises internationally. Public opinion therefore anchors public policy. Second, much research has found that mass opinion is similar to elite opinion on the use of military force, after adjusting for demographic differences between the two groups. We found that democracy exerted an especially large effect on elite-like respondents: those who were at least 35 years old, had college degrees, and expressed a high level of interest in politics. To argue that our findings do not shed light on policymakers, critics cannot simply point out that we did not interview elites directly. Rather, skeptics would need to identify specific individual-level variables that moderate the effect of democracy on opinion about the use of force; show that those moderators have a different distribution among elites than among the elite-like masses; and demonstrate that controlling for those difference changes the size of the effects we found (Druckman and Kam 2010).

Second, do our experiments predict how individuals would behave during real crises? Critics might wonder whether our experiments exaggerated the importance of democracy by giving respondents a bullet-list of information about the potential target. We believe this concern is misplaced. In actual crises, policymakers know whether they are dealing with a democracy or an autocracy. Thus, our estimates—especially the ones for elite subsamples—reflect how leaders would respond, based on the information they typically have on hand. Moreover, in actual crises, both politicians and the media make information about democracy salient to voters. Prior to the
U.S. invasion of Iraq in 2003, for example, Saddam Hussein was constantly portrayed as the dictator—not the elected leader—of Iraq. Moreover, policymakers and newscasters often use evocative language (“tyrant”, “dictator”) to describe regime type, whereas our experiments used deliberately neutral terms (“not a democracy”). Therefore, if anything, the effect of regime type on opinion could be accentuated, rather than diminished, in real-life crises where the stakes are higher and individuals are repeatedly exposed to information about regime type.

Third, can we extrapolate from surveys in the U.S. and U.K. in 2010 to draw more general conclusions about the democratic peace? It bears noting that the effects of democracy were extremely similar among U.K and U.S. respondents, despite striking differences in the militarism of the British and American electorates. This suggests that our findings generalize to countries with varying attitudes about military action. Moreover, as two of the most influential democracies in the world, the U.K. and U.S. are important in and of themselves. Their relative willingness to use force against autocracies, and reticence to use force against democracies, have a profound effect on international relations in general. At a minimum, our experiments show that the democratic peace is alive and well in two of the most important democratic military powers in the world, and they reveal the mechanisms through which democracy contributes to peace.

Finally, were the effects that we observed large enough to be politically consequential? We answer in the affirmative. In our experiments, democracy reduced willingness to strike by about 12–18 percentage points, depending on whether we considered the public as a whole or focused on the preferences of elite-like respondents. Shifts of that magnitude would change the nature of political debate. They could also make the difference between a majority and a minority. In the U.S., for example, a majority of the mass public favored a preventive strike when the target was an autocracy, but only a minority wanted to strike the democracy. The swing was even larger among elite-like masses. This is important because democracies typically do not go to war in the
face of public opposition (Reiter and Stam 2002).

Moreover, we found that democracy is important not only in isolation, but also in conjunction with other factors. Critics of the democratic peace rightly point out that democracy coincides with other pacifying factors, such as alliances, trade, and power. The combination of those forces can lead to major swings in preferences. In the U.S., for example, around 71% of elite-like respondents wanted to strike an autocracy that was neither an ally nor a major trading partner. In contrast, only 29% were willing to attack a democracy that was also an ally and a trading partner. Thus, if the U.S. typically entered alliances with other democracies and traded extensively with them, while forgoing alliances and trade with autocracies, elites would be 42 points less willing to attack democracies than to attack autocracies. These are consequential differences indeed.

9. Conclusion

The fact that democracies almost never fight each other is one of the most striking findings in political science. Yet scholars continue to debate whether the relationship between shared democracy and peace is causal, and what mechanisms explain it. Three obstacles have prevented previous research from resolving these debates: endogeneity, collinearity, and over-aggregation.

This paper overcomes these three obstacles by focusing on the implications of competing theories of the democratic peace for individual opinion, and testing them using survey experiments in the U.K and the U.S. We revisited existing theories and derived their implications for individual opinion about the use of force. Our experiments then found that British and American adults were far less willing to use force against democracies than against otherwise equivalent autocracies. The effect of democracy was especially large among the educated and politically engaged members of society who most resemble elites. Moreover, our experimental design allowed us to distinguish the effect of democracy from potential confounders. While
alliances, trade, and military power also affected attitudes toward military strikes, they did so to a lesser degree than democracy.

In addition to providing strong micro-level evidence of a democratic peace, our experiments shed light on the mechanisms behind it. We showed that existing theories contain often-overlooked implications for individual opinion, and identified four central pathways through which the regime type of the adversary can affect support for using force: by altering perceptions of threat, by raising concerns about costs, by dampening anticipation of success, and by triggering moral concerns. We then fielded an experiment designed to test for these mechanisms. Our panel design meant that respondents were interviewed in two separate time periods, which allowed us to observe how regime type affected each individual’s perceptions of threat, costs, success, and morality. All four perceptions strongly influenced support for military force, but only two explained why the target’s regime type had such a powerful effect. Democracy mattered by altering beliefs about threat and morality, rather than by raising expectations of costs or failure.

These findings have important implications for existing theories of the democratic peace. First, we show that democracy has a genuinely causal effect; it affects preferences independent of confounders such as alliances, power, and trade. At the same time, our experiments confirm the intuition of skeptics, who have argued that at least part of the peace among democracies is due to shared interests, military power, and economic ties. Second, the finding that democracies view other democracies as less threatening, which in turn reduces support for using force, accords with major works on the democratic peace emphasizing threat perception (Russett 1993, Risse-Kappen 1995). Understanding how and why democracies trust fellow democracies, but not autocracies, is an important avenue for future research (Kahl 1998, Williams 2001). Third, we found that perceptions of costs and success do not explain the effect of democracy. This
discovery is inconsistent with selectorate theory (Bueno de Mesquita et al. 1999), a popular explanation for the democratic peace. Finally, we found that morality plays an important role in the democratic peace. The regime type of the target affects moral calculations, which in turn changes preferences about the use of force. Surprisingly few scholars have explored morality as a potential source of peace. This should be a major topic for future research.

While our study sheds light on several potential causes of the democratic peace, it leaves other questions unanswered. For example, our current experiments cannot distinguish between “normative” and “structural” theories, both of which suggest that democracy reduces threat perception. Do democracies seem less threatening because people think democracies will externalize their domestic values of peaceful coexistence, because they believe democratic institutions will slow or prevent the march to war, or both? Future studies could find out by randomizing information about normative and structural attributes of regimes. With experiments, one could also test whether the perceived credibility of threats and promises varies by regime type (Fearon 1994, Schultz 2001, Slantchev 2005, 2011, Debs and Weiss 2012), whether people think democracies would be more willing to make peaceful bargains (Debs and Goemans 2010), and whether democracy leads to perceptions of shared preferences (Oneal and Russett 1999).

Finally, our study provides a template for research about other issues and regions. Future experiments could explore the effect of democracy in territorial disputes and in conflicts about domestic policies, including tensions with governments that fail to respect human rights, protect the welfare of their own citizens, or crack down on terrorists. One could also replicate our experiments in a wider range of countries and regions, to learn more about the empirical scope of the democratic peace.

For decades, U.S. and foreign leaders have cited the democratic peace when analyzing foreign affairs and justifying efforts to spread democracy around the globe. This topic is even
more critical today, given the tremendous pressure for democracy in the Middle East, Asia, and North Africa. By providing micro-level evidence about the democratic peace and its causes, this paper has shed new light on a debate of longstanding importance for scholars and policymakers, and one that will only become more relevant as new democracies emerge in the years to come.
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Table 1: The Effect of Democracy on Willingness to Strike

All respondents

<table>
<thead>
<tr>
<th></th>
<th>U.K. (between)</th>
<th>U.S. (between)</th>
<th>U.S. (within)</th>
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<td>34.2</td>
<td>53.3</td>
<td>50.0</td>
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<td>Democracy</td>
<td>20.9</td>
<td>41.9</td>
<td>38.5</td>
</tr>
<tr>
<td>Effect of democracy</td>
<td>-13.3</td>
<td>-11.4</td>
<td>-11.5</td>
</tr>
<tr>
<td>95% C.I.</td>
<td>(-19.6 to -7.0)</td>
<td>(-16.9 to -5.8)</td>
<td>(-14.8 to -8.3)</td>
</tr>
</tbody>
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Elite-like respondents

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<th>U.S. (between)</th>
<th>U.S. (within)</th>
</tr>
</thead>
<tbody>
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<td>Not a democracy</td>
<td>38.5</td>
<td>55.3</td>
<td>49.1</td>
</tr>
<tr>
<td>Democracy</td>
<td>20.5</td>
<td>39.0</td>
<td>34.5</td>
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<td>-14.6</td>
</tr>
<tr>
<td>95% C.I.</td>
<td>(-31.3 to -4.7)</td>
<td>(-27.1 to -5.5)</td>
<td>(-20.8 to -8.4)</td>
</tr>
</tbody>
</table>

Note: The table gives the percentage of respondents who supported military strikes when the target was a democracy and when it was not. The difference is the estimated effect of democracy. In the U.S., we present both between-subject and within-subject estimates. 95% confidence intervals appear in parentheses. Sample sizes for top panel (all respondents) were as follows: in the U.K., we generated between-subject estimates by comparing 398 cases in which the target was not a democracy, versus 634 cases in which the target was a democracy. In the U.S., we generated between-subject estimates by comparing 639 cases in which the target was a democracy, versus 634 in which it was not. The U.S. within-subject estimates were based on 972 respondents, each of whom assessed two scenarios, one in which the target was a democracy and another in which the target was not a democracy. Sample sizes for the bottom panel (elite-like respondents) were as follows: in the U.K., 91 cases of non-democracy versus 89 cases of democracy. In the U.S., between-subject estimates were based on 161 cases of non-democracy versus 159 cases of democracies. Finally, U.S. within-subject estimates were based on 267 elite-like respondents, each of whom assessed two scenarios: one in which the target was a democracy, and another in which the target was not a democracy.
Table 2: The Effect of Alliances, Power, and Trade

<table>
<thead>
<tr>
<th></th>
<th>All respondents</th>
<th>Elite-like respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>No military alliance</td>
<td>30.7</td>
<td>50.2</td>
</tr>
<tr>
<td>Military alliance</td>
<td>25.0</td>
<td>45.1</td>
</tr>
<tr>
<td>Effect of alliance</td>
<td>-5.7</td>
<td>-5.1</td>
</tr>
<tr>
<td>95% C.I.</td>
<td>(-12.0 to 0.7)</td>
<td>(-14.3 to 4.1)</td>
</tr>
<tr>
<td>Half as strong</td>
<td>29.3</td>
<td></td>
</tr>
<tr>
<td>As strong</td>
<td>26.3</td>
<td></td>
</tr>
<tr>
<td>Effect of strength</td>
<td>-3.0</td>
<td></td>
</tr>
<tr>
<td>95% C.I.</td>
<td>(-9.4 to 3.4)</td>
<td>(-17.2 to 9.9)</td>
</tr>
<tr>
<td>No high trade</td>
<td></td>
<td>50.3</td>
</tr>
<tr>
<td>High trade</td>
<td></td>
<td>45.1</td>
</tr>
<tr>
<td>Effect of high trade</td>
<td></td>
<td>-5.2</td>
</tr>
<tr>
<td>95% C.I.</td>
<td></td>
<td>(-10.7 to 0.2)</td>
</tr>
</tbody>
</table>

*Note:* The table gives the estimated effects (with 95% confidence intervals) of alliances, power, and trade on support for a military strike. In the U.K., the sample sizes for the analysis of all respondents were 371 for no alliance, 391 for alliance, 382 for half as strong, and 380 for as strong. The analogous sample sizes for elite-like respondents were 85, 94, 89, and 90. In the U.S. the sample sizes for the analysis of all respondents were 634 for no alliance, 639 for alliance, 612 for no high trade, and 661 for high trade. The analogous sample sizes for elite-like respondents were 156, 164, 135, and 185.
### Table 3: The Effect of Democracy on Perceptions of Threat

<table>
<thead>
<tr>
<th>If the U.S. did not attack, the country would …</th>
<th>All respondents</th>
<th>Elite-like respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belief if Autocracy</td>
<td>Effect of Democracy</td>
</tr>
<tr>
<td>Build nuclear weapons</td>
<td>75</td>
<td>-3 *</td>
</tr>
<tr>
<td>Threaten to use nukes vs. another country</td>
<td>52</td>
<td>-14 *</td>
</tr>
<tr>
<td>Threaten to use nukes vs. U.S. or U.S. ally</td>
<td>45</td>
<td>-11 *</td>
</tr>
<tr>
<td>Launch a nuclear attack vs. another country</td>
<td>34</td>
<td>-8 *</td>
</tr>
<tr>
<td>Launch a nuclear attack vs. U.S. or U.S. ally</td>
<td>30</td>
<td>-6 *</td>
</tr>
<tr>
<td>Average</td>
<td>47</td>
<td>-9 *</td>
</tr>
</tbody>
</table>

*Note: The first column gives the percentage of respondents who thought the event had more than a 50% chance of happening, when the country was an autocracy. The second column shows how much that percentage changed when those same respondents considered an identical scenario involving a democracy. Asterisks denote effects that were significant at the .05 level. N = 972 for all respondents and 267 for elite-like respondents.*
Table 4: The Effect of Democracy on Perceptions of Cost, Success, and Morality

<table>
<thead>
<tr>
<th>If the U.S. did attack ...</th>
<th>All respondents</th>
<th>Elite-like respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belief if Autocracy</td>
<td>Effect of Democracy</td>
</tr>
<tr>
<td>Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The country would attack U.S. or U.S. ally</td>
<td>39</td>
<td>0</td>
</tr>
<tr>
<td>The U.S. military would suffer many casualties</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>The U.S. economy would suffer</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>U.S. relations with other countries would suffer</td>
<td>49</td>
<td>4 *</td>
</tr>
<tr>
<td>Average</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>Success</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It would prevent nukes in the near future</td>
<td>66</td>
<td>-5 *</td>
</tr>
<tr>
<td>It would prevent nukes in the long run</td>
<td>30</td>
<td>-5 *</td>
</tr>
<tr>
<td>Average</td>
<td>48</td>
<td>-5 *</td>
</tr>
<tr>
<td>Morality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It would be immoral</td>
<td>31</td>
<td>7 *</td>
</tr>
</tbody>
</table>

*Note: The first column gives the percentage of respondents who thought the event had more than a 50% chance of happening, when the country was an autocracy. The second column shows how much that percentage changed when those same respondents considered an identical scenario involving a democracy. Asterisks denote effects that were significant at the .05 level. N = 972 for all respondents and 267 for elite-like respondents.*
Table 5: The Effect of Mediators on Support for a Military Strike

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-stat</th>
<th>Coefficient</th>
<th>t-stat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mediators</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat</td>
<td>0.30</td>
<td>13.3 *</td>
<td>0.30</td>
<td>6.8 *</td>
</tr>
<tr>
<td>Cost</td>
<td>-0.21</td>
<td>7.2 *</td>
<td>-0.28</td>
<td>4.0 *</td>
</tr>
<tr>
<td>Success</td>
<td>0.23</td>
<td>4.8 *</td>
<td>0.34</td>
<td>3.1 *</td>
</tr>
<tr>
<td>Morality</td>
<td>-1.12</td>
<td>12.2 *</td>
<td>-1.98</td>
<td>6.4 *</td>
</tr>
<tr>
<td><strong>Treatments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democracy</td>
<td>-0.18</td>
<td>2.9 *</td>
<td>-0.24</td>
<td>1.8</td>
</tr>
<tr>
<td>Ally</td>
<td>-0.06</td>
<td>0.7</td>
<td>-0.16</td>
<td>1.0</td>
</tr>
<tr>
<td>Trade</td>
<td>-0.05</td>
<td>0.7</td>
<td>0.05</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Militarism</td>
<td>-0.02</td>
<td>0.2</td>
<td>0.08</td>
<td>0.5</td>
</tr>
<tr>
<td>Internationalism</td>
<td>0.02</td>
<td>0.4</td>
<td>-0.01</td>
<td>0.1</td>
</tr>
<tr>
<td>Party ID</td>
<td>0.10</td>
<td>1.4</td>
<td>0.22</td>
<td>1.4</td>
</tr>
<tr>
<td>Ethnocentrism</td>
<td>0.09</td>
<td>1.1</td>
<td>-0.15</td>
<td>0.8</td>
</tr>
<tr>
<td>Religiosity</td>
<td>-0.03</td>
<td>0.5</td>
<td>-0.02</td>
<td>0.2</td>
</tr>
<tr>
<td>Male</td>
<td>0.05</td>
<td>0.6</td>
<td>-0.13</td>
<td>0.7</td>
</tr>
<tr>
<td>White</td>
<td>-0.18</td>
<td>1.8</td>
<td>-0.02</td>
<td>0.1</td>
</tr>
<tr>
<td>Age</td>
<td>0.01</td>
<td>2.2 *</td>
<td>0.00</td>
<td>0.2</td>
</tr>
<tr>
<td>Education</td>
<td>-0.06</td>
<td>1.5</td>
<td>0.27</td>
<td>1.5</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.30</td>
<td>1.5</td>
<td>-1.06</td>
<td>1.5</td>
</tr>
</tbody>
</table>

*Note:* The table gives the estimated coefficients and t-statistics from probit regressions. The dependent variable is coded 1 if the respondent supported a military strike and 0 otherwise. Each respondent appears in the sample twice, once when treated with democracy and once when treated with autocracy. Thus, \( N = 1944 \) for the model with all respondents and \( 532 \) for the model with elite-like respondents. T-statistics were computed based on standard errors that were clustered by respondent. An asterisk indicates that the estimated coefficient is statistically significant at the .05 level.
### Table 6: Estimates of Causal Mechanisms

<table>
<thead>
<tr>
<th>Mediator</th>
<th>All respondents</th>
<th>Elite-like respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average effect</td>
<td>% of total effect of</td>
</tr>
<tr>
<td></td>
<td>via this mediator</td>
<td>democracy</td>
</tr>
<tr>
<td>Threat</td>
<td>-4.0*</td>
<td>35</td>
</tr>
<tr>
<td>Cost</td>
<td>-0.4</td>
<td>4</td>
</tr>
<tr>
<td>Success</td>
<td>-0.7*</td>
<td>6</td>
</tr>
<tr>
<td>Immorality</td>
<td>-1.7*</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>-4.7*</td>
<td>41</td>
</tr>
</tbody>
</table>

Note: The table decomposes the total effect of democracy into various pathways, or mechanisms. Asterisks indicate effects that are statistically significant at the .05 level. The table also shows the percentage of the total effect that is transmitted by threat, cost, success, and immorality. The estimates on the left side are based on data from 972 respondents; the estimates on the right side are based on data from 267 elite-like respondents.