

# Correspondence

Dan Reiter and  
Allan C. Stam

## Another Skirmish in the Battle over Democracies and War

Alexander B. Downes

*To the Editors (Dan Reiter and Allan C. Stam write):*

In previous articles and in our 2002 book *Democracies at War*, we argued that democracies are particularly likely to win their wars. Democratic political institutions provide incentives for elected leaders to launch only short, winnable, low-cost wars, so they may avoid domestic political threats to their hold on power. Democracies tend to win the wars they initiate because democratic leaders generally “select” themselves into winnable wars, and they are more likely to win when they are targeted because their armies fight with better initiative and leadership.

Analyzing all interstate wars from 1816 to 1987, we found strong empirical support for our theory.<sup>1</sup> Other scholarship has produced findings supportive of our theory. Elsewhere, two different formal game-theoretic models produced the hypothesis that democracies are especially likely to win the wars they initiate.<sup>2</sup> The empirical results generated to test these and related hypotheses have withstood challenges to data selection and research design.<sup>3</sup>

Using data sets and research designs different from ours, other scholars have uncovered empirical patterns consistent with our theory that democracies are especially likely to win the crises they initiate,<sup>4</sup> that wars and crises are shorter when democracies and democratic initiators are involved, and that democracies become increasingly likely to initiate wars as their likelihood of victory increases.<sup>5</sup> H.E. Goemans’s recent

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1. Dan Reiter and Allan C. Stam, “Democracy, War Initiation, and Victory,” *American Political Science Review*, Vol. 92, No. 2 (June 1998), pp. 377–389; Dan Reiter and Allan C. Stam III, “Democracy and Battlefield Military Effectiveness,” *Journal of Conflict Resolution*, Vol. 42, No. 3 (June 1998), pp. 259–277; and Dan Reiter and Allan C. Stam, *Democracies at War* (Princeton, N.J.: Princeton University Press, 2002).
2. Darren Filson and Suzanne Werner, “Bargaining and Fighting: The Impact of Regime Type on War Onset, Duration, and Outcomes,” *American Journal of Political Science*, Vol. 48, No. 2 (April 2004), pp. 296–313; and Bruce Bueno de Mesquita, Alastair Smith, Randolph M. Siverson, and James D. Morrow, *The Logic of Political Survival* (Cambridge, Mass.: MIT Press, 2003), especially p. 226.
3. David H. Clark and William Reed, “A Unified Model of War Onset and Outcome,” *Journal of Politics*, Vol. 65, No. 1 (February 2003), pp. 69–91.
4. Christopher F. Gelpi and Michael Griesdorf, “Winners or Losers? Democracies in International Crises, 1918–94,” *American Political Science Review*, Vol. 95, No. 3 (September 2001), pp. 633–647; and Jean Sebastien Rioux, “A Crisis-Based Evaluation of the Democratic Peace Proposition,” *Canadian Journal of Political Science*, Vol. 31, No. 2 (June 1998), pp. 263–283.
5. D. Scott Bennett and Allan C. Stam III, “The Declining Advantages of Democracy: A Combined Model of War Outcomes and Duration,” *Journal of Conflict Resolution*, Vol. 42, No. 3 (June 1998),

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Table 1. Initiation, Regime Type, and War Outcome, 1816–1987

	Regime Type and War Outcome								
	Democracy			Mixed Regime			Autocracy		
	Loss	Draw	Win	Loss	Draw	Win	Loss	Draw	Win
Target	8 38%	2 10%	11 52%	30 54%	11 20%	15 27%	26 52%	6 12%	18 36%
Initiator	1 5%	6 30%	13 65%	15 36%	5 12%	22 52%	15 34%	7 16%	22 50%
Total	9 22%	8 20%	24 59%	45 46%	16 16%	37 38%	41 44%	13 14%	40 43%

SOURCE: Initiation and outcome codings are from Alexander B. Downes, "How Smart and Tough Are Democracies? Reassessing Theories of Democratic Victory in War," *International Security*, Vol. 33, No. 4 (Spring 2009), pp. 9–51.

NOTE: Democracies are 1–4 on Polity scale, mixed regimes are 5–17, and autocracies are 18–21.

empirical work exploring the relationship among conflict outcome, regime type, and the postwar fate of leaders confirms our theory, noting that his main result "now offers empirical support for some of these theories [of international conflict] (Buono de Mesquita et al. 1999, 2003; Reiter and Stam 2002)."<sup>6</sup> And, the long-established democratic peace has been explained using our theoretical assumption that variations in domestic political institutions create variations in conflict behavior.<sup>7</sup> Even the research designs of our critics, trivially adjusted, generate supportive results for our theory.<sup>8</sup> Lastly, in recent work, we have extended the data set forward to 2001 and confirmed our earlier results. Notably, in the 1988–2001 period, democratic initiators won five interstate wars, and tied or lost none.<sup>9</sup>

pp. 344–366; Branislav Slantchev, "How Initiators End Their Wars: The Duration of Warfare and the Terms of Peace," *American Journal of Political Science*, Vol. 48, No. 4 (October 2004), pp. 813–829; Reiter and Stam, *Democracies at War*, chap. 2; Bruce Bueno de Mesquita, Michael T. Koch, and Randolph M. Siverson, "Testing Competing Institutional Explanations of the Democratic Peace: The Case of Dispute Duration," *Conflict Management and Peace Science*, Vol. 21, No. 4 (Winter 2004), pp. 255–267; and Bruce Bueno de Mesquita, James D. Morrow, Randolph M. Siverson, and Alastair Smith, "Testing Novel Implications from the Selectorate Theory of War," *World Politics*, Vol. 56, No. 3 (April 2004), pp. 363–388.

6. H.E. Goemans, "Which Way Out? The Manner and Consequences of Losing Office," *Journal of Conflict Resolution*, Vol. 52, No. 6 (December 2008), pp. 771–794, at p. 790.

7. Bruce Russett and John Oneal, *Triangulating Peace: Democracy, Interdependence, and International Organizations* (New York: W.W. Norton, 2001); and David L. Rousseau, Christopher Gelpi, Dan Reiter, and Paul K. Huth, "Assessing the Dyadic Nature of the Democratic Peace, 1918–1988," *American Political Science Review*, Vol. 90, No. 3 (September 1996), pp. 512–533.

8. On Michael C. Desch, "Democracy and Victory: Why Regime Type Hardly Matters," *International Security*, Vol. 27, No. 2 (Fall 2002), pp. 5–47, see Dan Reiter and Allan C. Stam, "Understanding Victory: Why Political Institutions Matter," *International Security*, Vol. 28, No. 1 (Summer 2003), pp. 168–179. On Ajin Choi, "Democratic Synergy and Victory in War, 1816–1992," *International Studies Quarterly*, Vol. 48, No. 3 (September 2004), pp. 663–682, see Dan Reiter and Allan C. Stam, "Democracy and War Outcomes: Extending the Debate," paper presented at the annual meeting of the International Studies Association, Chicago, Illinois, February 28–March 3, 2007.

9. Reiter and Stam, "Democracy and War Outcomes: Extending the Debate."

The spring 2009 issue of *International Security* featured an article by Alexander Downes entitled "How Smart and Tough Are Democracies? Reassessing Theories of Democratic Victory in War."<sup>10</sup> This article critiques our empirical finding that democracies are more likely to win their wars. We welcome the opportunity to discuss important issues of research design and address Downes's critiques (there is unfortunately insufficient room here to lay out our critical reaction to Downes's case study of the Vietnam War). Downes offers four main critiques of our work: our dependent variable of war outcomes should include a third "draw" category as well as "win" and "lose" categories; a third category of war belligerent, "joiner," should be added to "initiator" and "target"; we miscoded some initiation outcomes; and we miscoded some war outcomes. We disagree with all of Downes's critiques, but because of limited space we focus here on two errors of theory and substance he made. We demonstrate that correcting those mistakes produces empirical results that, contrary to his claims, support our theory.<sup>11</sup>

Inspection of Downes's revised version of our data reveals our hypothesized patterns. Table 1 is a cross tabulation of initiation, regime type, and war outcomes, using Downes's codings. As our theory predicts, democratic initiators win more than either autocratic or mixed initiators. Strikingly, as our previous works also showed, democratic initiators almost never lose (13 wins, 1 loss). Note that this relationship of democratic initiators winning more than other initiators holds if draws are dropped or included (for more on this issue, see below). That is, as shown in table 1, our hypothesis is supported whether the comparison is win versus lose (democratic initiators win 93 percent of the time, autocratic initiators win 59 percent of the time, mixed regime initiators win 59 percent of the time), or as Downes prefers win versus draw versus lose (democratic initiators win 65 percent, autocratic initiators win 50 percent, mixed regime initiators win 52 percent). Cross tabulations aside, Downes's analysis presents two major concerns.

First, we were puzzled that Downes's statistical analysis used a research design that did not correctly test our central argument and associated hypotheses. In *Democracies at War* and in our 1998 *American Political Science Review* article, we argued (hypothesis 2.2) that the relationship between regime type and war outcomes among war initiators (and not targets) is curvilinear, as democratic initiators are the most likely to win, highly repressive initiators are less likely to win, and moderately repressive (or "mixed regime") initiators are least likely to win. We built this curvilinear hypothesis on mainstream international relations theory that dynamics such as internal political logrolling make mixed regimes even more likely than autocracies to initiate highly risky wars and to misperceive the likelihood of ultimate victory.<sup>12</sup> We then used a simple polynomial

10. Alexander B. Downes, "How Smart and Tough Are Democracies? Reassessing Theories of Democratic Victory in War," *International Security*, Vol. 33, No. 4 (Spring 2009), pp. 9–51.

11. Downes's other alterations to our data and research design are questionable. For example, coding the 1969–70 War of Attrition as a draw rather than an Israeli victory is strange, given that Israel achieved its political goal (of not budging from its forward position), Egypt failed to achieve its political goal (of dislodging Israel), and Egypt suffered more than nine times as many as casualties as Israel.

12. See also H.E. Goemans, *War and Punishment: The Causes of War Termination and the First World War* (Princeton, N.J.: Princeton University Press, 2000).

transformation to test for this hypothesized curvilinear effect, finding strong empirical support. None of Downes's models employs this or any curvilinear transformation. He instead tests for linear relationships between democracy, initiation, and outcome. It is not surprising that a linear model applied to a curvilinear relationship failed to find statistically significant results.

These results bring us to our second rebuttal of Downes's critique. Both Downes's criticism of our decision to drop draws from the analysis and his subsequent decision to include draws in an ordered probit analysis are misguided. The problem with Downes's approach is that the relationship between initiation, regime type, and draws is more complex than Downes's simplistic portrayal, as Allan Stam argued in his 1996 book *Win, Lose, or Draw*, and as we demonstrated in chapter 7 of our 2002 book.<sup>13</sup> In that chapter, building on a 1998 article by D. Scott Bennett and Stam, entitled "The Declining Advantages of Democracy," we hypothesized and found that in shorter wars, democracies are much more likely to win (and less likely to draw) than nondemocracies. If a war persists past the first year of fighting, however, the relationship changes, as the passage of time in war plays to the advantages of authoritarian regimes, not democracies.<sup>14</sup> As a result, as war duration extends past the first year or two of a war, democracies go from being more likely to win and less likely to draw, to being less likely to win and more likely to settle for draws (some have argued that as war endures, mixed regime leaders are more likely to gamble for resurrection than settle for a result short of decisive victory<sup>15</sup>). This is because publics often experience war fatigue as casualties mount, and democratic leaders feel more pressure than other kinds of leaders to end the war, by draw if necessary. Branislav Slantchev also found support for this conjecture, discovering that democratic initiators are more likely to win because they start wars they are confident they can win quickly, but their advantage disappears if the war drags on.<sup>16</sup> Downes's ordered probit analysis tests a hypothesis that we do not advance, nor do we expect there to be support for: that democracy has a uniform effect on the likelihood of draws across all wars. Hence, it is not surprising that a mismatch between a simple research design and a more complex reality produces statistically insignificant results.

This inconsistent relationship between democracy and draws (sometimes democracies are more likely to fight to a draw, and sometimes less likely) moved us several years ago to simplify matters by dropping draws in the war outcomes analysis in chapter 2 of *Democracies at War* and treating the analysis of the relationship between political institutions and war duration and outcomes in a separate, more nuanced analysis. Tackling the role of draws requires a more sophisticated research design than is allowed for in a data set in which the unit of analysis is a belligerent in a war and the dependent variable is war outcome (the approach we use in chapter 2 of our book and that Downes analyzes in his article). One needs instead a research design that accounts for

13. Allan C. Stam III, *Win, Lose, or Draw: Domestic Politics and the Crucible of War* (Ann Arbor: University of Michigan Press, 1996).

14. See, for example, Stam, *Win, Lose, or Draw*, p. 177.

15. Goemans, *War and Punishment*.

16. Bennett and Stam, "The Declining Advantages of Democracy"; and Slantchev, "How Initiators Win Their Wars."

Table 2. Exploring Curvilinear Relationships among Democracy, Initiation, and War Outcomes

Politics x Target	0.0135 (0.0193)
Initiation	6.10*** (1.76)
Poly Pol 1 (first curvilinear term)	-4.74** (1.66)
Poly Pol 2 (second curvilinear term)	-4.71** (1.68)
Capabilities	3.90*** (0.739)
Allies	4.79*** (1.10)
Troop Quality	0.0538 (0.0374)
Terrain	-13.7*** (3.71)
Strategy x Terrain	4.37*** (1.21)
Strategy 1	9.52** (3.29)
Strategy 2	4.43* (2.50)
Strategy 3	4.51** (1.61)
Strategy 4	3.68** (1.28)
Constant	-6.83*** (1.83)

SOURCE: Alexander B. Downes's data on initiation and war outcomes. Downes, "How Smart and Tough Are Democracies? Reassessing Theories of Democratic Victory in War," *International Security*, Vol. 33, No. 4 (Spring 2009), pp. 9-51.

$N = 196$ . Probit analysis; robust standard errors in parentheses. Pseudo  $R^2 = 0.53$ ; log-likelihood = 63.588738.

\*significant at 0.05; \*\*significant at 0.01; \*\*\*significant at 0.001. All tests are one-tailed.

the length of a war. The 1998 Bennett and Stam article and chapter 7 of our book did this by making the unit of analysis each year of war and by making the dependent variable whether in any particular year the war endured, ended in victory for one side or the other, or ended in a draw. Again, this more theoretically appropriate research design provided support for our theory, demonstrating that war outcomes are shaped by the public opinion constraints imposed on elected leaders in democracies.

The relatively high frequency of democracies experiencing draws supports this conjecture (see table 1). Democracies do better than other states at picking winnable wars

(hence, when democracies initiate wars, they win more often than they draw or lose as compared to other kinds of regimes). As we and others argue, when democracies start wars, they plan on fighting short, victorious wars. Democracies are significantly more likely to experience short, victorious wars than other kinds of states. As the war endures and the possibility of a short, victorious war fades, democracies become more likely to seek a negotiated settlement or a draw rather than fighting on. Other kinds of governments, facing different internal pressures, more commonly continue to fight on in the hopes of experiencing a decisive victory. That is, democracies are less likely than other states to make the mistake of starting a war that does not end in swift victory. When democracies do make the mistake of starting a war that does not result in swift victory, however, the eventual war outcome is more often a draw than it is when other kinds of states make that mistake.

Although we take issue with Downes's characterization of several of our data-coding decisions, due to space constraints we do not argue those points here. Instead we demonstrate that our findings are robust to minor changes in data codings, changes that Downes erroneously claimed alter our previous results. We reanalyzed his data, using his initiation codings, his initiation/joiner/target distinctions, and his war outcome codings. We corrected the two errors discussed above, employing the fractional polynomial terms we used in our previous work to test for a curvilinear effect and dropping draws. The results of this analysis are provided in table 2. As we found in our previous work, the initiation term and the democracy-initiation terms for the curvilinear functional form are all substantively and statistically significant. We should note that the presence of several interaction terms and the presence of fractional polynomials make it difficult to interpret easily the substantive effects of these variables by viewing the table. Our 1998 article and 2002 book provide detailed discussions and presentations of similar statistical results. Further analysis revealed that the net substantive effects of regime type and initiation on war outcomes are as predicted, as democratic initiators are more likely to win their wars (90 percent chance, holding other values at their means and modes) than autocratic initiators (78 percent chance), which in turn are more likely to win their wars than mixed regime initiators (57 percent chance). In these data, democratic targets are not more likely to win their wars.

Our work has moved forward, but not ended, the debate on the relationships between democracy and war. Much new and exciting research is ongoing, exploring for example possible determinants of public support during war, such as casualties, perceptions of success, stakes, and elite discourse. There is in particular robust debate about whether casualties, perception of success, or some combination of the two affected public attitudes during the 2003 Iraq War and its insurgency aftermath.<sup>17</sup> There is substantial theoretical and empirical research that explores the effects of political insti-

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17. Christopher Gelpi, Peter Feaver, and Jason Reifler, *Paying the Human Costs of War: American Public Opinion and Casualties in Military Conflicts* (Princeton, N.J.: Princeton University Press, 2009); Adam Berinsky, *In Time of War: Understanding Public Opinion, From World War II to Iraq* (Chicago: University of Chicago Press, 2009); Scott Sigmund Gartner, "The Multiple Effects of Casualties on Public Support for War: An Experimental Approach," *American Political Science Review*, Vol. 102, No. 1 (February 2008), pp. 95–106; and Dan Reiter, *How Wars End* (Princeton, N.J.: Princeton University Press, 2009).

tutions on conflict by using the leader as the unit of analysis.<sup>18</sup> But the empirical record still strongly supports our fundamental proposition that democracies are significantly more likely to win the wars they fight, and in particular the wars they initiate.

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—Allan C. Stam  
Ann Arbor, Michigan

### Alexander B. Downes Replies:

In my article “How Smart and Tough Are Democracies? Reassessing Theories of Democratic Victory in War,” I questioned the widespread view that democracies are more militarily effective than states with other types of political regimes.<sup>1</sup> Focusing on the most prominent example of this view, Dan Reiter and Allan Stam’s book *Democracies at War*, I advanced two arguments.<sup>2</sup> First, Reiter and Stam’s empirical analysis of the relationship between democracy and victory inappropriately omitted draws (an undesirable war outcome) and lumped all war participants into two categories—initiators and targets—when there are really three—initiators, targets, and joiners (states that entered into wars after they started). When draws and joiners are incorporated into the analysis, democratic initiators, targets, and joiners are not significantly more likely than nondemocracies to win interstate wars. Second, focusing on the democratic selection effects argument, I suggested that under certain conditions domestic politics might actually cause democratic failure. I demonstrated, for example, that President Lyndon Johnson escalated U.S. involvement in Vietnam despite believing that victory was unlikely and the costs would be high, and that this decision was caused in large part by his fear that not fighting in Vietnam would derail his domestic legislative agenda. In short, I found that democratic leaders may knowingly decide to fight losing wars to protect their domestic priorities.

I thank Dan Reiter and Allan Stam for their thoughtful reply to my article, and I welcome the opportunity to respond to their critique. Reiter and Stam offer two rebuttals to my arguments. First, they contend that I did not test their “central argument,” which is that a curvilinear relationship exists between regime type and war outcomes for war initiators: democracies are most effective, followed by dictatorships, and mixed regimes are worst. Reiter and Stam suggest that “it is not surprising that a linear model applied to a curvilinear relationship failed to find statistically significant results.” Second, Reiter and Stam reject my decision to incorporate into the analysis wars that end in

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18. Goemans, *War and Punishment*; Goemans, “Which Way Out?”; and Scott Wolford, “The Turnover Trap: New Leaders, Reputation, and International Conflict,” *American Journal of Political Science*, Vol. 51, No. 4 (October 2007), pp. 772–788.

1. Alexander B. Downes, “How Smart and Tough Are Democracies? Reassessing Theories of Democratic Victory in War,” *International Security*, Vol. 33, No. 4 (Spring 2009), pp. 9–51.

2. Dan Reiter and Allan C. Stam, *Democracies at War* (Princeton, N.J.: Princeton University Press, 2002).

draws. They argue that “the relationship between initiation, regime type, and draws is more complex” than the “simplistic portrayal” I offered in my article.

I am not persuaded by either of these rebuttals. Reiter and Stam’s main argument is that democracies are significantly more likely than nondemocracies to win wars; the curvilinear hypothesis is secondary. Moreover, when properly analyzed, the data (with or without draws) reveal no significant evidence of a curvilinear association between democracy and victory. Therefore, the analysis in my article, which treated regime type linearly and found that democracies are not significantly more likely than nondemocracies to win, is valid. Finally, including draws is necessary because forward-looking, risk-averse democratic leaders should seek to avoid all undesirable war outcomes, not only outright defeats. Omitting draws thus generates a bias in favor of finding a positive relationship between democracy and victory.

#### A CURVILINEAR RELATIONSHIP?

In my article, I tested what I understood to be the principal finding from the literature on democracy and victory, namely, that democracies are more likely to emerge victorious in wartime than nondemocracies. Although Reiter and Stam claim in their response that their “central argument” concerns a curvilinear relationship between regime type and victory, this contention is difficult to sustain. In the introduction to *Democracies at War*, Reiter and Stam state their thesis clearly: “Our central argument is that democracies win wars because of the off-shoots of public consent and leaders’ accountability to the voters.”<sup>3</sup> Reiter and Stam develop two arguments rooted in democracy for why democratic war initiators and targets prevail; they test these arguments against alternative explanations for democratic victory. With regard to democratic initiators, Reiter and Stam spend several pages carefully laying out their selection effects theory for why democracies are particularly likely to win wars they start, but they spend two paragraphs briefly outlining the logic for a curvilinear relationship between regime type and war outcomes.<sup>4</sup> Moreover, in previous debates with their critics, Reiter and Stam have not characterized this curvilinear relationship as being their main argument.<sup>5</sup> Reiter and Stam are thus primarily concerned with differences between democracies and nondemocracies, and secondarily interested in variation between different kinds of nondemocracies. Hence I tested their central argument in my article and found that democracies do not have a significant advantage over nondemocracies in winning wars when all wars are included in the analysis.

Nevertheless, Reiter and Stam are correct that I did not test their curvilinear hypothesis. In their rebuttal, they offer two pieces of evidence to support this hypothesis: a cross tabulation of initiation, regime type, and war outcomes (table 1), and a probit model that employs two fractional polynomials (FPs), which are designed to detect nonlinear effects of continuous independent variables (table 2). Neither of these pieces of evidence, however, actually supports their argument. Table 1, for example, shows

3. *Ibid.*, p. 3.

4. *Ibid.*, pp. 19–25.

5. See, for example, Dan Reiter and Allan C. Stam, “Understanding Victory: Why Political Institutions Matter,” *International Security*, Vol. 28, No. 1 (Summer 2003), pp. 168–179, written in response to Michael C. Desch, “Democracy and Victory: Why Regime Type Hardly Matters,” *International Security*, Vol. 27, No. 2 (Fall 2002), pp. 5–47.



that democratic initiators win 65 percent of the time when draws are included, a steep drop from the 93 percent figure reported by Reiter and Stam in *Democracies at War*. The table also shows a substantial narrowing of the gap in winning percentages among the three regime types: when draws are excluded, the disparity between democracies and autocracies is 33 percentage points, and between democracies and mixed regimes it is 35 points. When all war outcomes are considered, however, these differences are cut by nearly two-thirds for mixed regimes and more than half for autocracies. Mixed regimes also prevail at a slightly higher rate than autocracies—52 versus 50 percent—contrary to the proposed curvilinear hypothesis.

Cross tabulations, however, are relatively weak tests: not only are the relationships examined bivariate, failing to control for other possible causes of war outcomes, but this particular type of cross tabulation (among three variables) does not permit an assessment of the statistical significance of the correlations. Democratic initiators appear to be somewhat more likely to win than the two types of autocratic initiators, but it is impossible to draw any firm conclusions.

In table 2 of their rebuttal, Reiter and Stam present what initially appears to be more convincing evidence for the curvilinearity hypothesis. Using my data and codings—but excluding draws as a war outcome—Reiter and Stam replace the linear regime type variables (the Polity index, ranging in this case from 1 to 21, and Polity  $\times$  initiator) with two fractional polynomials.<sup>6</sup> Each of these terms is statistically significant, which Reiter and Stam claim supports the proposition that a curvilinear relationship exists between regime type and victory for war initiators.

This interpretation is incorrect. The key piece of evidence that must be examined when testing for nonlinear effects of independent variables is whether the curvilinear specification fits the data better than a linear specification.<sup>7</sup> Although it is true that the FPs in Reiter and Stam's model are statistically significant, this does not mean that treating democracy as curvilinear rather than linear explains more of the variance in war outcomes. In fact, the model that includes the FPs explains slightly less of the variance. The log-likelihood of the model in Reiter and Stam's response, for example, is  $-63.59$ . The log-likelihood of the same model but with the linear variables for regime type (Polity and Polity  $\times$  initiator) instead of the FPs is  $-62.40$ .<sup>8</sup> Because a smaller difference from zero indicates better model fit, the linear specification explains more of the variation in war outcomes.<sup>9</sup> In other words, the FP results indicate that FPs are not needed—even when the dependent variable excludes draws—because a curvilinear specification offers no improvement over a linear one.<sup>10</sup>

6. For details on FP models, see Patrick Royston and Willi Sauerbrei, *Multivariable Model-Building: A Pragmatic Approach to Regression Analysis Based on Fractional Polynomials for Modelling Continuous Covariates* (Chichester, U.K.: John Wiley, 2008).

7. *Ibid.*, pp. 82–83.

8. The regression tables are available on my website, <http://www.duke.edu/~downes/publications.htm>.

9. The difference in model fit is probably not statistically significant, but the point is that the curvilinear specification does not fit the data as well as the linear one.

10. This criticism also applies to the FP results in *Democracies at War*, where the linear and curvilinear versions of democracy produce models with identical log-likelihoods. Reiter and Stam, *Democracies at War*, p. 45, models 4 and 5. Contrary to the claim in their letter, however, the FPs used in this earlier work and in their correspondence are not the same. The formulas for the FPs in the letter are  $x^{-1/2} \times \text{initiator}$  and  $x^{-1/2}(\ln(x)) \times \text{initiator}$ , with  $x$  consisting of Polity + 11 (email commu-

Do these results hold when all war outcomes are examined (as I argued in my article should be the case) rather than wins and losses only? The answer is yes: comparing the fit of the linear versus curvilinear models run on the data that include draws yields log-likelihood statistics of  $-168.46$  and  $-169.15$ , respectively. Again, the linear specification outperforms the curvilinear one (the FPs in this model are also statistically significant).

These tests demonstrate that the relationship between democracy and victory for initiators is not curvilinear, as Reiter and Stam have suggested, but rather is best treated as linear, as I did in my article. The argument that my results are insignificant because I neglected a curvilinear relationship is thus without foundation. Moreover, as I demonstrated in my article, when democracy is treated as linear, democratic initiators, targets, and joiners are not significantly more likely to prevail in war.

#### THE CONTENTIOUS DRAWS

Reiter and Stam also claim that my decision to incorporate draws into the analysis is misguided because democracies' proclivity to settle for draws changes as wars continue. Democracies rarely accept draws in a war's early stages, but by the fifth year the probability that they do so reaches 0.7.<sup>11</sup> Reiter and Stam suggest that selection effects cause democratic leaders to choose "wars that are short, low-casualty, and victorious," but "when they guess wrong . . . and the war does not end quickly," democracies "seek a draw in order to exit sooner rather than later."<sup>12</sup>

This explanation faces two difficulties. First, as I pointed out in my article, democratic leaders do not simply guess wrong: sometimes they knowingly select their countries into wars that are likely to be costly and inconclusive, which defies the selection effects logic. In 1965, for example, President Johnson and his top advisers clearly understood that conditions in South Vietnam were grim, and that escalation—either attacking Hanoi or sending large numbers of U.S. ground forces to the South—stood little chance of reversing the situation, but they still decided to do both. Reiter and Stam support this view in *Democracies at War*, writing that when Johnson was making his fateful decisions to escalate, "the outlook for the conflict was not promising even at this early stage," and "the American leadership did not in 1965 foresee an imminent victory."<sup>13</sup> In short, democratic leaders sometimes choose to go to war knowing that a costly and indecisive result—such as a draw—may ensue. Excluding these cases biases democratic selection arguments toward finding a statistical relationship between democracy and victory.

Second, given Reiter and Stam's argument that democratic leaders aim to stay in office but face an increased likelihood of removal if they settle a war on less-than-victorious terms, it is unclear why they would ever settle for draws. Democratic leaders

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nication with Dan Reiter, June 15, 2009). The formulas in the book are  $x^{-1/2}$  and  $x^{-1/2}(\ln(x))$ , with  $x$  consisting of  $(\text{Polity} \times \text{initiator} + 11)/10$ . *Ibid.*, p. 41. It is easy to see that the second formula results in war targets being included in the analysis, assigning them a value of 1.1— $(\text{Polity} \times 0 + 11)/10 = 1.1$ —the same score that an initiator with a Polity score of zero receives. Because the FPs were constructed incorrectly to include targets, these results cannot be used as evidence to support the hypothesis of a curvilinear effect of democracy on the likelihood of victory for war initiators.

11. Reiter and Stam, *Democracies at War*, p. 171.

12. *Ibid.*, p. 178.

13. Quotations are from *ibid.*, pp. 173–174. For further evidence, see also *ibid.*, pp. 13, 174.

need to deliver policy success to remain in power, but draws are typically perceived as failures, meaning that leaders who preside over them do so at their peril. Logically, therefore, democratic leaders should try to avoid draws just as they do defeats; and if stuck in a quagmire, they should be reluctant to accept a draw and instead “gamble for resurrection” in the hope that they can somehow obtain victory.<sup>14</sup> Reiter and Stam, however, attribute the propensity to gamble to autocratic leaders, who they claim “choose to risk outright defeat in hopes of victory.” Yet Reiter and Stam also state that authoritarian rulers are relatively immune from being removed from office by their constituents, and thus have little to fear from settling a war short of victory.<sup>15</sup> According to this logic, autocrats have no incentive to gamble on decisive victory because they can repress domestic protest against the war’s outcome, whereas democrats are fairly certain to be removed for failing to win. In short, the logic of Reiter and Stam’s argument contradicts their empirical result.<sup>16</sup>

#### CONCLUSION

The aim of my article was to foster further debate and inquiry on the determinants of military effectiveness by demonstrating that the influence of democracy was more equivocal than previously believed, in some circumstances contributing to poor outcomes. It was not my aim to debunk democracy as an independent variable in general, only to question its explanatory power in this specific empirical domain. Indeed, although material power surely plays a role, I endorse Stephen Biddle’s argument that the causes of states’ military effectiveness are predominantly nonmaterial and found primarily at the domestic level.<sup>17</sup> I suggested a pair of mechanisms whereby domestic politics can cause democracies to choose poorly, but other scholars are exploring how state-level variables other than regime type affect how states perform in wartime.<sup>18</sup> I hope that my article and this exchange contribute to this growing literature.

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14. For this argument, see George W. Downs and David M. Rocke, “Conflict, Agency, and Gambling for Resurrection: The Principal-Agent Problem Goes to War,” *American Journal of Political Science*, Vol. 38, No. 2 (May 1994), pp. 362–380.

15. Reiter and Stam, *Democracies at War*, p. 168.

16. For an argument that mixed regimes rather than democracies gamble for resurrection, see H.E. Goemans, *War and Punishment: The Causes of War Termination and the First World War* (Princeton, N.J.: Princeton University Press, 2000).

17. Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton, N.J.: Princeton University Press, 2004).

18. For exemplary citations, see Downes, “How Smart and Tough Are Democracies?” p. 51 n. 128.