Abstract: Existing literature on the democratic peace focuses on dyadic outcomes but rests on several key assertions about monadic behavior, both among voters and democratic executives themselves. These assumptions, including the ability of retrospective voters to punish leaders for poor foreign policy performance, ignore a large body of work in American public opinion that suggests that these assumptions are unlikely to be fulfilled. A formal model of crisis escalation is presented where a democratic challenger has the opportunity to censor their domestic information market, or take steps to prevent voters from knowing the truth about an international rival and the issues at stake. Under certain conditions, this intuitive addition means that relatively irresolute challengers might find themselves in wars that would not otherwise happen given traditional theory.
Dating from Wilson and the creation of the League of Nations, through the Truman and Eisenhower Doctrines and beyond, the United States has long held that democracy abroad contributes to security at home. This position found its most transparent endorsement during the presidency of Bill Clinton, who asserted in his 1994 State of the Union address that “ultimately, the best strategy to ensure our security and to build a durable peace is to support the advance of democracy elsewhere. Democracies don't attack each other.”¹ Then-Undersecretary of State, Strobe Talbott, later wrote in *Foreign Affairs* that “the larger and more close-knit the community of nations that choose democratic forms of government, the safer and more prosperous Americans will be, since democracies are demonstrably more likely to maintain their international commitments, less likely to engage in terrorism or wreak environmental damage, and less likely to make war on one another.”²

That policy, at least in part, explains US interventions in Haiti and Kosovo, among others. It also proved to be among the final justifications referenced by George W. Bush over the 2003 invasion of Iraq. Immediately before the 2004 presidential election, Bush argued in a press conference that “the reason why I'm so strong on democracy is democracies don't go to war with each other. And the reason why is the people of most societies don't like war, and they understand what war means.”³

The unfortunate critique of Bush’s position is that “what war means” to individuals is no more predictable than the meaning of any other policy, and in some ways much less so. Current democratic peace theory stresses the importance of the retrospective voter who can punish their leadership for foreign policy failure, of which war is usually the most glaring example. This

---

assumption, however, both mistakes the political incentives facing a democratic executive and ignores the role of the media in communicating policy success and failure, as well as the standards for judging those outcomes, to the voters themselves. In short, voters can only act retrospectively and punish foreign policy failures insofar as they can discern success from failure and recognize the cost of failure itself. Given voters’ general lack of knowledge about foreign policy as compared to other issue areas, this is unlikely. More importantly, leaders face a temptation to act through the media such that they short-circuit the punishment that is necessary for the democratic peace to be achieved. As Berinsky notes, “there is a great deal of room for political leadership to affect the shape of public opinion.” If public opinion is compromised in this way, then the conditions under which it can constrain leaders in foreign policy are a good deal more complicated than existing theoretical approaches allow. Beyond the American example, Mahmoud Ahmedinejad’s succession of Mohammed Khatami in Iran and Hamas’ victory in the recent Palestinian parliamentary elections also provide reason to believe that voters are not necessarily keen on punishing foreign policy failure and encouraging reasoned, sober pacifism.

The following outlines a more detailed explanation for the logical difficulties facing the democratic peace and any larger connection between regime type and international bargaining behavior. A synthesis of the largely institutional theories of prominent IR scholars and the behavioral media effects literature is then offered, which presents several qualifiers for a theory of democratic decision-making during international crises. These ideas are used to advance a

---


crisis escalation model that incorporates public opinion and an executive’s ability to shape it; we label this phenomena as information market censorship. The availability of censorship to a challenging government changes their behavior in several interesting ways, which are explored in the final section.

Democracies and International Crisis Behavior

Empiricists were largely responsible for initiating early research into the democratic peace proposition, and their investigations quickly outpaced theoretical explanations of the phenomenon. Almost all theoretical work on the democratic peace can be traced to Michael Doyle, who asserted that the pioneering philosophy of Immanuel Kant was the logical foundation of then-President Reagan’s goal of spreading democracy abroad. Although there are multiple common explanations for the democratic peace in the current literature, the most parsimonious link domestic political institutions with the formation of elite preferences. Fearon has argued that democratic leaders’ desire to stay in office means that they must avoid backing down on public commitments. These leaders’ decision to escalate by means of action or the issuing of public appeals sends a more accurate signal of resolution than similar acts by autocratic leaders, because of the domestic audience costs (or piqued expectations) that they accumulate by pursuing such actions. By this logic, democratic states should have greater bargaining power in escalating crises, and be more likely to settle them on favorable terms.

---

Bueno de Mesquita and Lalman\textsuperscript{11} and Bueno de Mesquita et al\textsuperscript{12} also examine the domestic political incentives of leaders who assign differing values to the respective shaping of demands and the procurement of public versus private goods based on selection institutions. Bueno de Mesquita et al argue that democratic leaders must earn the support of a greater number of people in order to maintain office. Autocratic leaders need only satisfy a small minority, generally a coalition of military and business elites. The latter can do so by bribing their supporters with spoils, or private goods, but this approach cannot work for a democratic leader because of the diminishing marginal utility of employing such a strategy across a relatively large number of supporters. Stated differently, the political structure of democracies engenders in leaders the preferences for relatively more intangible—but wide ranging—benefits such as national security and freedom since they face a trade-off between investing resources in war or some other public good in their effort to ensure political viability. This view of democratic institutions adds a further nuance to the arguments presented by Fearon\textsuperscript{13} and his notion of the signaling capabilities of such states. When confronted with war, democratic leaders will try harder, relatively speaking, to win because of the risk that war poses for public goods allocation. Implicit to this understanding of democratic state crisis behavior is the idea that when citizens in such a state recognize the good under dispute as posing a threat to any member of a set of core principles (e.g., core public goods)\textsuperscript{14}; the leaders of the state are relatively more likely to devote as many resources necessary (and in effect fight harder) to achieve a satisfactory resolution of the dispute.

\textsuperscript{14} Bueno de Mesquita, Bruce, Alistair Smith, Randolph Siverson and James Morrow.  \textit{The Logic of Political Survival}.  Cambridge: MIT Press.  2003, 186.
Schultz\textsuperscript{15} also utilizes Fearon’s audience cost model\textsuperscript{16} but focuses on the role of political competition. Rather than address the effects that democracy writ large might have on leaders’ preferences, he notes that in open, competitive electoral systems, a leader has not only to contend with a would-be international rival abroad but also their domestic political competition. The primary finding is that a self-interested opposition party functions as a modifying or separating signal to the government’s negotiating tactics since the opposition presumably knows more about the government’s position than does the foreign rival. As such, when the government does threaten the international rival, the existence of the opposition party allows the rival to better estimate the government’s resolve independent of the government’s existing credibility from its domestic audience. A broader view of Schultz’s findings illustrates how certain internal processes, to which democratic states are particularly susceptible, impact the strategic behavior of these states and their international rivals on the world stage.

Approaches similar to Bueno de Mesquita et al. and Schultz make a couple of key assumptions about voting behavior in democratic regimes that this paper contests. They assume that voters or citizens more generally are able to accurately and independently evaluate executives’ performances in foreign policy. In other words, these approaches treat voters as adept connoisseurs of international events that effectively discern the true character of international outcomes and accurately judge leaders in the production of them. A related assumption is that democratic leaders possessing preferences different from those of the masses do not actively engage in the positive construal of otherwise unacceptable foreign policies to the

publics holding them accountable. Bueno de Mesquita et al\textsuperscript{17} allude to such a possibility in their description of how leaders of large winning coalition and large selectorate systems may overemphasize the public goods nature of an espoused policy while downplaying its potentially more prominent private goods character. This is an initial step toward acknowledging the tension that may exist between a democratic leader and her public, but it does not go so far as to explicitly evaluate the likely behavior given these differences. Hence, although the improvements and conceptual refinements that contributors to democratic peace theory have made are impressive, failure to address the veracity of these integral assumptions amounts to a collection of incomplete arguments that rely upon voting behavior to make these models “work”; but do not address important aspects of voting and public opinion that have been made by scholars working outside of international relations. Since these are the lines of research that have enjoyed the most empirical support,\textsuperscript{18} this is troubling.

It is important to note that this effort is not ignorant of the common finding that democracies are, in expectation, as war-prone as non-democracies.\textsuperscript{19} This paper does not expect that demonstrating that democracies sometimes fight wars should come as a surprise to the reader, nor is it a sufficient reason for the paper to exist. The task here is one that examines the theoretical preconditions and necessary assumptions that have been underappreciated in existing explanations of the democratic peace, and then leveraging an argument about public opinion to offer an explanation for certain anomalous parts of the empirical record, such as democratic interventions against weak democratic or semi-democratic states.

\textsuperscript{17} Bueno de Mesquita, Bruce, Alistair Smith, Randolph Siverson and James Morrow. \textit{The Logic of Political Survival}. Cambridge: MIT Press. 2003, 70.
\textsuperscript{18} Huth and Allee 2002.
\textsuperscript{19} Originally this was identified in Small, Melvin and David Singer. “The War Proneness of Democratic Regimes.” \textit{Jerusalem Journal of International Relations} 1.1 (1976): 50-69; explaining this regularity was a key part of Bueno de Mesquita et al 2003.
Public Opinion, Foreign Policy and the Role of Media

Simply put, research in American public opinion suggests that voters rarely fulfill any of these expectations for any issue area. In the pioneering *American Voter*, Campbell et al\(^\text{20}\) suggested that the American public was largely uninformed about the issues themselves, the major parties’ positions, or even their own most preferred policy. This consensus was of course challenged over the subsequent thirty years; Page and Shapiro\(^\text{21}\) later countered that the American voter is collectively under-informed, but updates their position rationally given available information. Zaller\(^\text{22}\) has argued that available information is the most important component of public opinion, but goes beyond Page and Shapiro to assert that what information ultimately reaches the public is a narrowly-selected and stereotyped view. These conceptions embrace an elite-centered position, where the activities of politicians, bureaucrats, journalists, activists and other specialists play a critical role in gatekeeping,\(^\text{23}\) framing and priming,\(^\text{24}\) as well as the factual content of information. This provides clear precedence for government intervention in the arena of public opinion, and various authors have explicitly argued that some type of interaction does exist. Shapiro and Jacobs, for example, find that the American president’s ability to lead public opinion on foreign policy has increased, and his responsiveness to public

\(^{23}\) On gatekeeping, or agenda-setting, one classic example can be found in Shanto Iyengar and Donald Kinder’s *News That Matters*. Chicago: University of Chicago Press, 1987.
outcry decreased, with the end of the Cold War as a constraining frame. Berinsky argues that elite discourse has a sizable effect on expressed public opinion, with pro-government (typically hawkish) discourse dominating the early stages of crises such that dissenters tune out the policy debate. When asked their opinion, these voters typically insist that they “don’t know” or have no opinion. Narrowing the focus of his research, Berinsky also presents a case study in which a change in elite communication within the African-American community—from either supporting or ignoring the Vietnam War to opposing it—created a similar change among African-American voters.

A number of other findings support the Shapiro and Page claim about a “rational public” in foreign policy. Aldrich et al show support for the notion that the most salient foreign crises can have a large effect on beliefs, and that voters are able to detect differences in the foreign policy of US presidential candidates. In the Western European context, Isernia et al find that mass publics demonstrate some predictability in their response to major international events rather than the wild swings predicted by Campbell et al or Almond. Knopf reaches some of the same conclusions for American voters, noting that public opinion seems to change in the face of international events, but does so in a relatively cautious manner that he labels “rational.”

The key observation that links the two bodies of work together is that while voters may resemble rational updaters, they are still extremely vulnerable to elite suggestion. Berinsky’s depiction of Vietnam as a cognitively difficult task is one especially parsimonious way to put it,

29 Almond, Gabriel. The American People and Foreign Policy. New York: Praeger, 1960
but the role of the executive leading the media, and presumably, public opinion on foreign policy is described in fuller narrative detail by Nathan and Oliver\textsuperscript{31} and lamented by Mermin.\textsuperscript{32} Scholars within the public opinion arena have clearly shown how citizens respond to changes in the content of their informational environment, which lends support to the prospect for elite persuasion and weakens that of the characterizing voters as adept connoisseurs who independently assess governmental leaders. Stimson et al\textsuperscript{33} have gone so far as to derive empirical trends mapping the feedback processes between political elites and the masses in their evaluation of changes in expressed opinions, governmental composition, and implemented policies but no one has convincingly taken the additional step of formally describing how the existence of these internal interactions contributes to interstate, strategic behavior.

\textbf{A Synthesis of Public Opinion and Bargaining, and a Theory}

The above discussion is important for two reasons. First, while voters might be more reasonable than Converse\textsuperscript{34} and Almond claimed, they rarely receive the full story of a foreign policy question from the media and their leaders. Second and in conjunction, institution-driven explanations of the democratic peace suggest that democratic leaders face the greatest incentives to artificially constrain information available to citizens. Autocrats who rule at whim have comparatively little reason to change people’s hearts and minds, so long as they have sufficient military might to maintain their hold on power. With no other way to maintain power other than changing hearts and minds, democrats must, paradoxically, fear free speech the most.


The interest, willingness and ability of a government to intervene in the information market, as well as the consequences of its intervention, require further specification. Under what conditions might a government choose to intervene in the information market and censor information? What impact does this have on international outcomes? How does the government’s ability to impact the information available affect the likelihood that voters will support revisionist governments? The importance of information markets\(^\text{35}\) lies at the core of the questions above. Previous modeling attempts have ignored the impact of endogenous information provision upon democratic peace. The model that follows explicitly establishes a choice for the challenging and defending governments engaged an international confrontation. Each government can choose whether it wants to censor in order to impact the perceptions of their respective voters. This censorship might take the form of preventing voters from informing themselves about the issues, or by waging an proactive propaganda campaign to inflate the danger from a potential adversary. In either event, the decision to intervene in the information market is a costly lottery. If voters discover censorship, they may choose to penalize the government since the revelation of government intervention is unpalatable. However, discovery of intervention is contingent upon the quality and freedom of the information market within a given country. Within a well-established and protected media, revelation of censorship is more likely because the number of interested media players should increase. Trivially, a larger media should stand a better chance on stumbling across the truth than a smaller one, \textit{ceteris paribus}.

Given the costs specified above, it is important to specify why government might find censorship beneficial. There are two distinct ways of describing the value of censorship to a government. The simpler reason is that by censoring the information market, the government

\(^{35}\) The term “information market” implying the free provision of thoughts and ideas among a polity such that the best rise to the top; the term was most famously used by Milton in the Areopagitica (1644), who described a “marketplace of ideas” as being essential for liberty.
might avoid being held accountable for failure. Given that even apologists for Americans’ interest in foreign policy, who claim that efficient voting behavior implies only paying attention during crises,\textsuperscript{36} admit that foreign policy enjoys far less salience than other issues, then leaders might rationally expect that a publicized failure might carry an inflated weight with the public as compared to a number of less-well-known successes. In other words, leaders might fear post hoc retrospective voting that has a particularly short time horizon.

The second reason, which is more complicated but also closer to existing literature on crisis escalation, is that censorship might increase the range of policy options available to the government leading up to the crisis itself. If the government can successfully manipulate the information market, they may have a greater ability to escalate conflict without risking a large loss of support. This additional resolve, generated by the government as an instrument for diplomacy, should yield some greater ability to demand concessions from a rival given that their expected war losses would now be smaller. The ability to escalate a crisis more quickly with a supportive (although incompletely informed thanks to censorship) public should enhance credibility and the chances of a favorable outcome by encouraging a defender to back down.\textsuperscript{37}

This depends on a departure from the institutional work of Bueno de Mesquita et al, who assume that the only important preference for leaders is the desire to stay in office itself and avoid the formidable task of specifying a leader’s possible exogenous motivations. One common example of the latter, of course, is Churchill abandoning his prime ministership rather than sacrifice his private preference for maintaining the British Empire after World War II, but specifying any general private payoff for leaders is difficult precisely because they might often rest on individual idiosyncrasies. More generally, when successful censorship allows a state to

\textsuperscript{36} Shapiro and Jacobs 2000.
\textsuperscript{37} Fearon 1994
gain concessions when it otherwise wouldn’t, a public goods surplus is generated. This profit can be expected to increase the odds for a leader to maintain office in the fashion that Bueno de Mesquita et al describe, which makes censorship attractive and probable without specifying additional executive preferences.

The ability to impact information markets and its associated cost-benefit relationship yield a number of hypotheses about monadic and dyadic democratic peace propositions. First, strong information markets that are relatively immune to manipulation will encourage peaceful outcomes. Since strong information markets increase the probability of getting caught, a costly activity, those democracies are less likely to use censorship and thus less likely to engage in unnecessary provocation. Second, democracies may have a relatively strong incentive to engage in censorship. An autocratic government that ignores the population can embark on whatever policy it deems fit. Democratic governments who care about maintaining support may have incentive to manipulate information to gain support for certain policies, as described above. Strong institutions supporting free speech thus introduce a second strategic tension: they deter leaders from using censorship, but their high expected cost also makes them more credible signals when they are used.

The Model

The modeling effort here simplifies many of the above possibilities in the interest of tractability. Rather than a two-sided interaction where both governments have the possibility of censoring their populations, in this model only the challenger has that option. Implicitly, this means the model assumes a democratic challenger, since in a dictatorship there is not a relevant public to bother misleading in most circumstances. Although the defender is left without the
opportunity to censor, it should not be interpreted as an autocratic state. The regime type of the
defender is simply outside the model’s current specification.

This model adapts a crisis escalation model to include the possibility of information
market intervention. At the outset of the crisis, the challenging government can choose to
maintain the status quo (~Ch), challenge the status quo and censor information available to its
voters about the challenge (Ch,C), or challenge the status quo without censorship (Ch,~C). If
there is no challenge, the game ends and each state receives payoffs equal to their existing share
of the good under dispute.

\[ U_{g1}(sq) = q \]

\[ U_{g2}(sq) = 1 - q \]

Under incomplete information, a chance move by nature determines the challenger’s
costs for war prior to the challenger’s decision, and the defending state is unaware of this move’s
outcome. The instrumental value of censorship is that when successful, it further reduces the
challenger’s war costs. Since resolve, or the willingness to go to war, is a product of the costs of
doing so successful censorship can be seen as an added bonus to resolve.

After observing the challenging state’s decision to challenge as well as whether or not to
censor, the defending state decides whether or not to mobilize in response (M; ~M). If the
defender doesn’t mobilize, then the game ends and the challenger wins the entirety of the good
being disputed.

\[ U_{g1}(g2\; acq) = 1 \]

\[ U_{g2}(g2\; acq) = 0 \]
If the defender does mobilize, then the challenger has a decision on whether to back down (BD) or continue the dispute (~BD). If the challenger backs down, then both sides are left with their status quo payoffs but the challenger pays an additional reputational cost, $c^*$. 

$$U_{g_1}(g_1 \text{ acq}) = (q - c^*)$$

$$U_{g_2}(g_1 \text{ acq}) = (1 - q)$$

If the challenger continues the dispute, then both sides receive payoffs from an endogenized war lottery, such that

$$U_{g_1}(\text{ war}) = (w - c_1)$$

$$U_{g_2}(\text{ war}) = (1 - w - c_2)$$

Where $c_i$ are war costs for either side. Finally, in those cases where the challenger decided to censor, an additional chance move occurs where there is some probability, $x$, of censorship being revealed. As $x$ increases, the probability of revelation goes up as well; $x$ parameterizes the strength of free market norms and institutions. If censorship is revealed, then the challenging government pays an additional cost, $l$. If not, then the challenger’s costs of war are $c_1'$, where $c_1' < c_1$. One simplifying assumption is added where $g_1$ doesn’t pay a lying penalty when it wins an acquiescence from $g_2$.

$$U_{g_1}(\text{ war | censorship}) = x(w - c_1 - l) + (1 - x)(w - c_1')$$

$$U_{g_1}(g_1 \text{ acq | censorship}) = x(q - c^* - l) + (1 - x)(q - c^*)$$

$$U_{g_1}(g_2 \text{ acq | censorship}) = U_{g_1}(g_2 \text{ acq}) = 1$$

Under incomplete information with typing, a resolute type of $g_1$ pays $c_1'$ in either circumstance. For brevity, only the complete information game is shown below. In incomplete
information, the following extensive form describes the payoff structure for the irresolute type of
g1. A resolute g1 differs in that it pays only $c_1'$ for war, as described above. In incomplete
information, the relative probability of a resolute type and irresolute type $\gamma$ and $(1-\gamma)$,
respectively.

Although earlier versions of this model included a third player, G1’s median voter, who
had the opportunity to choose between supporting government G1 or not after observing the
outcome of the international crisis, it has been omitted here. Including a voter is intuitive, but
did not add any value to the model’s conclusions. In generalized payoffs, specifying the value of
an unknown challenger amounts to some exogenous scaling parameter, $m$, that ultimately falls
out of all relevant equilibrium conditions. As such, the backlash from a “voter” who has been
lied to are captured in $l$. 
Figure 1—the Crisis Censorship game under complete information, without typing

Equilibrium Analysis
The case for an irresolute challenger leads to three equilibrium possibilities without a typing move by nature. If $q < (w - c_1)$, then war is more attractive than the status quo even when paying a high cost, so trivially $G_1$ will escalate. If $(1 - w - c_2) > 0$, then $G_2$ will mobilize and war will be the final outcome. If $(1 - w - c_2) > 0$ and $(q - c^*)$, the payoff for $G_1$ of acquiescence, is greater than $(w - c_1 + (1-x)(c_1-c_1'))$, the payoff from fighting a censored war, then $G_1$ should never challenge; since $q > (q - c^*)$, $q$ becomes $G_1$’s best option in the face of a $G_2$ that is willing to fight. Finally, a third stable state exists when $(1 - w - c_2) > 0$ and $(w - c_1) < (q - c^*) < (w - c_1 + (1-x)(c_1-c_1'))$. In this case, $G_1$ would back down after not censoring $(Ch\sim C, BD)$ but not after censoring $(ChC, \sim BD)$. The expected payoffs of the censored outcome dominate those of the noncensored, and $G_2$’s willingness to fight means that the outcome will be a war fought under censorship in the challenging state.

The above indicates several important points. First, the cases where $(1 - w - c_2) > 0$ are uninteresting for extended analysis because $G_2$ will never have reason to back down, since acquiescence means that it loses the entirety of the good and thus has a payoff of 0. In the following sections it is assumed that $(1 - w - c_2) < 0$. Second, the immediate value of censorship to $G_1$ is the difference between $(w - c_1)$ and $(w - c_1')$ and their relationship to $q$, the initial distribution of a good. For tractability, it is assumed that for the irresolute type of $G_1$, $(w - c_1) < q$ and $(w - c_1') > q$.

With typing, there are three potential equilibria in complete information. Given a resolute type, $g_1$ can ensure itself $q$ by playing the status quo SQ, but by assumption $w - c_1' > q$. $G_1$ can get its preferred outcome of $w - c_1'$ with probability $x$ by challenging and censoring, $Ch,C$, but realizes its preferred outcome for certain by challenging without censoring, $Ch,\sim C$. In fact, since $w - c_1' > x(w - c_1' - l) + (1-x)(w - c_1')$, $Ch,\sim C$ is dominated by $Ch,C$ and SQ for $G_1$. $G_2$ must
decide how to respond knowing that G1 will not back down in the face of mobilization. The payoff to G1 backing down is \((q-c^*)\), which is strictly less than \(q\), but dominated by \(w-c_1\) associated with war, \(-BD\). Knowing that G1’s threat is credible, G2 is best off not mobilizing, since \(1-w-c_2\) is less than the zero payoff of not mobilizing. Given complete information with a resolute G1, the equilibrium strategy profile is \(\{(R, Ch, \sim C \sim BD), M\}\). This is the only equilibrium for a resolute type of G1.

The other two equilibrium strategies for the complete information game are contingent upon an irresolute G1. The irresolute type is confronted with the same three decisions as the resolute type. G1 can ensure itself \(q\) by playing SQ. If G1 decides to challenge without censoring, G2 knows that G1’s threat is not credible. Since the standing firm outcome of \((w-c_1)\) is strictly less than the status quo outcome \(q\), G2 knows that if it mobilizes G1 will choose to back down. The payoff to G1 is \((q-c^*)\) for challenging and then acquiescing. Since this outcome is strictly less than \(q\), G1 is better off upholding the status. Recognizing that they will be confronted with acquiescence in the face of a challenge, G2’s decision to mobilize ensures that G1 plays SQ. Therefore, SQ dominates challenging without censoring, CH,\(\sim\)C, for G1 given the best response strategies for G2.

G1 will not play challenge without censorship when status quo is an available exit option. The remaining question is whether an irresolute G1 can challenge with censorship, CH,C. When the irresolute type censors, the expected payoff for war to G1 is \(x(w-c_1-1)+(1-x)(w-c_1^*)\). Since \(w-c_1<q\) and \(w-c_1^*<q\), the value for war will only exceed the status quo if the probability of revelation, \(x\), is sufficiently low. When the value of \(x\) in G1 satisfies the inequality \(x(w-c_1-1)+(1-x)(w-c_1^*)>q\), then G1 prefers war to the status quo. Effective censorship with a low probability of exposing the lie makes G1’s threat to go to war credible in complete information. With a low
probability of revelation, G2 recognizes that G1 is willing to go war. G2’s utility for war, \(1-w-c_2\) < 0, results in G2 decision to not mobilize given the credible threat of war from G1.

This means that there are two possible equilibria for an irresolute G1 in complete information. The first possible equilibria results in the status quo when G1 chooses not to challenge and G2 mobilizes because they know G1’s threat would not have been credible. This strategy profile is \(\{I; (SQ,BD), M\}\) and is invoked when,

\[
x < \frac{q + c_1 - w}{c_1' - c_1 - l}.
\] (3.1)

If inequality (3.1) is violated, then the latter strategy discussed above is in equilibrium. Here, the irresolute G1 chooses to challenge and censor knowing that its chances of revelation are sufficiently low. In this challenge, G1 is credible since the value to war exceeds that of status quo. To avoid war, G2 chooses not to mobilize. The strategy profile of this equilibrium is \(\{I, (Ch,C, ~BD), ~M\}\), and occurs when (3.1) is violated.

The outcomes in the incomplete information game build off the strategies in the complete game, so it is worth recapping the complete information results briefly. When G1 is resolute, they challenge without censorship knowing that the threat of war is credible, and G2 chooses not to mobilize. An irresolute G1 will choose the status quo when the probability of revelation is sufficiently high because G2 is willing to mobilize against an invalid threat. When the probability of revelation is low, G1 can choose to challenge and censor to improve their credibility, resulting in G2’s decision not to mobilize. In the complete information case, challenge without censorship is dominant for resolute type G1 and status quo or challenge with censorship is dominant for the irresolute type.

With the introduction of incomplete information such that G2 does not know the type of G1 in advance, it might make sense for G1 to alter its behavior to change G2’s perception about
their type. This is indeed an outcome of the incomplete information game. Aside from knowledge of payoffs, G2 also must have some belief about the distribution of G1’s type, $\gamma$. G2 believes that G1 is resolute with probability $\gamma$ and irresolute with probability $1-\gamma$. G2 can try to distinguish G1’s type based on their initial move. In a perfect Bayesian equilibrium, G2 must have consistent beliefs about types and payoffs given observed outcomes.

G1 is ensured a payoff of $q$ if they play SQ irrespective of type. If G1 plays challenge without censoring, CH,~C, then G2 must believe that the expected payoff of G1’s action is,

$$\gamma(w-c_1')+(1-\gamma)(w-c_1).$$

(3.2)

This means that G2 must believe that G1 will get a payoff of $w-c_1'$ with probability $\gamma$ and a payoff of $w-c_1$ with probability $1-\gamma$. If G2 observes Ch,~C, then they must believe that the value of the non-censored challenge exceeds the value of the guaranteed status quo, $\gamma(w-c_1')+(1-\gamma)(w-c_1) > q$. For this inequality to be true, G2’s belief about G1’s type must be,

$$\gamma > \frac{q+c_1-w}{c_1-c_1'},$$

(3.3)
given G1’s decision to play Ch,~C. This inequality is indicative of the set of inequalities necessary to specify G2’s beliefs. The inequality in (3.2) provides a condition on G2’s beliefs given Ch,~C and relative to the status quo, SQ. However, if G1 plays Ch,~C, then G2 must also believe that the payoff to Ch,~C was greater than that associated with the third option, Ch,C. G2’s expected payoff of Ch,C to G1, conditional on a belief of G1’s type is,

$$\gamma(x)(w-c_1'-l)+ \gamma(1-x)(w-c_1')+(1-\gamma)(x)(w-c_1-l)+(1-\gamma)(1-x)(w-c_1').$$

(3.4)

If G2 observes G1 challenge without censoring, Ch,~C, then G2 must believe that the payoff associated in (3.2) is greater than the payoff in (3.4). Setting inequalities (3.2) and (3.4) equal
yields a belief condition for G2’s belief about G1’s type given that Ch,~C is valued more than Ch,C,

\[ \gamma > \frac{c_1' - c_i + x(c_i + l - c_i')}{(c_1' - c_i)(1 - x)}. \]  

(3.5)

Both (3.3) and (3.5) yield lower boundaries on the possible beliefs that G2 holds after witnessing Ch,~C. G2 must assume that \( \gamma \) was greater than the larger of the two boundaries above in order to sustain consistent beliefs about G1’s type. When

\[ x > \frac{c_1' + q - w}{c_1 + q - w - l}, \]  

(3.6)

then the value of \( \gamma \) in (3.3) is greater than (3.5). The quality of the information market can be used to distinguish between the two boundary conditions. When the information market is sufficiently strong such that (3.6) is true, then G2 can use the belief in (3.3) to value their possible outcomes given the choice set to mobilize or not. G2 is confronted with assessing whether the belief-weighted outcomes to mobilizing are greater than the value to acquiescence,0

\[ \left( \frac{q + c_1' - w}{c_1 - c_1'} \right) (1 - w - c_2) = \left( 1 - \frac{q + c_1' - w}{c_1 - c_1'} \right) (1 - q) > 0. \]  

(3.7)

Inequality (3.7) is satisfied when the costs to a resolute challenger are,

\[ c_1' < \frac{c_1(c_2 + w - 1) + (q - w)(c_2 - q + w)}{q - 1}. \]  

(3.8)

This implies that when the costs for a resolute G1 are sufficiently small, then G2 will choose to mobilize. This is somewhat contrary to traditional notions of resolve in war. Usually states mobilize when they face an opponent with higher war costs. In this case, the lower costs serve as a signal that G1 is more likely to be an irresolute type bluffing in their play of Ch,~C in the hope
that G2 does not mobilize. In this case, as the conflict gets cheaper to the resolute type, the irresolute type is more likely to bluff. In this case, G2 does not believe the bluff and mobilizes irrespective of G1 type. As the differential between resolute and irresolute war costs widen, there is added incentive for G1 to use that to bluff. Put slightly differently, the more of a bonus to resolve that censorship provides, the more likely an irresolute G1 is to take that gamble.

When (3.6) and (3.8) are true, the equilibria are \( \{ \text{R;} \ (\text{Ch, } \sim C, \sim \text{BD}; \ M) \} \) and \( \{ \text{I;} \ (\text{SQ, BD); M}) \). In this case, there is separation since only the resolute G1 challenges and war is an expected outcome. G2 can deter an irresolute G1 from challenging by mobilizing. If condition (3.6) is true but (3.8) is violated, then the equilibria change. When (3.8) is violated, G2 will never mobilize. In this case, there is pooling for G1 on Ch,\sim C. The two equilibria for the types are \( \{ \text{R;} \ (\text{CH, } \sim C, \sim \text{BD}; \sim \text{M}) \} \) and \( \{ \text{I;} \ (\text{Ch, } \sim C, \text{ BD}); \sim \text{M}) \). Therefore, when G1’s resolute war costs are sufficiently high, an irresolute G1 can bluff. G2, unable to differentiate between types, chooses not to mobilize assuming only a true resolute type would pay the costs of war.

When condition (3.6) is violated and the information market is not sufficiently strong, G2’s expectations and behavior change significantly. Instead of relying on condition (3.3) to shape beliefs, G2 relies on the boundary in (3.5). This changes G2’s expected value calculation in (3.7),

\[
\left( \frac{c_1 - c_1' + x(c_1' - c_1 - l)}{(c_1' - c_1)(x - 1)} \right) (1 - w - c_2) + \left( 1 - \frac{c_1 - c_1' + x(c_1' - c_1 - l)}{(c_1' - c_1)(x - 1)} \right) (1 - q) > 0. \tag{3.9}
\]

This revised value calculation for G2 provides a different boundary condition on G1’s resolute costs. For condition (3.9) to hold such that G2 chooses to mobilize,

\[
c_1' > \frac{c_1(w + c_2 - l)(x - 1) + l(w + c_2 - q)x}{(w + c_2 - l)(x - 1)}. \tag{3.10}
\]
G2’s decision to mobilize based upon G1’s resolute costs is dependent upon the quality of the information market. Above in (3.8), when the information market was sufficiently strong, G1’s resolute war costs had to be sufficiently small for G2 to mobilize. When the information market is weak, (3.10) shows that G1’s resolute war costs must be sufficiently large for G2 to mobilize. This condition is more consistent with typical expectations as the state mobilizes against a country with high war costs. With a poor information market, high war costs do not signal type as they did above. G2 will mobilize against a G1 facing higher costs even for resolute types. When the war costs for G1 are sufficiently low, attempting to dissuade G1 by mobilization is wasted irrespective of type. This is particularly true since an irresolute type with a poor information market and low war costs is can attempt to fool G2 by playing Ch,~C.

If condition (3.6) is violated but (3.10) is true the model yields \{R; (Ch,~C, ~BD); M\} and \{I; (SQ, BD); M\}. When resolute war costs are high in G1 with a poor information market, G2 mobilization against an irresolute G1 encourages G1 to maintain the status quo. In this case, the resolute G1 will separate itself by showing its willingness to pay the higher costs and conflict will ensue. When both conditions (3.6) and (3.10) are violated, then G2 will not have incentive to mobilize. The equilibria of this outcome are \{R; (Ch,~C, ~BD); ~M\} and \{I; (Ch,~C, BD); ~M\}. Both types of G1 pool on Ch,~C and bluffing can be effective because G2 will not mobilize if the war costs are sufficiently low.

The equilibria above highlight some important characteristics about resolution, war costs and the information market. When the information market was strong, G1 could pool and effectively bluff when war costs were sufficiently high. Alternatively, there was separation when war costs were sufficiently low. With a poor information market, G1 can pool and
effectively bluff when the resolute costs of war are sufficiently small. When the costs to G1 are high and the information market is poor, then G1 separates based upon types.

Alternatively, there is a set of equilibria conditions in incomplete information where the challenging government elects to censor. In the complete information game above, censorship was a tool of the weak. An irresolute government could gamble on censorship in the hopes that the signal might keep G2 from mobilizing or that their population was effectively censored. As happened in the analysis of incomplete information above, G2 updates its beliefs upon observing G1’s initial move, in this case Ch,C. When G2 observes this action, they are left to conclude that Ch,C has a greater expected payoff than both SQ and Ch,~C. This requires that condition (3.4) be greater than the other alternatives of q for SQ or the expected payoff of Ch,~C in condition (3.2). G2’s belief about G1’s type is such that challenging with censorship exceeds the value of the status quo when,

$$\gamma > \frac{q - w + c_1^' + x(c_1 + 1 - c_1^')}{x(c_1 - c_1^')}.$$  \hspace{1cm} (3.11)

Given that G1 plays Ch,C, G2 must believe that G1 is resolute with a probability as least as great as that in the lower bound (3.11). Condition (3.5) above specified the belief that Ch,~C>Ch,C for G1. This is easily reversed to provide an upper bound on G2’s beliefs given Ch,C. When (3.5) is violated and \(\gamma\) is below that critical value, challenge with censoring exceeds the value of challenging without censoring. Restated here as a condition on beliefs given the play Ch,C,

$$\gamma < \frac{c_1 - c_1^' + x(c_1^' - c_1 - l)}{(c_1^' - c_1)(x - 1)}.$$  \hspace{1cm} (3.12)

Combining the two conditions above, G2’s belief about G1 must meet (3.11)<\(\gamma\)<(3.12). This condition only holds when condition (3.6) is violated and the information market is poor. Once
the quality of the information market is high, there is no incentive for G1 to censor. G2 knows that, and its beliefs upon observing challenge and censorship are predicated upon a weak information market.

These boundary values on G2 beliefs can again be substituted into G2’s utility calculation. Given the lower bound (3.11) on G2 beliefs, G2’s mobilization payoffs must exceed not mobilizing,

$$\left(\frac{q-w+c_1^\prime+x(c_1+l-c_1^\prime)}{x(c_1-c_1^\prime)}\right)(1-w-c_2)+(1-\frac{q-w+c_1^\prime+x(c_1+l-c_1^\prime)}{x(c_1-c_1^\prime)})(1-q)>0. \ (3.13)$$

Given the condition for the lower bound in (3.13), G2 will get positive utility from mobilizing when,

$$c_1^\prime<-\frac{q^2-2qw+w^2+c_1x+lqx-c_1wx-lwx-c_2(q-w+x(c_1-l))}{q-w+c_2(x-1)-x-wx}. \ (3.14)$$

This implies that G2 will have incentive to mobilize when the G1’s resolute war costs are sufficiently small. This occurs because G2 knows that censorship is a tool of the weak. When the costs are sufficiently small, G2 knows that an irresolute type has significant incentive to censor and challenge despite being irresolute.

A similar set of conditions can be established for the upper bound. The upper bound on G2’s belief about its value for mobilizing is,

$$\left(\frac{c_1-c_1^\prime+x(c_1^\prime-c_1-l)}{(c_1^\prime-c_1)(x-1)}\right)(1-w-c_2)+(1-\frac{c_1-c_1^\prime+x(c_1^\prime-c_1-l)}{(c_1^\prime-c_1)(x-1)})(1-q)>0. \ (3.15)$$

This upper bound condition on G2’s updated expected utility is also translated into a statement about G1’s resolute costs of war,
At the upper bound of G2’s belief set after observing G1 decision to challenge and censor, G1’s resolute costs of war must be sufficiently high for G2 to mobilize. At the upper bound, G2 is more concerned that they are facing a resolute type. When the G1’s resolute costs of war are sufficiently low, G2 believes that their mobilization is not likely to act as a deterrent against aggression. This is true because the information market remains weak. When G2 faces an opponent with high war costs, mobilization is more likely to deter G1.

There are two self-contained equilibria that emerge for irresolute G1 given the discussion above. When conditions (3.14) and (3.16) are violated, G1 has incentive to challenge and censor such that \{I; (Ch,C, BD); ~M\} is an equilibria. When conditions (3.14) and (3.16) are true, G2 will mobilize against any challenge by G1. The irresolute G1 will not risk challenging a G2 who has incentive to mobilize. The equilibrium for these cases is \{I; (SQ, BD); M\}. However, there is a third irresolute equilibrium that is important to specify. A censoring equilibrium is possible where an irresolute G1 and G2 will end up in conflict. For an irresolute G1 to challenge and censor credibly so that they are willing to go to war, they must be able to satisfy the inequality familiar from above, \(x(w-c_1-l)+(1-x)(w-c_1') > q\). Substituting the lower bound of G1’s resolute war costs that lead G2 to mobilize yields,

\[
x(w-c_1-l)+(1-x)\left(w - \frac{c_1(w + c_2 - 1)(x - 1) + l(w + c_2 - q)x}{(w + c_2 - 1)(x - 1)}\right) > q.
\]

When (3.17) is true, then an irresolute G1 will have sufficient incentive to launch a credible challenge against G2 who has incentive to mobilize. Restating (3.17) in terms of the information market, irresolute G1 will launch a credible challenge when
\[ x < -\frac{(c_1 + q - w)(c_2 + w - 1)}{l(q - 1)}. \]  

(3.18)

Since the denominator in (3.18), \( l(1-q) \), is less than 0, there are positive values for which condition (3.18) will be true. When this occurs, the equilibrium outcome will be \( \{I; (Ch,C, ~BD); M\} \). This finding in particular shows how censorship can serve to evoke a war between an irresolute challenger and a relatively pacific defender.

**Implications**

There are a number of features from the models above that are worth highlighting. The first, and perhaps the most conventional, is that censorship is likely to be used by irresolute states. When the government has strong support from the population, there is little incentive to intervene and censor. If a government chooses to do so, they potentially subject themselves to unnecessary costs. The irresolute challenger may have incentive to challenge with censorship if censorship makes the threat more credible. The challenger hopes that the added credibility from censorship makes a defender back down. This strategy is most effective when there are weak information markets. These features were most evident in the complete information games.

The incomplete information games led to greater counterintuitive results. One of the central results was that the information market and resolute war costs for a challenger interacted in some unexpected ways. Figure 2 summarizes the expected response from the defender based upon the quality of information and the resolute war costs in the challenging state. The basic crisis escalation argument usually shows that lower war costs, or greater resolve, are associated with greater bargaining and deterrent capability. When an information market is included this result is not so straightforward. The traditional argument holds when the information market is weak. In those cases, lower war costs were associated with greater deterrence since the
challenger did not escalate. As war costs increased in a weak information environment, the
challenger lost its ability to deter the defender from mobilizing. The traditional argument about
resolve was found to reverse itself when states had sufficiently strong information markets.

When information markets were strong, higher war costs, or lower resolve, were associated with
defender acquiescence. As the war costs decreased, the defender was more likely to mobilize.

<table>
<thead>
<tr>
<th>G1 Resolute War Costs</th>
<th>Information Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Defender Back Down</td>
</tr>
<tr>
<td>High</td>
<td>Defender Mobilize</td>
</tr>
</tbody>
</table>

Figure 2
Defender Response to Challenger Attributes in Challenge, Not Censor

The justification for these results lies in the signaling power of the information market.

Effective signaling often requires those interested in sending an effective signal to bear some sort
of costs. When the information market was strong, the defender required the challenger to bear
significant costs to differentiate the honest resolute actor from the bluffing irresolute type. The
irresolute actor is much less likely to gamble on challenging when the war costs of the challenge
are high. This is especially true when the information market is strong and censoring is less
appealing. Alternatively, when the information market is weak and war costs are low, neither
type is easily deterred. If the defender prefers to back down rather than engage in a war, then
they are best off not mobilizing against an enemy that has incentive to stand firm. When the
information market is weak, the defender loses the ability to tell whether they are facing a
resolute or irresolute type. Consistent with the traditional argument, they have a better chance of
successful deterrence when costs are high as transparency decreases.

The model also provided additional insight concerning the ability of irresolute types to
bluff effectively. These results also draw upon the findings in Figure 2. When the information
market is weak, irresolute states are better able to bluff and signal resolute status by challenging without censorship when the war costs to their resolute type are low. A weak information market means that irresolute states might have had sufficient incentive to censor and challenge. This confusion, coupled with low war costs, makes separation difficult. Alternatively, states with better information markets are better able to bluff when the resolute costs of war are high relative to the irresolute costs. The good information market makes challenging with censorship less attractive. Since the irresolute challenger is less likely to signal by making use of censorship, detection is difficult when the types have similar costs.

Just as irresolute types can bluff by choosing not to censor, the model shows that censoring can be an effective tool for resolute states. The ability to change public perception and perceived war values can be effective in changing the behavior of an adversary. When an adversary believes that censorship is likely to be effective, they are less likely mobilize. There is a drawback to censorship, however. Under incomplete information, an irresolute state using censorship preferring to opt for the status quo may end up in a war with the defender. There is a possibility that the defender plans to mobilize against an irresolute challenger in the hopes of deterring the challenge, but censorship makes the challenge credible.

Concluding Thoughts

The above discussion suggests that the introduction of public opinion into a model of international diplomacy, with the concomitant incentive to intervene in public opinion for a democratic leader, can generate interesting and counterintuitive results outside of the traditional crisis escalation model. It also suggests that procedural democracy itself is not sufficient for encouraging peaceful outcomes because those peaceful outcomes depend to a large extent on a well-protected information market. In transitional democracies, this condition is even less likely
to be met; it is unlikely that such states have strong traditions of free speech that encourage honesty in government and an informed citizenry, although of course we have argued above that voters in established democracies rarely fulfill that second criterion either. In particular, this result agrees with a body of empirical research suggesting that transitional democracies are especially war-prone.\textsuperscript{38}

Additionally, the model offers a variety of ways in which censorship might be more likely for a given democratic challenger. Beyond the depth of institutionalization of free speech, $x$, the penalty for violating free-speech norms during a crisis, $l$, and the added resolve that censorship might gain within a specific interaction, $|c_1 - c_2|$, both describe censorship-friendly conditions. It might be the case that a democratic challenger has an incentive to lie because it would free their hand in the early stages of a conflict, as in the second Iraq War or the Vietnam War; that there is little penalty for lying because the stakes are relatively low, as in the American intervention in Grenada; or that the information market has experienced some shock such that there is simply a reduced risk of being caught in a lie at all. Looking to the future, an empirical test of these propositions would have to focus on separating these different parameters and assessing their relative weight in a challenging democracy’s decision-making. Although the media and politics and public opinion literatures have been valuable in establishing the case for elite-driven public opinion, and in particular elite-driven public opinion within foreign policy, they are much less instructive in examining the institutional framework for media influence; these literatures emphasize affective impact rather than effective. Since our argument is entirely about the literal effects of information and its absence, whether generating empirical expectations for the relationship between information markets, misinformation and crisis

behavior will have a strong connection to these American politics research agendas moving forward is an open question.