Strategic Symbolic Politics*

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Abstract

Symbolic political actions are pervasive, but many observers view them as meaningless gestures. Employing a novel strategic information transmission framework that considers the role of uncertain *bias* in the case of a single Sender and two Receivers, I demonstrate that symbolism can credibly communicate information. In communicating to one constituent that they are aligned, a political actor can simultaneously communicate to another constituent that they are not aligned, generating an endogenous cost; key to separation is specificity of resources. A substantive example is presidential candidate Bill Clinton's "Sister Souljah moment," in which Clinton's condemnation of a recording artist at a Rainbow Coalition event intentionally enraged Jesse Jackson followers to appeal to centrists. This framework shows how increasing a group's power can lead to "backlash" that ironically hurts its goals, inducing a separating equilibrium that enables its opponent to identify friends and enemies. For example, the rise of the power of racial minorities in the U.S. recently led to some political elites' credible communication of alignment with white nationalist priorities. Although the main substantive focus is elite political communication to social and interest groups, another application pertains to the information value of small hard money donations.

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Judge me by the enemies I have made.

-Franklin D. Roosevelt, 1932 Portland, Oregon Campaign Address

This paper examines the function of symbolic politics, which I define as taking public actions that are both costless and inherently inconsequential, purportedly in support of a particular constituent. Such actions may represent an effort by the sender to communicate that its preferences are aligned with those of the receiver. These actions may include symbolic executive orders, campaign statements, bill cosponsorship, or lobbyists' small contributions. Yet while symbolic actions are pervasive throughout American politics (and undoubtedly that of other countries as well), their ability to credibly communicate information initially seems doubtful. Unlike a standard cheap talk model, in which the Sender's bias is known and a "state of the world" is unknown, it appears as if every Sender type should want to send a message communicating alignment. And indeed, political scientists and commentators have often concluded that these actions are meaningless. Sears (1993, 121-2) emphasizes that "the process by which symbols evoke predispositions... is automatic and affective. Among other things, cost-benefit calculations should play a relatively modest role." Although this may accurately describe the underlying psychological process, the argument has been extended to conclude that whenever individuals respond to symbolism, their behavior is self-evidently counter to self-interest. For example, in an article whose subtitle is "Displacing Symbolic Politics", Niemeyer (2004) writes that an experiment in deliberative democracy "served to dissipate symbolic claims, liberating citizens to formulate their own judgments." Similarly, another article's title is "Symbolic Politics or Rational Choice?" (Kaufman 2006).¹

In contrast, I will argue that under the right circumstances, symbolic politics can credibly 1. Some however have recognized the importance of symbols in allowing groups to identify friends and enemies. For example, Schickler (2018) writes of the 2016 election, "From early on, it was clear which groups Trump was against: immigrants, Muslims, Latinos, and African Americans. This message was conveyed both through Trump's rhetoric and through communicate information. Three elements will make this possible. First, there must be two Receivers with disparate preferences; straightforwardly this may be opposed interest or social groups. Second, there must be a complementarity between the Receiver's support and the actual policy goals of the aligned Sender type. As one interpretation, when a politician wins the support of a social group, the politician may later mobilize it to achieve policy goals; it may be difficult for example to misrepresent as a gun rights supporter and subsequently call on NRA members to help push for stricter gun laws. Third, Receivers must expect that the Sender's type will eventually matter for actual policy; while the Sender may engage in symbolism today, the Receiver must expect that providing support to the Sender will have real consequences for policy tomorrow.

Given this, the argument for the credibility of symbolic politics is as follows. A symbolic action from a Sender can communicate to one Receiver that they are aligned while simultaneously communicating to another Receiver that they are not aligned. Importantly, the presence of the second Receiver, sufficiently close in efficacy to the first, generates an endogenous cost and enables credible communication from the Sender to both Receivers. Put simply, to show that you are aligned with someone, you must alienate someone else.² For any of this to matter, Receivers must then expect that an aligned Sender would produce endorsing policies that were hostile to these groups."

2. In the model, messages are assumed to be public. One might wonder about the role of private messages, which one might interpret as "dog-whistle" communications. The model implies that such a communication cannot credibly communicate information unless sending such a message is sufficiently exogenously costly for a misaligned type; learning the particularities of which symbols mean what may constitute this cost. Alternatively, some proportion of opposed individuals who are informed may still manage to hear the dog-whistle communication. While this question is outside the scope of the present paper, future research will present a rational theory of dog-whistle politics. tangible policy benefits for them in the future. Simply put, the value of symbolism is in its ability to identify friends and enemies in anticipation of a fight over substantively meaningful policy. But we finally require that there exist complementarity between a group's support and the specific goals of the type of actor with which it is aligned. In the absence thereof, as soon as any Receiver became infinitesimally more effective than its opponent, all Sender types would want to express alignment with it, destroying the possibility for separation.

Many categories of political actions fit this pattern. One example is executive orders that seek to appeal to some interest but have no real policy consequence. For example, in April 2018, President Trump signed an executive order aimed at ending the practice of "catch and release," by which undocumented immigrants are released from detention while their cases process (Davis 2018). As Davis notes, "The directive does not, on its own, toughen immigration policy or take concrete steps to do so.... But it is a symbolic move by Mr. Trump." Similarly, in March 2019, President Trump signed an executive order requiring that universities protect free speech in order to receive federal grants. Yet this was already required by federal law, leading a commentator to conclude that "it sends a message that Trump is eager to embrace the priorities of conservative activists" (Nilsen 2019). Eager to signal alignment with social and cultural conservatives, many of Trump's symbolic actions have done so by alienating moderate Republicans who may benefit from the current immigration regime or prefer that agenda time be spent on the concerns of business.

Another category includes campaign statements. For example, by the end of the spring of 1992, Bill Clinton was assured of winning the Democratic nomination, but he had unexpectedly found himself running to the left of his primary opponents. Seeking to pivot to the general election, Clinton was searching for a way to appeal to moderate voters and distance himself from the more "radical" elements of the Democratic Party such as Jesse Jackson Sr.'s Rainbow Coalition (Kornacki 2018). His opportunity came when recording artist Sister Souljah said about the Los Angeles riots, "If black people kill black people every day, why not have a week and kill white people?... So if you're a gang member and you would normally be killing somebody, why not kill a white person?" (Mills 1992). When Clinton and Souljah were both invited to a Rainbow Coaliton conference in June 1992, Clinton took the opportunity to harshly criticize her, remarking, "If you took the words 'white' and 'black,' and you reversed them, you might think David Duke was giving that speech" (Stephens 2019). This infuriated Jackson, reassuring leading Democrats who were heartened to see that Clinton was willing to disagree with him (Lewis 1992).

Other examples could include campaign statements, cosponsorship or support of bills that have no chance of passing,³ or even lobbyists' contribution of hard money. This last application, with a lobbyist in the role of Sender and two politicians as Receivers, will be discussed later.

While the game shares some similarities with a canonical cheap talk game, there are important differences emanating from the substantive question of interest. Rather than the state of the world being uncertain and the bias being known, the reverse is true. Additionally, rather than a Receiver implementing policy, the Sender implement it. These differences are what necessitate the features discussed above to produce a separating equilibrium, in contrast to the canonical cheap talk game. There is work that demonstrates that the presence of multiple Receivers can make public communication possible when private communication to each receiver individually would not be possible (Farrell and Gibbons 1989; Goltsman and Pavlov 2011; but see also Koessler 2008); it however does not explore the role of uncertain

3. Kessler and Krehbiel (1996) have argued that bill cosponsorship primarily serves the purpose of intralegislative signaling rather than extralegislative position-taking, demonstrating that extremists are most likely to cosponsor first. Yet their argument appears most relevant for those bills that actually stand a chance of passing. Additionally, we will see that even known extremists have reason to send signals to constituents, as Appendix A makes clear that the model applies not only to left-right conflict but also conflict over priorities. bias. On the other hand, work that has considered uncertain bias (Li 2004; Li and Madarász 2008) has not examined the role of multiple Receivers.

Work on the credibility of campaign promises has explored similar themes, though. Banks (1990) examines costly deviation from campaign platforms. Kartik and McAfee (2007) study the case in which, unobserved by voters, some candidates have "character" and inherently prefer to be truthful. In Schnakenberg 2016, candidates' indifference to different messages allows them to use cheap talk to communicate the direction of their ideal points relative to the center of the policy space. Panova (2017) argues that candidates may keep campaign promises to maintain strategic ambiguity and assemble a majority within a multidimensional policy space. Kartik and Van Weelden (2019) argues that candidates may credibly reveal information if voters prefer a candidate known to disagree with them over one whose agreement is uncertain. Most similar in its logic is the model of Harrington (1992), which features a set of voters and two candidates, with all three holding private information about their own preferences. Each candidate values policy and holding office, and a complementarity is assumed: holding office is worth more when the voters support the candidate's policies. This enables candidates to separate and credibly communicate their policy intentions.⁴ The present model shows that a similar result obtains in a completely different set of circumstances, namely that in which a single Sender holds private information about his type and there are two different Receivers whose preferences are known. Specific to this distinct setup, the model is extended and applied in novel and productive ways.⁵

4. Harrington (1993) extends this argument to a repeated setting in which players have heterogeneous beliefs about the most effective policy.

5. My argument is also somewhat reminiscent of the literature on domestic audience costs in international relations; see e.g. Fearon (1994) and Slantchev (2006). This literature explores how domestic audiences' imposition of costs may allow leaders to commit to resolve against an opponent. In the present model, the presence of two audiences generates discipline Most notably, the model has implications for shifts in relative political power and the "backlash" that may result. As noted above, credible communication is only possible when the goals of the Sender and one of the Receivers is sufficiently complementary. Yet this complementarity can be overwhelmed if one Receiver is much stronger than the other, such that all Sender types will still want to express alignment with it. Then only a babbling equilibrium would be possible. The weaker Receiver may actually prefer this. Although it is unable to identify friends and enemies, neither is the opposed receiver. And the stronger opposed receiver likely would make better use of such information. Ironically then, a moderate increase in the weaker Receiver's strength—enough to bring about separation but not enough to overwhelm the other Receiver—may actually hurt the weak Receiver. The model therefore predicts that when a weak group becomes stronger, two phenomena will go handin-hand: credible communication of alignment with their opponents, and the mobilization of resources to oppose their interests.

This is substantively important. Consider the case of immigration policy, which I briefly summarize now and expand upon later. For decades following the enactment of the Immigration and Nationality Act of 1965, Republican politicians almost uniformly promised increased enforcement but also gestured toward sympathy for Mexican migrants. In 1986, Reagan signed the Immigration Reform and Control Act of 1986, which was to increased enforcement of immigration laws. Yet the number of undocumented immigrants in the U.S. later spiked, with hardliners blaming insufficient commitment by Reagan, Bush, and others (Plumer 2013; Coulter 2015; Gallagher 2016; Kammer 2019) and expressing skepticism of the motives of subsequent Republicans pursuing other reform efforts (Coulter 2015; Gallagher 2016). Decades later, the picture has changed. The country's continued diversification led some white Americans to believe that they were under increasing threat, with minorities ascendant. This allowed candidate Donald Trump's openly harsh messaging on immigration to enable credible communication of the Sender's bias. to resonate and earn the support of white nationalists, to be followed by draconian policy under President Donald Trump. Thus, ironically but unsurprisingly, minorities' increasing numbers and strength enabled credible messaging against them that ultimately hurt their position.

I proceed as follows. First, I present a model to formalize the intuition described above, give substantive motivations for its assumptions, and provide solutions. Next, I trace the implications for policy outcomes and welfare as they relate to group power, presenting implications for the politics of backlash. Then, I discuss an alternative substantive application pertaining to campaign finance. Finally, I discuss potential extensions and conclude.

The Model

The two key parts of the model are the presence of two Receivers and the fact that contributions are specific, or in other words not perfectly fungible. This specificity—i.e. inability to be repurposed completely by the Sender for aims contrary to the Receiver—can enable the Sender to credibly communicate his type, earning the support of one Receiver by incurring the cost of loss of support from the other Receiver. If contributions were perfectly fungible, any Sender regardless of type would have an incentive to express alignment with the Receiver possessing a greater ability to contribute, causing separation to break down. Additionally, if only one Receiver were present, clearly the Sender would always have an incentive to express alignment with the Receiver regardless of the Sender's actual type.

Formal Definition

Preliminaries

There will be a continuous, one dimensional policy space, with policy $x \in \mathbb{R}$. Players consist of a Sender S and two Receivers A and B. Policy will initially be located at a status quo point q. Receivers A and B can offer nonnegative contributions to S to enable S to move policy.⁶ An exogenous fraction t of each contribution must either be used to move policy in the direction preferred by the contributor or disposed, while the remaining fraction 1 - tmay be used however S prefers. The distance that S may move policy will be equal to the amount of contribution available and usable for a given direction.

Sequence of Moves

The sequence of moves is as follows:

- 1. Nature selects the Sender S's type σ and reveals it to S.
- 2. S issues a public message $m \in \{L, R\}$.
- 3. Each Receiver $I \in \{A, B\}$ chooses a contribution to $S, c_I \ge 0$.
- 4. S uses the contributions to implement policy.
- 5. The game ends and payoffs are realized.

Utility Functions

Players shall have the following utility functions:

$$U_S(x) = \sigma x$$
$$U_A(x) = -x - \frac{c_A^2}{2\psi_A}$$
$$U_B(x) = x - \frac{c_B^2}{2\psi_B}$$

^{6.} For a discussion of negative "contributions," see the Extensions section.

where $\sigma \in \{-1, 1\}$ is S's type, c_I is the amount of Receiver I's contribution granted to S, and ψ_I is Receiver I's "strength" or inverse marginal cost of contributing. With probability $p, \sigma = -1$.

Assumptions

The following assumption is without loss of generality:

Assumption 1. $\psi_A \leq \psi_B$

That is to say, Receiver A faces a higher cost of granting contributions.

Summary

The exogenous parameters are q, p, t, ψ_A , and ψ_B . The endogenous choices are m, c_A , c_B , and x. The random variable is σ . As a sequential game of imperfect information, the natural equilibrium concept is perfect Bayesian equilibrium (PBE). I focus exclusively on pure-strategy PBE.

Discussion

This setup can generalize to a number of situations. Most obviously, it corresponds to an official taking a symbolic action, such as the President issuing a substantively meaningless executive order. In such an analogy, the issuance of an executive order that symbolically supports one social group is the message, political support of the President (in its various forms) is the contribution, and the President issuing substantive executive orders or pushing for substantive legislation is policy implementation. Another substantive application pertaining to campaign finance is discussed later.

A key assumption in representing these situations is that these contributions are not

necessarily perfectly fungible. An example of a perfectly fungible contribution would be money, which can be immediately and perfectly repurposed for whatever end is desired. Yet this is often not the form that political support takes. When executive orders or campaign statements constitute the symbolic action of interest, the policy goals of the official and the supporters can exhibit complementarities. While an official can clearly repurpose campaign money or votes for contrary ends, support may take the form of activism. Achieving policy goals can require mobilizing outside forces such as activists, interest groups, and lay people (Andrews 2001; Edwards III 2009; Bueno de Mesquita 2010). An official may therefore wish to use a symbolic action to win over these actors and have them ready to mobilize later when the time comes to push for real policy. But if these groups' goals are actually not aligned with those of the official, their efforts to help the official achieve his preferred policy are likely to be ineffective. To give one example, it would make little sense for the President to issue an executive order communicating alignment with pro-gun interests to earn their support, only to implore them later to take to the streets in favor of stricter gun control legislation. Complementarity therefore ensures that there is value to finding one's friends.⁷

The other key assumption is that there are multiple Senders. The reason why symbolic political actions may not seem credible is because they are exogenously costless. If a few thousand dollars means nothing to a lobbyist, and if issuing an executive order that has no real policy implications only consumes a couple hours of staff time, how could these actions possibly credibly communicate anything? And if these actions communicate nothing, why do actors keep taking them? I argue that these actions do incur a cost, and it is endoge-

7. If negative "contributions" (i.e. attacks) were allowed, as is explored in the Extensions section, a different complementarity may enable separation. In particular, attacks from one's friends may be more effective than attacks from one's enemies. Continuing the example, if a politician's true goal is to restrict gun ownership, an attack from a gun control group may prove more deleterious than an attack from the NRA.

nous. In communicating alignment to one group, the Sender simultaneously communicates misalignment to another group. The presence of a second opposed group is necessary, then, to allow the Sender to transmit a credible message. Concretely, when a political candidate expresses concerns about Medicare for All, she may communicate alignment with the American Medical Association and insurance companies, specifically because doing so alienates more radical reformers. Or when a Governor issues an order directing a committee to study transgender bathrooms, for example, he may communicate that his top priority is social conservatism, because such an agenda does nothing for (and possibly hurts) efforts to attract businesses to the state.⁸ The fact that someone will be displeased with a message enables it to communicate the official's type to both those who will be pleased and those who will be displeased.

Analysis

We first examine how A and B should contribute to S as a function of their posterior belief about the probability that $\sigma = -1$, which we will denote μ . Expected utility to Receiver A as a function of c_A is as follows:

$$EU_A(c_A) = \mu(-(q - c_A - (1 - t)c_B)) + (1 - \mu)(-(q + (1 - t)c_A + c_B)) - \frac{c_A^2}{2\psi_A}$$

8. In general, the model can be interpreted to speak either to cases in which the conflict is over ideology or priorities. While formally players are arrayed on a left-right policy space, it is demonstrated in an extension in Appendix A that the same results on equilibrium existence continue to hold when players care about different dimensions of policy. See Ogden (2019) for an interesting variation on the canonical cheap talk model in which a single Receiver is uncertain about the priorities of the Sender. In mirror image, we have the following for Receiver B:

$$EU_B(c_B) = \mu(q - c_A - (1 - t)c_B) + (1 - \mu)(q + (1 - t)c_A + c_B) - \frac{c_B^2}{2\psi_B}$$

As we see, the contributions help S to move policy. But if S is the "wrong" type, he cannot perfectly repurpose a contribution, as reflected by the fact that t < 1.

The respective first-order conditions imply the following optima (second-order conditions are satisfied):

$$c_A^*(\mu) = \max\left\{ \left(-(1-t) + \mu(2-t) \right) \psi_A, 0 \right\}$$
$$c_B^*(\mu) = \max\left\{ \left(1 - \mu(2-t) \right) \psi_B, 0 \right\}$$

As μ increases, A becomes more willing to contribute, because S is more likely to be aligned, and likewise for B given a decrease in μ . Of course, both A and B are willing to contribute more when t increases, as their contributions become more specific to their objectives and force a misaligned S to discard more of them.

We now move on to equilibrium analysis. As in a typical cheap talk game, there always exists an equilibrium in which no credible communication occurs:

Proposition 1. A pooling equilibrium always exists.

Proof. Proof is by example. Let μ_J denote the belief of A and B that $\sigma = -1$ following a message of $J \in \{L, R\}$. The following is a PBE:

- Strategy for S: independent of type, randomize between m = L and m = R according to some probability r: 0 < r < 1.
- 2. Strategy for $I \in \{A, B\}$: contribute $c_I^*(p)$ regardless of m.
- 3. Beliefs: $\mu_L = \mu_R = p$.

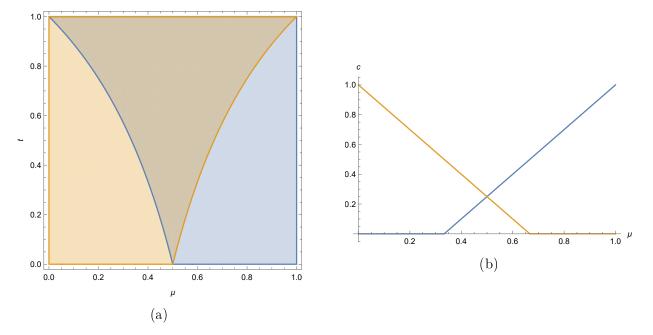


Figure 1: The relationship between μ and optimal contributions c_A^* and c_B^* . Part (a) depicts the region of μ and t where each Receiver makes a nonzero contribution. When μ is small or intermediate, B contributes. When μ is intermediate or large, A contributes. The size of the space considered "intermediate" increases in t. Part (b) depicts optimal contributions as a function of μ (fixing t = 1/2 and $\psi_A = \psi_B = 1$). The increasing line corresponds to c_A^* and the decreasing line corresponds to c_B^* .

S has no incentive to deviate, as he would receive the same contributions from each Receiver. Then clearly Beliefs are consistent. Given this, $c_I^* : I \in \{A, B\}$ was already constructed to be optimal.

Under pooling, both Receivers may contribute when their contributions are specific enough and when their prior belief that the Sender is aligned is sufficiently high. But the inability to identify friends and enemies leaves this a speculative exercise, reducing the total amount that the Sender receives in aggregate as well as the amount that the Sender can use to achieve preferred objectives. When the separating equilibrium also exists, we will see that pooling is worse for the Sender (and for the aligned type of Receiver). Then if we were to apply the equilibrium refinements discussed in Farrell (1993) and Matthews, Okuno-Fujiwara, and Postlewaite (1991), we would select the separating equilibrium exists whenever it exists.

The following proposition summarizes the conditions under the separating equilibrium can exist:

Proposition 2. A separating equilibrium exists whenever $1 - t \leq \frac{\psi_A}{\psi_B} \leq \frac{1}{1-t}$.

Proof. See appendix.

To gain intuition, this condition can be re-expressed as the intersection of two conditions: $(1-t)\psi_B \leq \psi_A$ and $(1-t)\psi_A \leq \psi_B$. That is to say, the amount that A will want to offer to a left-type S must exceed the amount that such an S could gain by misrepresenting himself as a friend of B, and the other way around. This allows separation to occur.

Two parameter shifts that can bring the separating equilibrium into existence are of interest. First, increasing t helps both of these conditions to be satisfied. Intuitively, the less that S can use resources for purposes contrary to the intentions of Receivers, the less incentive S has to misrepresent and take help from an opponent. Second, making ψ_A and

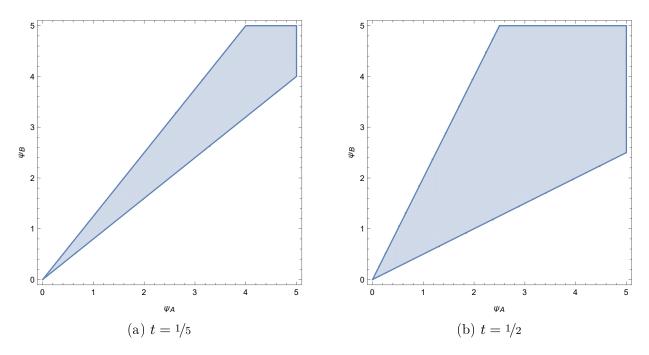


Figure 2: The region of ψ_A and ψ_B in which separation is possible.

 ψ_B sufficiently close also helps satisfy the conditions. Intuitively, when the two Receivers have close to equal power, S no longer has an incentive to communicate that he is aligned with a group only because it is much more powerful, not because it is actually aligned.

Policy outcomes

I shall now examine how the existence of imperfect information affects policy outcomes. That is to say, given a vector of parameter values, does policy move more or less toward Bunder separation or pooling?

In general, expected policy is the same as B's expected utility excluding the cost of contributions. Then expected policy under separation (presently ignoring whether it is possible in equilibrium) is as follows:

$$E[x|\mathbb{S}] = q + p(-\psi_A) + (1-p)\psi_B$$

Let us say that p, the prior probability of the Sender aligned with A, is **tiny** when $p \leq \frac{1-t}{2-t}$, **small** when $\frac{1-t}{2-t} \leq p \leq \frac{1}{2}$, **large** when $\frac{1}{2} \leq p \leq \frac{1}{2-t}$, and **huge** when $\frac{1}{2-t} \leq p$. Recalling that only one Receiver will contribute to S if p is sufficiently lopsided, expected policy under pooling is as follows:

$$E[x|\mathbb{P}] = \begin{cases} q + (1 - p(2 - t))^2 \psi_B & p \text{ tiny} \\ q - (1 - p(2 - t) - t)^2 \psi_A + (1 - p(2 - t))^2 \psi_B & p \text{ small or large} \\ q - (1 - p(2 - t) - t)^2 \psi_A & p \text{ huge} \end{cases}$$

I will first present a result on when policy will move farther left in expectation under pooling than under separation. Call $\frac{\psi_A}{\psi_B}$ big when

$$\frac{\psi_A}{\psi_B} > \begin{cases} 3 - p(2-t)^2 - 2t & p \text{ tiny} \\ \frac{p(p(t-2)^2 + 2t-3)}{(p-1)(p(t-2)^2 - (t-1)^2)} & p \text{ small or large} \\ \frac{1}{p(2-t)^2 - (1-t)^2} & p \text{ huge} \end{cases}$$

Next, the following lemma will prove useful momentarily:

Lemma 1. When p is tiny or small, $\frac{\psi_A}{\psi_B}$ cannot be big.

We are now ready for the result on how the information environment affects the direction that policy is expected to move:

Proposition 3. If and only if $\frac{\psi_A}{\psi_B}$ is big, expected policy under separation will be strictly farther left than that under pooling.

Proof. $E[x|\mathbb{S}] < E[x|\mathbb{P}]$ follows immediately from rearranging the condition for $\frac{\psi_A}{\psi_B}$ to be big, given the corresponding bounds on p.

We see intuitively that when ψ_A is big relative to ψ_B , separation helps A to mobilize superior resources. Yet under our assumption that $\psi_A \leq \psi_B$, then p being tiny or small guarantees that separation is worse for A. Ironically, then, a small increase in ψ_A , such that $\psi_A \leq \psi_B$ continues to hold, can bring about a separating equilibrium that actually leaves A worse off. This holds because B is able to take better advantage of everyone knowing who are friends and who are enemies. Simply put, more often will B discover that an S is its friend, and when it does, it has more resources that it will be able to fully put behind them. Figures 3 and 4 illustrate this phenomenon.

We can now look at comparative statics on expected policy, examining how parameter shifts affect expected policy under pooling minus that under separation. If a parameter shift were to cause this quantity to increase, for example, that means that policy under pooling moves right relative to that under separation, such that separation increasingly relatively benefits A (who prefers left policy).

Proposition 4. A sufficient increase in p may may make move A from preferring pooling to preferring separation, but never the reverse. If and only if p is large or huge, a sufficient increase in t may move A from preferring separation to preferring pooling, but never the reverse. Finally, when p is tiny, an increase in t relatively improves separation for A; and when p is huge, an increase in t relatively improves pooling for A.

Proof. See appendix.

This result says that a sufficient increase in p will improve separation relative to pooling given A's goal of shifting policy leftward. The interpretation is clear. Policy will shift leftward faster under separation because every new left-type S will gain full support from A, while under pooling, A will increase her contributions but to less than the maximum and with some still wasted on the "wrong" Senders.

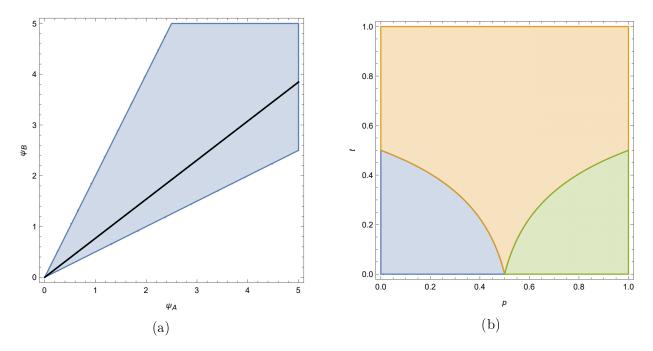


Figure 3: In (a), some combination of t and p determines the ray emanating from the point $(\psi_A, \psi_B) = (0, 0)$ that separates the region in which policy moves leftward, helping A (below the ray), from that in which policy moves rightward, helping B (above the ray). Also charted is the cone seen previously that determines when separation is possible. Notice in this example that starting from a point at which separation is not possible, and increasing ψ_I given $\psi_I < \psi_J, I, J \in \{A, B\}, I \neq J$, then at the instant that separation becomes possible, it hurts the policy objectives of I. That is to say, becoming stronger can actually hurt the weaker group because separation allows their opponent to identify their friends and enemies. In (b), we see how p and t determine whether a corresponding diagram like that in (a) will exhibit this property. In the lower left region of (b), p and t are so low that separation overwhelmingly favors B, so the ray in (a) would be less steep than the lower boundary of the cone. In the lower right region of (b), p is so high and t so low that separation overwhelmingly favors A, so the ray in (a) would be steeper than the upper boundary of the cone. Elsewhere, the pattern in (a) holds.

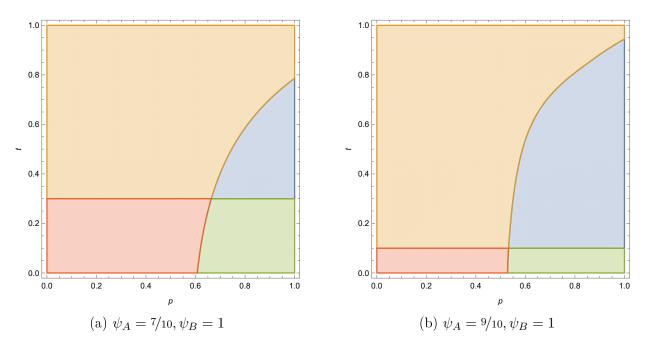


Figure 4: In each figure, in the upper two regions, separation can occur, and in the lower two regions, separation cannot occur. In the left two regions, policy moves farther right under separation, and in the right two regions, policy moves farther left under separation. Notice then two effects of increasing the strength of a weaker group. The upper-right region, in which separation can occur and serves the policy interests of the weaker group (A here), expands. But this only helps A when p is high. Otherwise, this might hurt A's policy goals. The lower left region, in which separation cannot occur and this benefits A's policy goals, shrinks.

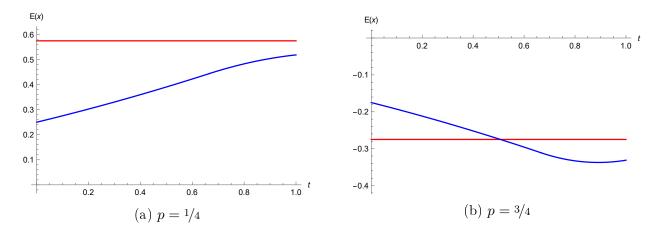


Figure 5: Expected policy as a function of t. The sloped lines are expected policy under pooling, while the constant lines are expected policy under separation. In both (a) and (b), $\psi_A = 7/10$ and $\psi_B = 1$. In (a), we see that A, which prefers leftward policy, never comes to prefer separation over pooling, but an increase in t mostly makes pooling worse for her. In (b), we see that expected policy under pooling mostly slopes downward in t, and a sufficient increase in it leads A to prefer pooling.

Consider instead an increase in t. This shift has no effect on expected policy under separation, of course. But what it does do is increase the space of p in which B is willing to make a contribution, because B knows that an enemy will be increasingly unable to use it. Suppose that p is large or huge. Although A also benefits from this property, she benefits less so, as the average S was a friend anyway. This then implies that an increase in t relatively improves separation more for B. An analogous argument in reverse applies for p tiny or small.

We conclude two things from this section. First, a shift in t, the specificity of contributions, will have an effect that is contingent upon p, the expectation that the average S will agree with A rather than B. Specifically, when most Senders are probably aligned with a group, pooling works well for it when contributions can be made specific to policy goals (which itself can induce separation, ironically). If most Senders agree with you, this will lead you to increase your contributions and your opponent to decrease them (possibly to zero for sufficiently small t) relative to the Sender's type having fair odds. Then larger t can

therefore do more to help you protect your contributions from contrary purposes than your opponent.⁹

Second, becoming more powerful can actually hurt a weaker group, as it helps the other group to identify friends and enemies.¹⁰ This observation holds importance to the politics of backlash, in which the ascendancy of long-disadvantaged groups seemingly awakens a countervailing response from long-established powers. At least recently, a characteristic of this response appears to be open and credible messaging about alignment with the powerful group and against the disadvantaged groups, when such messaging was previously seen as unthinkable. This corresponds to the predictions of the model.

Discussion: political backlash and immigration policy

This last implication constitutes a unique argument about the nature of political backlash. Most existing accounts have emphasized perception of threat and increasing anxiety among voters (Abrajano and Hajnal 2015) and the role of issue entrepreneurs in exploiting this anxiety by reframing old concerns about race around new issues such as "crime" (Weaver 2007). While undoubtedly politicians were able to take advantage of voters' increasing anxieties, I argue that credible communication to voters may play an important role in enabling these entrepreneurs to find success. In particular, when a weak group becomes stronger, the separating equilibrium comes into existence, such that it becomes possible for

9. Of course, a countervailing effect is that when the average Sender is agreed with a particular Receiver, sufficiently large t can eventually induce the other Receiver to start contributing. This accounts for the (almost) downturn in the sloped line in Figure 5a and the upturn in the sloped line in Figure 5b.

10. In the Endogenous Capacity extension, group power is endogenized to explore this idea further.

politicians to credibly communicate their opposition to racial equality to members of the public. Ironically, this may hurt the group whose strength increased.

I illustrate this possibility with a brief case pertaining to immigration policy. For years, Republican politicians promised increased enforcement but also gestured toward sympathy for Mexican migrants. For example, in a 1980 debate between George H.W. Bush and Ronald Reagan, Bush stated, "I'd like to see something done about the illegal alien problem.... But as we have made illegal some types of labor that I would like to see legal, we're doing two things. We're creating a whole society of really honorable, decent, family-loving people that are in violation of the law, and second we're exacerbating relations with Mexico. These are good people, strong people — part of my family is Mexican." The more conservative Reagan nevertheless felt compelled to echo Bush, stating, "Rather than talking about putting up a fence, why don't we work out some recognition of our mutual problems, make it possible for them to come here legally with a work permit" (Lee 2017).

Later, as President, Reagan signed the Immigration Reform and Control Act of 1986, which was to increased enforcement of immigration laws. Subsequently, hardliners believed the law's enforcement provisions to be ineffective, blaming business. According to Wayne Cornelius at UC San Diego's Center for Comparative Immigration Studies, the bill's authors "gutted the employer sanctions" to ensure the support of the business community; additionally, Border Patrol's staff remained relatively constant until 1993 (Plumer 2013). Jerry Kammer of the anti-immigration group Center for Immigration Studies (CIS) believed that this was because "Reagan was never committed to the worksite regulation that was essential to the effort to control the border. Reagan was a small-government conservative and a frequent critic of just the sort of regulation that was a linchpin of the 1986 immigration reform. Indeed, Reagan showed his fealty to the California agribusiness interests that — in concert with Mexican-American congressmen — led the effort to ensure the failure of IRCA's procedures for verifying that a worker was not an illegal immigrant" (2019). The 1986 law was followed by a sharp increase in the population of undocumented immigrants, going from 3.5 million in 1990 to about 11 million since 2005. This perceived failure led hardliners to be skeptical of subsequent attempts to reform immigration. Writing in the conservative American Interest, Gallagher (2016) writes, "[T]he 2007 Comprehensive Immigration Reform Act and the 2013 Gang of Eight bill were the same basic compromise, with tweaks and a 'trust us, this time we mean it.' Only, many people don't". More bluntly, Coulter (2015, 8) writes, "The amnesty came, but the border security never did. Illegal immigration sextupled. There have been a half dozen more amnesties since then, legalizing millions more foreigners who broke our laws. Perhaps we could have trusted Washington's sincerity thirty years ago, but Americans have already been fooled once—then, six more times. They aren't stupid."

Soon enough though, with the country increasingly diversified, immigration hardliners began to break through, eventually finding a politician who was willing and able to embrace their tough positions. This corresponded to a dramatic shift in political rhetoric and positioning. As of 2012, even conservative commentator Sean Hannity stated that he had "evolved" on immigration and that he supported a pathway to citizenship for undocumented immigrants without criminal records (Weiner 2012). Yet by 2015, he was arguing that Donald Trump's statement about Mexicans being rapists were "not racially tinged" (Lerner 2015) and that Trump's plan to deport 11 million people was feasible (Gass 2015). Hannity thus moved toward longtime immigration opponents who up to this point had failed to find traction with political leaders. This included columnist Ann Coulter, who followed up her 2015 book *Adios, America: The Left's Plan to Turn Our Country into a Third World Hellhole* with 2016's *In Trump We Trust*. Hardliners thus saw in Trump a potentially viable candidate who credibly communicated support for harsh immigration policy.¹¹ As Greenfield (2016) noted

11. Admittedly, Pat Buchanan pushed a "culture war" message that resonated with parts of electorate when running against incumbent President George H.W. Bush for the 1992 Republican presidential nomination (Greenfield 2016). If Buchanan was able to credibly at the time, "Trump's loaded, inflammatory language about immigration, biased 'Mexican' judges, women and the African-American experience have him polling at historically low levels with minorities and women." But enraging these constituencies is precisely what helped Trump's message reach voters panicked about immigration (Silver 2015), which contributed to his victory in November (Ehrenfreund and Clement 2016; Klinkner 2016; Ingraham 2016; Reny, Collingwood, and Valenzuela 2019). And true to this campaign messaging, Trump's election has enabled draconian immigration policies, including the travel ban on a number of majority-Muslim countries and the policy of separating families at the Mexican border. This demonstrates how the increasing power of a weak group can bring about a shift in political messaging, with this messaging credibly communicating policy commitments in a way that was previously impossible.

Alternative substantive application: campaign finance

In the substantive application presented so far, an official is the Sender and two opposed interest or social groups are the Receivers. The message was an executive order, campaign communication, inconsequential bill cosponsorship, or the like. The sense of complementarity was an aligned Receiver's superior ability to help the official achieve shared goals in the future. An alternative application is campaign finance. Lobbyists want to influence policy, but politicians do not necessarily know that they share interests with the lobbyist, and it is possible that the lobbyist could be providing information that actually contravenes the goals of the politician. In this application, the lobbyist is the Sender and two opposed politicians are the Receivers. The message is a small hard-money donation. The "contribution" is communicate his alignment with anti-immigration forces, it was arguably because he stood little chance of winning the nomination either way, which may of course have been due to insufficient voter concern about immigration (Greenfield 2016). the politician's grant of access, with policy implementation corresponding to the lobbyist sharing policy information. The complementarity comes from the possibility that a lobbyist may more effectively be able to use a meeting to achieve its policy goals when it is aligned with the politician. It is plausible that if the lobbyist holds information about the optimal design of a government program, providing this information to a sympathetic politician would prove more efficacious than using it to produce calculated misrepresentations to frustrate an opponent; effective opposition may simply require different information.

The same key mechanisms are still at play, then. When a lobbyist gives a small contribution to Pete Buttigieg, it may communicate, both to Pete Buttigieg and Elizabeth Warren, that she wants to help rather than hurt the financial industry. And should a lobbyist for the financial industry get a meeting with Pete Buttigieg, it may be a better use of time than a meeting with Elizabeth Warren. While the donation may have been inherently inconsequential to the lobbyist, it nevertheless allows the lobbyist to find its friends and work with them to achieve consequential policy.

The application of the model here solves some puzzles in the literature on the role of small hard-money donations. Ansolabehere, Figueiredo, and Snyder (2003) exemplifies the argument of some political scientists, arguing that such donations are "expressive" and therefore of little consequence. While this argument may well fit individual contributions by ordinary people, it seems less satisfying as an explanation of lobbyists and business executives. Samples (2006, 96-7) notes that if donations were an investment, donors would hedge and give to both parties, arguing that the rarity of such behavior implies some consumptive motivation. This argument ignores a key dis-analogy: if one buys stock in both Pepsi and General Electric, for example, the value of each stock is not affected by holding the other, except through the value of diversification to the portfolio as a whole. Yet as I showed, "investing" in one politician may ruin the "investment" in another.

Offering another explanation, Hall and Wayman (1990) and Austen-Smith (1995) argue

that contributions signal that a lobbyist shares common interests with a legislator. Yet it initially appears as if such contributions must be costly to have bite. Lee Drutman, a political scientist and senior fellow at the New America Foundation, has stated that "campaign contributions are like bringing a nice bottle of wine to the party" (Hallerman and Gould Sheinin 2016). But when lobbyists can easily afford to buy many "nice bottles" and bring them to competing parties, why should such a gesture buy valuable access? Indeed, while recent work has grappled productively with the role of campaign donations, a common premise is that they are costly or shift the probability of victory (Austen-Smith 1995; Schnakenberg 2017; Schnakenberg and Turner 2019).¹²

In contrast to these perspectives, the model I presented shows that campaign donations may be costless to donors yet still credibly communicate information (though see Bouton, Castanheira, and Drazen 2018). This resolves the tension between the empirical puzzles highlighted by those such as Ansolabehere, Figueiredo, and Snyder and the role of information suggested by Hall and Wayman and Austen-Smith. If one views lobbying as a "legislative subsidy" (Hall and Deardorff 2006), the present paper thus argued for one way that legislators are able to identify friendly lobbyists in the first place.

Extensions and variations

I now briefly discuss some possible extensions to and variations on the baseline model.

Conflict over priorities

As mentioned previously, one might view a conflict not in left-right terms but rather in terms of where players' priorities lie. In some cases, this may imply more plausible sub-12. Similarly, Fox and Rothenberg 2011 examine how a politician can take a costly action to communicate preference alignment to interest groups. stantive cases. For example, everyone knows that President Donald Trump will implement conservative rather than liberal policies if given a choice (though this was not always clear, with symbols themselves helping to inform people of this information). But what might have been less certain is whether Trump will exert more resources to address the concerns of business interests or social conservatives, presuming that resources spent on one provide no benefit to the other (in reality, some anti-immigration proposals may directly contravene the interests of business, such that the baseline model still applied). Given this alternative view of conflict, the same results on equilibrium existence hold. To be sure, under pooling both Receivers will now contribute a strictly positive amount whenever t > 0, because the only risk to each Receiver is that a contribution will have been a waste of effort. But for the Sender, there is still the same desire to communicate alignment with the complementary type, with high complementarity (t) and relatively equal values of strength (ψ) enabling separation exactly as before. That is, separation is once again possible whenever $1 - t \leq \frac{\psi_A}{\psi_B} \leq \frac{1}{1-t}$. See Appendix A for full details.

Endogenous capacity (ψ)

So far we have imagined Receiver strength as being exogenous. But we might suppose that Receivers can endogenously select their levels of strength through investments in capacity. I show that a weaker group may decline to invest in capacity even when doing so is exogenously costless. This is once again because doing so may bring about the separating equilibrium, which may ultimately harm the weaker group even after its capacity investment. See Appendix B for full details.

Polarization

One way of examining the role of polarization would be to specify two ideal points, one for each Receiver-Sender type pair. The farther apart these ideal points are, the more the environment is polarized. Then of course the position of the status quo becomes relevant. If the status quo lies sufficiently external to both ideal points, there is no longer any conflict and thus ability or purpose to communicate information with symbols. Both Receivers would want to contribute the maximum knowing that the status quo is assured to move closer to them. Greater polarization will mean that this situation occurs less often. One effect of polarization, then, may be to increase the use of symbols and decrease the degree to which policy moves.

What about the case in which policy lies in-between the two ideal points? If the status quo were interior but sufficiently close to one of them, the Receiver whose ideal point was far away could only benefit from contributing a large amount. If the aligned type has arisen, policy can move a far distance favorably, while the misaligned type's potential to inflict damage would be limited. This would be reversed for the other Receiver. So one receiver would want to contribute a lot, and the other would want to contribute very little. And consequently, all Sender types would want to communicate alignment with the former, preventing separation from being possible. However, in the specific case in which the status quo is close to the midpoint of the ideal points and Receivers have disparate levels of strength, sufficiently strict bounds on how far contributions may move policy may bring each Receiver's effective contribution close to equality and enable separation when not previously possible.

While there are some ambiguities, then, greater polarization therefore mostly implies greater ability of symbolism to credibly communicate information. And while in some cases this may have led to greater policy shifts, we must remember that increasing polarization decreases the measure of policies over which everyone would have agreed such that credible communication was not even necessary; in such a case, both Receivers would have contributed to help move policy.

Negative contributions (c)

One might imagine that Receivers may not only contribute (positive amounts) but may also attack (i.e. contribute negative amounts). For this to make sense as an attack, it must be imposed on policy outcomes in contravention to the Sender's goals. But we are left to specify the role of complementarities as they pertain to attacks. As suggested above, an attack from a friend (when they falsely believe the subject of the attack to be an enemy) might prove more effective than an attack from an enemy, as the very people who will be needed in the future to help push for the desired policy shift may "lose faith" as a result.

Suppose then that an attack from an enemy is only a fraction u < 1 as effective as an attack from a friend. Let $I, J \in \{A, B\}$ with $I \neq J$. The optimal contribution of Receiver I to what it believes to be an aligned Sender will be as before, while its optimal "contribution" to a misaligned Sender will be $-u\psi_I$. In that case, a Sender aligned with type I will prefer to be truthful when $\frac{\psi_I}{\psi_J} \ge \frac{1-t+u^2}{1+u} \equiv T$. Because we also need the Sender aligned with type J to be truthful for separation to hold, we would also require $\frac{\psi_J}{\psi_I} \ge T$. Then a small value of T is needed for separation. Notice first that if u = 1 - t, then T = 1 - t as before. That is to say, if an enemy's punishment is as ineffective as a friend's help is complementary, prior results continue to hold. Next, $\frac{\partial T}{\partial t} = -\frac{1}{1-u} < 0$, such that increasing t facilitates separation as before, but this effect is dampened the greater that an enemy's punishment is effective. Finally, T is decreasing in u when $u < \sqrt{2-t} - 1$ and increasing otherwise. That is to say, punishments are most effective in bringing about separation when they have intermediate relative effectiveness against enemies. If they were completely ineffective, then once again we would have T = 1 - t and be back in the world of the baseline model. But completely effective punishments from an opponent decrease (but do not necessarily eliminate) the relative benefit to signaling to the aligned type, yielding T = 1 - t/2. We conclude then that attacks may either facilitate or interfere with separation, depending on the relative complementarity of positive contributions and attacks.

Endogenous specificity (t)

One might suppose that the Receiver can determine how fungible its contributions are. In particular, a Receiver might choose to grant either cash or activism. While it seems plausible that each Receiver would want its contributions to be as specific as possible, this ignores strategic interactions between the Receivers. When the prior probability of a Sender type aligned with the weak Receiver is sufficiently high, the strong Receiver may choose for its contribution to be fungible so as to jam the ability of its opponent to identify friends, since those friends would now be tempted to communicate allegiance to the opposed strong Receiver. Remarkably, the strong Receiver's equilibrium contribution in this circumstance is zero, as only pooling is possible. See Appendix C for full details.

Conclusion

This paper has argued that symbolic political actions can actually credibly communicate information. Essentially, in communicating to one group that he is with them, a political actor communicates to another group that he is against them. This framework can apply to a number of situations, including symbolic executive orders, campaign statements, bill cosponsorship, and hard money donations. Two factors prove crucial in determining whether such separation is possible. First, these groups must be close in their ability to make contributions. Second, their contributions must be sufficiently specific to their intended policy goals.

A surprising result of the analysis was that increased power might actually harm a weaker group: the separation that may result will not only allow it to identify its own friends but also allow a potentially still-stronger opponent to do the same. This provides a novel explanation for "backlash" politics: as a marginalized group becomes more powerful, politicians become able to credibly express alignment with the dominant group in a way that was not previously possible, causing a setback for the marginalized group. This can help us to understand recent shifts in political communication, with increasing numbers of immigrants in the U.S. preceding Trump's harsh anti-immigrant messaging and subsequent draconian policies.

In summary, the model and extensions presented herein have connected and explicated a wide range of empirical phenomena. These include the prevalence of symbolic actions that otherwise seem strategically mystifying, the nature of shifting group power as it pertains to political backlash, and the ability of hard money donations to communicate information. Still, there is much room for work to explore additional domains in which to apply the theoretical framework presented herein. Furthermore, future theory on political communication may clarify the role of "dog whistles" and related phenomena.

References

- Abrajano, Marisa, and Zoltan L. Hajnal. 2015. *White Backlash.* Princeton, NJ: Princeton University Press.
- Andrews, Kenneth T. 2001. "Social Movements and Policy Implementation: The Mississippi Civil Rights Movement and the War on Poverty, 1965 to 1971." American Sociological Review 66 (1): 71–95.
- Ansolabehere, Stephen, John M. de Figueiredo, and James M. Snyder. 2003. "Why Is There so Little Money in U.S. Politics?" The Journal of Economic Perspectives 17 (1): 105– 130.
- Austen-Smith, David. 1995. "Campaign Contributions and Access." The American Political Science Review 89 (3): 566–581.
- Banks, Jeffrey S. 1990. "A model of electoral competition with incomplete information." Journal of Economic Theory 50, no. 2 (April 1): 309–325.
- Bouton, Laurent, Micael Castanheira, and Allan Drazen. 2018. A Theory of Small Campaign Contributions. Working Paper 24413. National Bureau of Economic Research, March. Accessed February 14, 2020. http://www.nber.org/papers/w24413.
- Bueno de Mesquita, Ethan. 2010. "Regime Change and Revolutionary Entrepreneurs." American Political Science Review 104, no. 3 (August): 446–466.
- Chamon, Marcos, and Ethan Kaplan. 2013. "The Iceberg Theory of Campaign Contributions: Political Threats and Interest Group Behavior." American Economic Journal: Economic Policy 5, no. 1 (February): 1–31.
- Coulter, Ann. 2015. Adios, America: The Left's Plan to Turn Our Country into a Third World Hellhole. Washingtion, DC: Regnery Publishing.

- ———. 2016. In Trump We Trust: E Pluribus Awesome! New York, New York: Sentinel, August 23.
- Davis, Julie Hirschfeld. 2018. "Trump Signs Memo Ordering End to 'Catch and Release' Immigration Policy." The New York Times (April 6). https://www.nytimes.com/ 2018/04/06/us/politics/trump-immigration-policy.html.
- Edwards III, George C. 2009. The Strategic President: Persuasion and Opportunity in Presidential Leadership. Princeton, NJ: Princeton University Press.
- Ehrenfreund, Max, and Scott Clement. 2016. "Economic and racial anxiety: Two separate forces driving support for Donald Trump." Washington Post. March 22. https://www. washingtonpost.com/news/wonk/wp/2016/03/22/economic-anxiety-and-racialanxiety-two-separate-forces-driving-support-for-donald-trump/.
- Farrell, Joseph. 1993. "Meaning and Credibility in Cheap-Talk Games." Games and Economic Behavior 5, no. 4 (October 1): 514–531.
- Farrell, Joseph, and Robert Gibbons. 1989. "Cheap talk with two audiences." American Economic Review 79 (5): 1214–1223.
- Fearon, James D. 1994. "Domestic Political Audiences and the Escalation of International Disputes." The American Political Science Review 88 (3): 577–592.
- Fox, Justin, and Lawrence Rothenberg. 2011. "Influence without Bribes: A Noncontracting Model of Campaign Giving and Policymaking." *Political Analysis* 19 (3): 325–341.
- Gallagher, Nicholas M. 2016. "30 Years Since Amnesty-for-Enforcement Failure." The American Interest (November 8). https://www.the-american-interest.com/2016/11/ 08/30-years-since-amnesty-for-enforcement-failure/.

- Gass, Nick. 2015. "Hannity defends Trump's immigration plan." POLITICO (August 18). https://www.politico.com/story/2015/08/sean-hannity-jorge-ramos-donaldtrump-immigration-121476.html.
- Goltsman, Maria, and Gregory Pavlov. 2011. "How to talk to multiple audiences." *Games* and Economic Behavior 72, no. 1 (May 1): 100–122.
- Greenfield, Jeff. 2016. "Donald Trump Is Pat Buchanan With Better Timing." POLITICO Magazine (September). https://www.politico.com/magazine/story/2016/09/ donald-trump-pat-buchanan-republican-america-first-nativist-214221.
- Hall, Richard L., and Alan V. Deardorff. 2006. "Lobbying as Legislative Subsidy." American Political Science Review 100, no. 1 (February): 69–84.
- Hall, Richard L., and Frank W. Wayman. 1990. "Buying Time: Moneyed Interests and the Mobilization of Bias in Congressional Committees." *American Political Science Review* 84, no. 3 (September): 797–820.
- Hallerman, Tamar, and Aaron Gould Sheinin. 2016. "Gun rights groups have spent millions on Georgia campaigns since 2009." Atlanta Journal-Constitution (June 20). https:// www.ajc.com/news/state--regional-govt--politics/gun-rights-groups-havespent-millions-georgia-campaigns-since-2009/02s4IJUXLOQ2tWaWs0E0ZK/.
- Harrington, Joseph E. 1992. "The Revelation of Information Through the Electoral Process: An Exploratory Analysis." *Economics & Politics* 4, no. 3 (November 1): 255–276.
- Harrington, Joseph E. 1993. "The Impact of Reelection Pressures on the Fulfillment of Campaign Promises." Games and Economic Behavior 5, no. 1 (January 1): 71–97.

- Ingraham, Christopher. 2016. "Two new studies find racial anxiety is the biggest driver of support for Trump." Washington Post (June 6). https://www.washingtonpost.com/ news/wonk/wp/2016/06/06/racial-anxiety-is-a-huge-driver-of-support-fordonald-trump-two-new-studies-find/.
- Kammer, Jerry. 2019. "How the Washington Post Exposé of Trump Missed the Story of How Reagan Wrecked Immigration Reform." CIS.org. January 3. https://cis.org/Kamm er/How-Washington-Post-Expose-Trump-Missed-Story-How-Reagan-Wrecked-Immigration-Reform.
- Kartik, Navin, and R. Preston McAfee. 2007. "Signaling Character in Electoral Competition." American Economic Review 97, no. 3 (June): 852–870.
- Kartik, Navin, and Richard Van Weelden. 2019. "Informative Cheap Talk in Elections." The Review of Economic Studies 86, no. 2 (March 1): 755–784.
- Kaufman, Stuart J. 2006. "Symbolic Politics or Rational Choice? Testing Theories of Extreme Ethnic Violence." International Security 30 (4): 45–86. Accessed September 22, 2019.
- Kessler, Daniel, and Keith Krehbiel. 1996. "Dynamics of Cosponsorship." The American Political Science Review 90 (3): 555–566.
- Klinkner, Philip. 2016. "The easiest way to guess if someone supports Trump? Ask if Obama is a Muslim." Vox (June 2). https://www.vox.com/2016/6/2/11833548/donaldtrump-support-race-religion-economy.
- Koessler, Frédéric. 2008. "Lobbying with two audiences: Public vs private certification." Mathematical Social Sciences 55, no. 3 (May 1): 305–314.
- Kornacki, Steve. 2018. The Red and the Blue: The 1990s and the Birth of Political Tribalism. New York, NY: Ecco, October 2.

- Lee, Timothy B. 2017. "This video of Ronald Reagan shows how much the Republican Party has changed on immigration." Vox (January 29). Accessed February 11, 2020. https: //www.vox.com/2017/1/29/14429368/reagan-bush-immigration-attitude.
- Lerner, Adam B. 2015. "Sean Hannity: Trump's remarks not 'racially tinged'." POLITICO (June 30). https://www.politico.com/story/2015/06/sean-hannity-defendsdonald-trump-119574.html.
- Lewis, Anthony. 1992. "Abroad at Home; Black and White." *The New York Times* (June 18). https://www.nytimes.com/1992/06/18/opinion/abroad-at-home-black-andwhite.html.
- Li, Ming. 2004. "To Disclose or Not to Disclose: Cheap Talk with Uncertain Biases." [Unpublished manuscript]. https://pdfs.semanticscholar.org/2041/62f8a69de4d56c 3b67ee6813ae6f3df0ee93.pdf.
- Li, Ming, and Kristóf Madarász. 2008. "When mandatory disclosure hurts: Expert advice and conflicting interests." *Journal of Economic Theory* 139, no. 1 (March 1): 47–74.
- Matthews, Steven A, Masahiro Okuno-Fujiwara, and Andrew Postlewaite. 1991. "Refining cheap-talk equilibria." *Journal of Economic Theory* 55, no. 2 (December 1): 247–273.
- Mills, David. 1992. "Sister Souljah's Call to Arms: The rapper says the riots were payback. Are you paying attention?" (May 13). http://www.washingtonpost.com/wp-dyn/ content/article/2010/03/31/AR2010033101709.html.
- Niemeyer, Simon. 2004. "Deliberation in the Wilderness: Displacing Symbolic Politics." *Environmental Politics* 13, no. 2 (June 1): 347–372.

- Nilsen, Ella. 2019. "Trump's new executive order on campus free speech is more symbolism than substance." Vox. March 21. https://www.vox.com/policy-and-politics/2019/ 3/21/18275828/trump-executive-order-campus-free-speech.
- Ogden, Benjamin. 2019. Multidimensional Strategic Communication with Uncertain Salience. SSRN Scholarly Paper ID 3491847. Rochester, NY: Social Science Research Network, November 22. Accessed February 14, 2020. https://papers.ssrn.com/abstract= 3491847.
- Panova, Elena. 2017. "Partially Revealing Campaign Promises." Journal of Public Economic Theory 19 (2): 312–330.
- Plumer, Brad. 2013. "Congress tried to fix immigration back in 1986. Why did it fail?" The Washington Post (January 30). https://www.washingtonpost.com/news/wonk/wp/ 2013/01/30/in-1986-congress-tried-to-solve-immigration-why-didnt-itwork/.
- Reny, Tyler T., Loren Collingwood, and Ali A. Valenzuela. 2019. "Vote Switching in the 2016 Election: How Racial and Immigration Attitudes, Not Economics, Explain Shifts in White Voting." *Public Opinion Quarterly* 83, no. 1 (May 21): 91–113.
- Samples, John. 2006. The Fallacy of Campaign Finance Reform. Chicago: University Of Chicago Press.
- Schickler, Eric. 2018. "Democracy for Realists, Groups, and Ordinary Voters." Critical Review 30, no. 1 (April 3): 119–129.
- Schnakenberg, Keith E. 2016. "Directional Cheap Talk in Electoral Campaigns." The Journal of Politics 78, no. 2 (January 28): 527–541.

- . 2017. "Informational Lobbying and Legislative Voting." American Journal of Political Science 61 (1): 129–145.
- Schnakenberg, Keith E., and Ian R. Turner. 2019. "Helping Friends or Influencing Foes: Electoral and Policy Effects of Campaign Finance Contributions." [Unpublished manuscript]. http://www.ianrturner.com/SchnakenbergTurnerCampaignFinanceONLINE.pdf.
- Sears, David O. 1993. "Symbolic Politics: A Socio-Psychological Theory." In Explorations in Political Psychology, edited by Shanto Iyengar and William J. McGuire, 113–149. Durham, NC: Duke University Press.
- Silver, Nate. 2015. "Donald Trump Is The World's Greatest Troll." FiveThirtyEight (July 20). Accessed February 21, 2020. https://fivethirtyeight.com/features/donaldtrump-is-the-worlds-greatest-troll/.
- Slantchev, Branislav L. 2006. "Politicians, the Media, and Domestic Audience Costs." International Studies Quarterly 50 (2): 445–477.
- Stephens, Bret. 2019. "We Need More Sister Souljah Moments." The New York Times (March 22). https://www.nytimes.com/2019/03/22/opinion/trump-mccain-2020-republicans-democrats.html.
- Weaver, Vesla M. 2007. "Frontlash: Race and the Development of Punitive Crime Policy." Studies in American Political Development 21 (2): 230–265.
- Weiner, Rachel. 2012. "Sean Hannity: I've 'evolved' on immigration." Washington Post (November 8). https://www.washingtonpost.com/news/post-politics/wp/2012/ 11/08/sean-hannity-ive-evolved-on-immigration/.

Appendix A: Two-dimensional policy space extension

In this appendix, I consider a different conception of the nature of competition between receivers A and B. Namely, rather than assuming that they have opposed policy interests lying along one dimension, we might think that they have orthogonal interests, along two different policy dimensions. Then even though each is indifferent to the other's desired policy shift on its own, resources granted to S can only be used on one dimension or the other. Thus A and B can be thought of as competing for agenda time.

Formal Definition

Preliminaries

There will be a continuous, two-dimensional policy space, with policy $\mathbf{x} \equiv (x_1, x_2) \in \mathbb{R}^2$.

Players consist of a Sender S and two Receivers A and B. Policy will initially be located at a status quo point \mathbf{q} . Receivers A and B can offer contributions to S to enable S to move policy. An exogenous fraction t of each contribution must either be used to move policy in the dimension over which the contributor has concern or disposed, while the remaining fraction 1 - t may be used however S prefers. The distance that S may move policy will be equal to the amount of contribution available and usable for a given dimension.¹³

Sequence of Moves

The sequence of moves is as follows:

- 1. Nature selects the Sender S's type σ and reveals it to S.
- 2. S issues a public message $m \in \{L, D\}$.

13. We will see that S is indifferent between using and disposing of the portion of contributions specific to the dimension over which he has no concern; we shall assume the former.

- 3. Receivers A and B each decide how much to contribute to S and the dimension of the contribution.
- 4. S uses the contributions to implement policy.
- 5. The game ends and payoffs are realized.

Utility Functions

Players shall have the following utility functions:

$$U_{S}(x) = \sigma(-x_{1}) + (1 - \sigma)(-x_{2})$$
$$U_{A}(x) = -x_{1} - \frac{c_{A}^{2}}{2\psi_{A}}$$
$$U_{B}(x) = -x_{2} - \frac{c_{B}^{2}}{2\psi_{B}}$$

where $\sigma \in \{0, 1\}$ is S's type, c_I is the amount of Receiver I's contribution to S, and ψ_I is Receiver I's "strength" or inverse marginal cost of contributing. With probability $p, \sigma = 1$.

Analysis

We first examine how A and B should contribute to S as a function of their posterior belief about the probability that $\sigma = 1$, which we will denote μ . Expected utility to Receiver A as a function of c_A is as follows:

$$EU_A(c_A) = \mu(-(q_1 - c_A - (1 - t)c_B)) + (1 - \mu)(-(q_1 - tc_A)) - \frac{c_A^2}{2\psi_A}$$

In mirror image, we have the following for Receiver B:

$$EU_B(c_B) = \mu(q_2 + tc_B) + (1 - \mu)(q_2 + (1 - t)c_A + c_B) - \frac{c_B^2}{2\psi_B}$$

The respective first-order conditions imply the following optima (second-order conditions are satisfied):

$$c_A^{*'}(\mu) = (\mu + (1 - \mu)t)\psi_A$$

 $c_B^{*'}(\mu) = (\mu t + 1 - \mu)\psi_B$

As μ increases, A becomes more willing to contribute, because S is more likely to be aligned, and likewise for B given a decrease in μ . Of course, both A and B are willing to contribute more when t increases, as their contributions become more specific to their objectives and force a misaligned S to discard more of them.

As before, there always exists an equilibrium in which no credible communication occurs:

Proposition 1A. A pooling equilibrium always exists.

Proof. Proof is by example. Let μ_J denote the belief of A and B that $\sigma = 1$ following a message of $J \in \{L, D\}$. The following is a PBE:

- 1. Strategy for S: independent of type, randomize between m = L and m = D according to some probability r: 0 < r < 1.
- 2. Strategy for $I \in \{A, B\}$: contribute $c_I^*(p)$ regardless of m.
- 3. Beliefs: $\mu_L = \mu_D = p$.

S has no incentive to deviate, as he would receive the same contributions from each Receiver. Then clearly Beliefs are consistent. Given this, $c_I^* : I \in \{A, B\}$ was already constructed to be optimal.

Next, the following proposition summarizes the conditions under which the separating equilibrium can exist:

Proposition 2A. A separating equilibrium exists whenever $1 - t \leq \frac{\psi_A}{\psi_B} \leq \frac{1}{1-t}$.

Proof. See appendix.

As we see, this result is identical to that in Proposition 2.

Appendix B: Endogenous capacity extension

So far we have assumed that ψ_A and ψ_B are exogenous. Yet arguably, organizations have the ability to invest in capacity and increase these values. Given the results we have reached so far, how might this investment actually play out? In this extension, I investigate this question by supposing the existence of a group that is initially relatively weak and another that is relatively strong. The weak group can choose to invest in capacity, followed by the ability of the strong group to respond with its own investment. Subsequently, the sequence of moves present in the baseline model occur as before.

Preliminaries

In Stage 2, the baseline model plays out as before. In Stage 1, A and B start with initial levels of strength $\underline{\psi}_A$ and $\underline{\psi}_B$ respectively. At no exogenous cost, each $I \in \{A, B\}$ may then choose to increase ψ_I , up to a maximum of $\overline{\psi}_I$ (but may not decrease it).

Sequence of moves

The sequence of moves is as in the baseline model, except preceding them is the following:

Stage 1

- 1. Receiver A selects its strength $\psi_A \in [\underline{\psi}_A, \overline{\psi}_A]$.
- 2. Receiver B selects its strength $\psi_B \in [\underline{\psi}_B, \overline{\psi}_B]$.

Subsequent moves shall collectively comprise Stage 2.

Utility functions

In Stage 2, S, A, and B shall have the same utility functions as before. In Stage 1, A and B shall have the following utility functions (defining a Stage 1 utility function for S is of no

consequence):

$$U_A^1(x) = -x$$
$$U_B^1(x) = x$$

Assumptions

I now impose assumptions corresponding to the case of interest, namely that in which a group A is relatively weak compared to a group B.

The first assumption concerns the initial strength of the groups:

Assumption 2. $\underline{\psi}_A < (1-t)\underline{\psi}_B$

This simply states that A starts off relatively weak compared to B, such that only the pooling equilibrium is admitted.

Next, I assume the following:

Assumption 3. $(1-t)\overline{\psi}_A < \underline{\psi}_B < \frac{1}{1-t}\overline{\psi}_A$

The first part of this, $(1-t)\overline{\psi}_A < \underline{\psi}_B$, simply states that no matter *B*'s choice of investment, *A* cannot induce pooling by becoming sufficiently stronger than *B*. The second part of this, $\underline{\psi}_B < \frac{1}{1-t}\overline{\psi}_A$, ensures non-triviality; it would otherwise be impossible for any strategy profile to lead to separation in equilibrium.

Finally, I assume the following:

Assumption 4. $\frac{1}{1-t}\overline{\psi}_A < \overline{\psi}_B$

This simply states that no matter how much A invests, B can always induce pooling with sufficient investment. Results are similar without this assumption, but it greatly simplifies

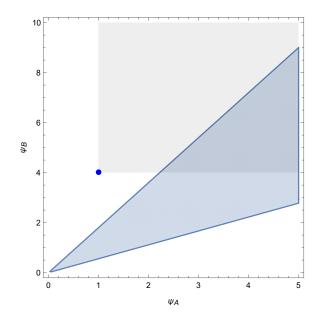


Figure 6: An example fitting the assumptions. In particular, $\underline{\psi}_A = 1$, $\underline{\psi}_B = 4$, $\overline{\psi}_A = 5$, $\overline{\psi}_B = 10$, and t = 4/9. As before, the cone is the region in which separation occurs. The dot shows initial capacity, and the gray rectangle shows the set of points to which players may move capacity.

the analysis while corresponding substantively to the case of interest.

Summary

The exogenous parameters are $\underline{\psi}_A$, $\overline{\psi}_A$, $\underline{\psi}_B$, $\overline{\psi}_B$, q, p, t, ψ_A , and ψ_B . The endogenous choices are ψ_A , ψ_B , m, c_A , c_B , and x. The random variable is σ . As a sequential game of imperfect information, the natural equilibrium concept is perfect Bayesian equilibrium (PBE). I focus exclusively on pure-strategy PBE.

Discussion

The purpose of this section is to explore more fully a question discussed above. In particular, when can strengthening a weaker group actually prove detrimental to its policy goals? This section expands on some of the arguments made in the Policy Outcomes section by looking at how Receivers will strategically select their capacity if given the opportunity to do so. I comment briefly on the assumptions. First, consider the order of moves. Allowing A to move first corresponds to the backlash dynamics that I explore. The question is, in anticipation of a stronger group's strategic response, how will a weaker group make decisions about building its capacity? The assumed order of moves fits this question.

Next, the fact that organizational capacity is free will lead us to an even starker result than if it were costly. We will see that even when A does not have to pay to increase capacity, it may still decline to do so. Although B also need not pay for capacity, one can imagine that as the more powerful group, it would have faced a lower cost compared to A anyway.

Finally, it is worth discussing the utility functions. In Stage 2, A and B incur a cost of making contributions to S. Yet in the Stage 1, A and B are unconcerned with the cost that they can anticipate incurring in the future. This can be justified substantively. One can imagine the Receivers in Stage 1 as representing different actors compared to those in Stage 2. Donors or activists making decisions about how to build their organizations may care about policy but not about the effort that bureaucrats in the future will have to exert. Alternatively, the costs of making contributions can capture a notion of constraint at the moment that they are granted rather than representing a source of negative utility to an institutional designer. While this assumption simplifies the analysis, it also allows us to continue to focus on the substantively interesting question of how policy actually moves.

Analysis

Stage 2 plays out as before. In Stage 1, there will be three cases, corresponding to the regions in Figure 1a. Recall of course that under pooling, when $p < \frac{1-t}{2-t}$, only *B* contributes ("Case 1"), when $\frac{1-t}{2-t} , both contribute ("Case 2"), and when <math>\frac{1}{2-t} < p$, only *A* contributes ("Case 3").

A key observation is that once A has made a choice of ψ_A , only two things can be optimal for B: choose ψ_B just small enough such that a separating equilibrium continues to be possible, or choose ψ_B as large as possible. In Cases 1 and 2, which option B prefers will be a function of ψ_A (while in Case 3, B contributes zero under pooling, so that its only consideration in selecting ψ_B will be which equilibrium it wishes to induce. We will see that this is not a function of ψ_A). For a small value of ψ_A , B would need to forgo a large potential increase in ψ_B to maintain separation. As ψ_A increases, though, this sacrifice diminishes, and setting $\psi_B = \frac{1}{1-t}\psi_A$ (the largest value of ψ_A compatible with separation) becomes relatively more attractive. This is summarized in the following lemma:

Lemma 2. Suppose Case 1 or 2 holds. There exists a threshold value of ψ_A , call it $\tilde{\psi}_A$, such that when $\tilde{\psi}_A \ge (1-t)\psi_A$, $\psi_A \le \tilde{\psi}_A$ implies that B prefers to induce pooling by setting $\psi_B = \overline{\psi}_B$; while $\psi_A \ge \tilde{\psi}_A$ implies that B prefers to induce separation by setting $\psi_B = \frac{1}{1-t}\psi_A$ (if feasible, i.e. $\psi_A \ge (1-t)\underline{\psi}_B$; otherwise B continues to set $\psi_B = \overline{\psi}_B$).

Suppose instead that Case 3 holds. Then B will either always prefer pooling or always prefer separation, i.e. regardless of the choice of ψ_A . If B always prefers pooling, she will surely select $\psi_B = \overline{\psi}_B$. If B always prefers separation, she will set $\psi_B = \frac{1}{1-t}\psi_A$.

Proof. See appendix.

Given this result on B, A's optimum can be one of four things. First, if $\tilde{\psi}_A \ge (1-t)\underline{\psi}_B$, we see that the value of ψ_A at which B is indifferent between pooling and separation lies to the right of the minimum value of ψ_A at which B can actually induce separation. In this region, A recognizes that any smaller ψ_A does not reduce B's choice of ψ_B . Consequently, A can select ψ_A as large as possible subject to the constraint that B can induce separation but is at least indifferent to pooling.

Second, if $\tilde{\psi}_A < (1-t)\underline{\psi}_B$, the value of ψ_A at which B is indifferent to pooling is less than the minimum value of ψ_A at which it is possible for B to induce separation. Consequently, Amay consider setting $\psi_A = (1-t)\underline{\psi}_B$ to guarantee pooling, anticipating that anything larger

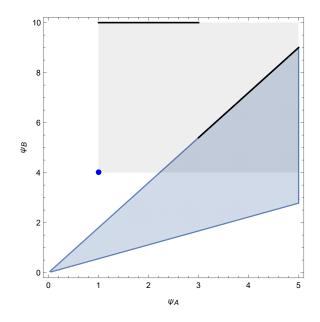


Figure 7: The black line shows one possibility for B's optimal choice of ψ_B as a function of ψ_A . When ψ_A is small, B would need to set ψ_B much smaller than $\overline{\psi}_B$ to allow for separation, i.e. $\frac{1}{1-t}\psi_A$ is small. Yet when ψ_A becomes larger, setting $\psi_B = \frac{1}{1-t}\psi_A$ becomes relatively more attractive, such that B eventually comes to prefer to induce separation.

would surely induce separation.¹⁴

The other potential optimal reflect the fact that in the region of ψ_A in which B will prefer separation, a larger choice of ψ_A will mean larger ψ_B . We will find that ψ_A will have a corner solution, so I only discuss two additional possibilities. The third candidate for an optimum is for A to select ψ_A just large enough such that B is at least indifferent to separation.¹⁵. Finally, the fourth candidate is for A to select ψ_A as large as possible.

Of course, if Case 3 holds, B will always prefer pooling or always prefer separation, 14. Once again, to ensure the existence of an equilibrium, I assume that A can induce the pooling equilibrium by selecting a value of ψ_A that, along with B's initial level of power $\underline{\psi}_B$, would admit separation on the knife's edge.

15. This of course is the same value as the second candidate optimum. Because A can move ψ_A rightward or leftward from this point by any $\epsilon > 0$, I will suppose that A can break B's indifference whichever way it prefers.

regardless of the choice of ψ_A . If *B* always prefers pooling, she will surely select $\psi_B = \overline{\psi}_B$. Then *A* may as well select $\overline{\psi}_A$. If *B* always prefers separation, *A* will once again have a corner solution and must determine whether $\psi_A = (1 - t)\underline{\psi}_B$ or $\psi_A = \overline{\psi}_A$ is optimal.

Based on what turns out to be optimal for A, the following proposition tells us how Aand B will choose capacity and when separation will result:

Proposition 5. Define

$$T' \equiv \frac{\overline{\psi}_A - \sqrt{t\overline{\psi}_A \left(\overline{\psi}_A - 4(1-t)^2 \underline{\psi}_B\right)}}{2(1-t)^2(2-t)\underline{\psi}_B} + \frac{1-t}{2-t}$$

When $p < \frac{1}{2-t}$, A sets $\psi_A = \max\{\tilde{\psi}_A, (1-t)\underline{\psi}_B\}$, B sets $\psi_B = \overline{\psi}_B$, and pooling occurs. When $\frac{1}{2-t} , <math>A$ sets $\psi_A = (1-t)\underline{\psi}_B$, B sets $\psi_B = \overline{\psi}_B$, and pooling occurs. When T' , <math>A sets $\psi_A = \overline{\psi}_A$, B sets $\psi_B = \frac{1}{1-t}\overline{\psi}_A$, and separation occurs. Finally, when $\frac{1-t(1-t)}{2-3t+t^2} < p$, A sets $\psi_A = \overline{\psi}_A$, B sets $\psi_B = \overline{\psi}_B$, and pooling occurs.

Proof. See appendix.

The following diagram is helpful for understanding this result:

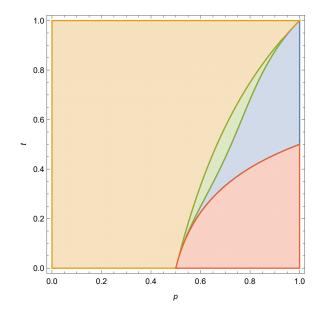


Figure 8: Regions corresponding to Proposition 5. In this example, $\overline{\psi}_A = \underline{\psi}_B = 8$.

In the region to the left, A holds back on increasing ψ_A too far because it fears the consequences of separation. This is because p is simply too small, such that when friends and enemies can be identified, this more often benefits the more powerful B.

Next, in the sliver-shaped region, B always wants to separate: it contributes zero under pooling, while p is tilted enough in A's favor that it makes positive contributions. If separation were instead to occur, the powerful B would identify and contribute to more friends than A would like, relative to A's benefit of identifying its own friends.

Next, in the upper-right region, B still always wants to separate. What has changed is A's calculation. Now, p has become sufficiently large such that A's benefit of identifying its friends improves relative to the cost of B being able to identify its friends. While B still does better under separation, this option has become relatively attractive to A compared to the alternative of keeping ψ_A so small that for B it is infeasible to induce separation.

Finally, in the lower-right region, separation overwhelmingly benefits A: large p and small t means that most Senders are likely to be A's friends, but without the ability to identify friends or make contributions specific, there is a high potential for A's contributions to be

repurposed. Therefore, B always wants to induce pooling, so both players increase their power as far as possible.

A comparative static implication we thus see is that increasing p sufficiently may make it larger than T', implying that A comes to prefer separation. That is to say, when A is more likely to identify a friend, it becomes more valuable for it to do so. Of course, as reflected by the lower-right region, increasing p too much may cause B to induce pooling. Finally, the following comparative statics give us results on when the region of separation will increase or decrease in size:

Proposition 6. The space of t in which separation occurs is increasing in $\overline{\psi}_A$ and decreasing in $\underline{\psi}_B$.

Proof. See appendix.

These comparative statics essentially reflect a change in various forms of relative strength compared to B. When A's maximum potential power decreases, separation becomes less desirable to A. Finally, when B's initial power is greater, this gives A room to increase its power more while still not triggering separation, making pooling relatively attractive. In summary, then, increasing B's relative current and potential power leads A to be increasingly wary of choosing to increase its own power to the maximum that is feasible.

The main conclusion to draw from this section is that in most of the parameter space, namely the left and sliver-shaped regions, A holds back on increasing its power as far as it could, even though such an increase would incur no direct cost. This is because while A increasing its power may induce the separating equilibrium to reveal its friends and then allow A to help those friends more effectively, this simultaneously allows B to increase its own power more than it otherwise would have while still preserving separation. As a consequence, an even-more powerful B is also able to identify *its* friends and enemies.

Appendix C: Endogenous specificity extension

I extend the baseline model to examine how players might endogenously choose specificity t. I therefore relax the assumption that there is a common value of t and instead allow it to be specific to each player, i.e. t_I is the fraction of I's contribution that cannot be repurposed, with $I \in \{A, B\}$. Additionally, selection of each t_I will occur simultaneously before the baseline model plays out. This therefore represents an organization's decision of what kind of help to specialize in offering: something like cash, or something like activism.

Formal Definition

Preliminaries

Preliminaries are as in the baseline model, except an endogenously chosen fraction t_I of the contribution offered by Receiver $I, I \in \{A, B\}$, must either be used to move policy in the specified direction or disposed.

Sequence of moves

The sequence of moves is as before, except preceding them is the following:

Stage 1

1. Each Receiver $I \in \{A, B\}$ simultaneously selects $t_I \in [\underline{t}_I, \overline{t}_I]$, with \underline{t}_I and \overline{t}_I exogenously given such that $0 \leq \underline{t}_I \leq \overline{t}_I < 1$.

Subsequent moves shall collectively comprise Stage 2.

Utility functions

Utility functions are as in the endogenous capacity extension.

Assumptions

Assumption 1 is maintained. Next, to analyze a non-trivial case, I assume the following:

Assumption 5. $\underline{t}_B \leq 1 - \frac{\psi_A}{\psi_B} < \overline{t}_B$.

This ensures that B (who we will see holds the keys to separation) actually has a choice of inducing pooling or separation.

Summary

The exogenous parameters are q, p, \underline{t}_A , \underline{t}_B , \overline{t}_A , \overline{t}_B , ψ_A , and ψ_B . The endogenous choices are t_A , t_B , m, c_A , c_B , and x. The random variable is σ . As a sequential game of imperfect information, the natural equilibrium concept is perfect Bayesian equilibrium (PBE). I focus exclusively on pure-strategy PBE.

Discussion

The main purpose of this section is to explore the way in which organizations will build up their capacity to engage in different means of helping potential allies. The choice of t_I represents Receiver I's decision of whether to build an organization that is skilled at something like giving cash or something like providing supportive activism. Receivers anticipate that their choices will feed into the baseline model, which subsequently plays out as before. Allowing the choice of t_I to occur before the baseline subgame occurs corresponds to this substantive question of interest. Furthermore, it reflects the fact that a motivated base of grassroots activists willing to take to the streets for you cannot immediately be exchanged for relationships with wealthy individuals willing to donate millions of dollars to your organization, and the other way around; a choice of specificity of contributions therefore entails some level of commitment.¹⁶

Analysis

In Stage 2, it is clear from an analysis that is analogous to that in the baseline model that we have

$$c_A^*(\mu; t_A) = \max\left\{ \left(-(1 - t_A) + \mu(2 - t_A) \right) \psi_A, 0 \right\}$$
$$c_B^*(\mu; t_B) = \max\left\{ \left(1 - \mu(2 - t_B) \right) \psi_B, 0 \right\}$$

Then the conditions required by a separating equilibrium are as follows:

(1)
$$(1-t_B)\psi_B \le \psi_A$$

(2)
$$(1-t_A)\psi_A \le \psi_B$$

Because $\psi_A \leq \psi_B$, it is immediate that (2) is always satisfied. That is to say, A's choice of t_A will never determine whether the separating equilibrium is possible. We will therefore see that it is always a weakly dominant strategy for A to select t_A as large as possible. Whether we are in the separating or pooling equilibrium will be in B's hands, with separation occurring whenever t_B is selected to satisfy (1).¹⁷ Analogous to A's choice, then, selecting $t_B = 1 - \frac{\psi_A}{\psi_B}$

16. If instead S first had an opportunity to send the message, followed by the choice by each $I \in \{A, B\}$ of t_I , then trivially, it would be a weakly dominant strategy to set t_I as large as possible. In particular, either the message would have credibly communicated information, after which the choice of t_I is inconsequential, or it would not have credibly communicated information, after which setting t_I as large as possible would be strictly preferred.

17. To ensure that an equilibrium exists, I assume that on the boundary at which the separating equilibrium comes into existence, the pooling equilibrium will still be played.

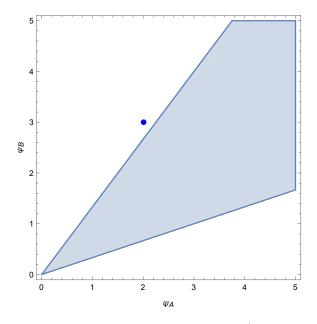


Figure 9: An example in which $\psi_A = 2$, $\psi_B = 3$, $t_A = \frac{1}{4}$, $t_B = \frac{2}{3}$, and pooling occurs. Because *B* can move the upper boundary of the cone, $\psi_B > \psi_A$ implies that *B* is in control of whether separation is possible.

will weakly dominate any $t_B < 1 - \frac{\psi_A}{\psi_B}$. That is to say, if pooling is going to happen, better that t_B be as large as possible. This is summarized in the following lemma:

Lemma 3. It is a weakly dominant strategy for A to set $t_A = \overline{t}_A$. For B, setting $t_B = 1 - \frac{\psi_A}{\psi_B}$ weakly dominates setting t_B smaller.

Proof. See appendix.

However, B also realizes that t_B even larger may bring about separation, at which point the specific choice of t_B otherwise does not matter. Therefore, in determining the equilibrium, we consider B's two candidates for optimal play. First, B can select the largest t_B that is still compatible with pooling. Second, B can select anything larger than that to induce the separating equilibrium. We obtain the main result of this analysis:

Proposition 7. Define $T \equiv \frac{\psi_A \left(1 - (2 - \bar{t}_A) \bar{t}_A\right) + \psi_B}{\psi_A (2 - \bar{t}_A)^2}$. When $p \leq T$, there exists a PBE in which

A sets $t_A = \overline{t}_A$, B sets $t_B = \overline{t}_B$, and separation occurs. When $p \ge T$, there exists a PBE in which A sets $t_A = \overline{t}_A$, B sets $t_B = 1 - \frac{\psi_A}{\psi_B}$, pooling occurs, and $c_B^* = 0$.

Proof. See appendix.

A small value of p, then, means that B prefers separation. That is, when S is not overwhelmingly likely to be aligned with A, it benefits B's policy goals more for both players to be able to identify their friends and enemies. And in keeping with the fact that B is more powerful than A, notice that $T \geq 1/2$, so even if S is somewhat more likely to be aligned with A, it may still benefit B to separate. When p is large, it is remarkable that B can induce pooling by setting t_B sufficiently small but then does not end up having to make any contributions at all. The mere presence of its superior, fungible resources proves tempting enough to opposition Senders such as to destroy any possibility for a separating equilibrium, thus preventing A from being able to identify its friends and enemies.

To explore additional relationships between the equilibrium and parameters, we can look at comparative statics on T. Of course, an increase in T means separation becomes more desirable for B, while a decrease means that pooling becomes more desirable. The result is as follows:

Proposition 8. The threshold T is increasing in \bar{t}_A and ψ_B and decreasing in ψ_A .

Proof. See appendix.

Intuitively, as B becomes more powerful relative to A, separation comes to benefit B more. Finally, as \overline{t}_A increases, A is able to do increasingly well under pooling, eventually inducing B to want to bring about separation.

We conclude two main things from this section. First, if any Receiver were to build the ability to grant something fungible rather than specific, it would have to be the stronger one.

This is a novel explanation for why weaker groups may prefer to pursue a strategy of activism. Second, we see that when enough Senders agree with the weaker group, the stronger group uses the mere existence of its superior, fungible resources to destroy the ability of the weaker group to identify its friends and enemies: remarkably, the stronger group does not actually end up having to contribute anything. This therefore provides an alternative theoretical account of the "missing money" phenomenon, in which, given the enormous financial stakes of public policy, the aggregate amount of campaign donations appears smaller than it should (Chamon and Kaplan 2013).

Appendix D: Formal proofs

Proof to Proposition 2. Denote S of type $\sigma = -1$ as S_L and S of type $\sigma = 1$ as S_R . A separating equilibrium will take the following form:

- 1. Strategy for S_L : set m = L.
- 2. Strategy for S_R : set m = R.
- 3. Strategy for $I \in \{A, B\}$: contribute $c_I^*(1)$ upon observing m = L and contribute $c_I^*(0)$ upon observing m = R.
- 4. Beliefs: $\mu_L = 1$ and $\mu_R = 0$.

Holding fixed the behavior of Receivers, we must check when both Sender types have no incentive to deviate. The utility to S_L from setting m = L will be $-q + \psi_A$ while the utility to S_L from misrepresenting and setting m = R will be $-q + (1 - t)\psi_B$. Then the utility of being truthful will exceed that of misrepresenting when $\frac{\psi_A}{\psi_B} \ge 1 - t$. Next, the utility to S_R from setting m = R will be $q + \psi_B$ while the utility to S_R from misrepresenting and setting m = L will be $q + (1 - t)\psi_A$. Then the utility of being truthful will exceed that of misrepresenting the utility to S_R from misrepresenting and setting m = L will be $q + (1 - t)\psi_A$. Then the utility of being truthful will exceed that of misrepresenting when $\frac{\psi_B}{\psi_A} \ge 1 - t$ or equivalently, $\frac{\psi_A}{\psi_B} \le \frac{1}{1-t}$. Taken together, we require $1 - t \le \frac{\psi_A}{\psi_B} \le \frac{1}{1-t}$. Given this, Beliefs are consistent. Finally, $c_I^* : I \in \{A, B\}$ was already constructed to be optimal.

Proof to Proposition 4. First suppose that $p < \frac{1-t}{2-t}$. By Proposition 3, expected policy under separation will be strictly farther left than that under pooling if and only if

$$\frac{\psi_A}{\psi_B} > 3 - p(2-t)^2 - 2t$$

Notice that the right-hand side is decreasing in p. Next, because $0 \le t \le 1$ implies $p \le 1/2$, Lemma 1 and Proposition 3 imply that a sufficient increase in t cannot make $E[x|\mathbb{P}] - E[x|\mathbb{S}]$ go from positive to negative. Finally, noticing that expected policy under pooling minus that under separation is

$$E[x|\mathbb{P}] - E[x|\mathbb{S}] = q + (1 - p(2 - t))^2 \psi_B - (q + (1 - p)\psi_B + p(-\psi_A))$$

observe that

$$\frac{\partial}{\partial t} \left(E[x|\mathbb{P}] - E[x|\mathbb{S}] \right) = 2p\psi_B(1 - p(2 - t)) > 0$$

Next suppose that $\frac{1-t}{2-t} \le p \le \frac{1}{2-t}$. By Proposition 3, expected policy under separation will be strictly farther left than that under pooling if and only if

$$\frac{\psi_A}{\psi_B} > \frac{p\left(p(t-2)^2 + 2t - 3\right)}{(p-1)\left(p(t-2)^2 - (t-1)^2\right)}$$

Notice that the right-hand side is decreasing in p, and if and only if p > 1/2, is increasing in t.

Lastly, suppose that $\frac{1}{2-t} \leq p$ (implying that $p \geq 1/2$). By Proposition 3, expected policy under separation will be strictly farther left than that under pooling if and only if

$$\frac{\psi_A}{\psi_B} > \frac{1}{p(2-t)^2 - (1-t)^2}$$

Notice that the right-hand side is decreasing in p and increasing in t. Finally, noticing that expected policy under pooling minus that under separation is

$$E[x|\mathbb{P}] - E[x|\mathbb{S}] = q - (1 - p(2 - t) - t)^2 \psi_A - (q + (1 - p)\psi_B + p(-\psi_A))$$

observe that

$$\frac{\partial}{\partial t} \left(E[x|\mathbb{P}] - E[x|\mathbb{S}] \right) = -2(p-1)\psi \mathcal{A}(p(t-2) - t + 1) < 0$$

Proof to Lemma 2. Notice first that within pooling or separation, only the largest ψ_B compatible with said equilibrium can be optimal.

In any Case, if *B* cannot induce separation (i.e. $\psi_A < (1-t)\underline{\psi}_B$), it is clear that setting $\psi_B = \overline{\psi}_B$ is optimal. Suppose instead that $\psi_A \ge (1-t)\underline{\psi}_B$. Then *B*'s expected utility from separation (setting $\psi_B = \frac{1}{1-t}\psi_A$) will be

$$EU_B^{\mathbb{S}} = q + \frac{((1 - p(2 - t))\psi_A}{1 - t}$$

Now suppose that Case 1 holds. *B*'s expected utility from pooling (setting $\psi_B = \overline{\psi}_B$) will be

$$EU_B^{\mathbb{P}} = q + (1 - p(2 - t))^2 \overline{\psi}_B$$

Then $EU_B^{\mathbb{S}} \ge EU_B^{\mathbb{P}}$ implies (and is implied by)

(3)
$$\psi_A \ge (1 - p(2 - t))(1 - t)\overline{\psi}_B$$

so clearly $\tilde{\psi}_A$ is equal to the right-hand side of (3).

Suppose that Case 2 holds. B's expected utility from pooling (setting $\psi_B = \overline{\psi}_B$) will be

$$EU_B^{\mathbb{P}} = q - (1 - p(2 - t) - t)^2 \psi_A + (1 - p(2 - t))^2 \overline{\psi}_B$$

Then $EU_B^{\mathbb{S}} \ge EU_B^{\mathbb{P}}$ implies (and is implied by)

(4)
$$\psi_A \ge \frac{(1-p(2-t))^2(1-t)}{(1-p)(2-t)(1-p(2-t)(1-t)-t(1-t))}\overline{\psi}_B$$

so clearly $\tilde{\psi}_A$ is equal to the right-hand side of (4).

Suppose that Case 3 holds. B's expected utility from pooling (setting $\psi_B = \overline{\psi}_B$) will be

$$EU_B^{\mathbb{P}} = q - (1 - p(2 - t) - t)^2 \psi_A$$

Then $EU_B^{\mathbb{S}} \ge EU_B^{\mathbb{P}}$ implies (and is implied by)

(5)
$$p \le \frac{1 - t(1 - t)}{2 - 3t + t^2}$$

and obviously (5) is unrelated to ψ_A .

Proof to Proposition 5. Given what we know from Lemma 2 about B's choice of ψ_B , A's expected utility from separation in any Case will be

$$EU_A^{\mathbb{S}} = -q + \frac{(p(2-t)-1)\psi_A}{1-t}$$

Then

$$\frac{dEU_A^{\mathbb{S}}}{d\psi_A} = \frac{p(2-t)-1}{1-t}$$

so it follows that $\frac{dEU_A^{\mathbb{S}}}{d\psi_A} < 0$ in Cases 1 and 2, and $\frac{dEU_A^{\mathbb{S}}}{d\psi_A} > 0$ in Case 3. Therefore, we conclude that if A were to induce separation, in Cases 1 and 2, A would set $\psi_A = \max\{\tilde{\psi}_A, (1-t)\underline{\psi}_B\}$ (if B were ever so averse to separation such that $\tilde{\psi}_A > \overline{\psi}_A$, then A simply cannot induce separation and sets $\psi_A = \overline{\psi}_A$). In Case 3, A would set $\psi_A = \overline{\psi}_A$.

Note also that in any Case, given that A chooses to induce pooling, A will set ψ_A as large

as is compatible with this.

Suppose that Case 1 or 2 holds. Suppose first that $\tilde{\psi}_A \ge (1-t)\underline{\psi}_B$. Then at $\psi_A = \tilde{\psi}_A$, A can induce either pooling or separation. But recall that $\tilde{\psi}_A$ is defined as the value of ψ_A such that B is indifferent between pooling and separation, and because the game in Stage 1 is constant-sum, this implies that A is also indifferent between pooling and separation (and of course would not prefer separation at any greater value of ψ_A). We conclude that A sets $\psi_A = \tilde{\psi}_A$ and can assume that when indifferent, A induces pooling.¹⁸ Suppose instead that $\tilde{\psi}_A < (1-t)\underline{\psi}_B$. Because we just demonstrated that A's Stage 1 utility under separation is strictly decreasing in ψ_A , this implies that, since at $\tilde{\psi}_A A$ is indifferent between pooling and separation, at $(1-t)\underline{\psi}_B A$ must strictly prefer pooling. Then A sets $\psi_A = \tilde{\psi}_A$ and induces pooling.

Suppose that Case 3 holds. Suppose that B prefers pooling, i.e. $p \geq \frac{1-t(1-t)}{2-3t+t^2}$. Then B will always set $\psi_B = \overline{\psi}_B$ regardless of ψ_A , so A sets $\psi_A = \overline{\psi}_A$. Suppose instead that B always prefers separation, i.e. $p \leq \frac{1-t(1-t)}{2-3t+t^2}$. Then A can either induce pooling by setting $\psi_A = (1-t)\underline{\psi}_B$ or induce separation by setting $\psi_A = \overline{\psi}_A$. A's utility from pooling is

$$EU_A^{\mathbb{P}}((1-t)\underline{\psi}_B) = -q + (1-p(2-t)-t)^2(1-t)\underline{\psi}_B$$

while its utility from separation is

$$EU_A^{\mathbb{S}}(\overline{\psi}_A) = -q + \frac{\overline{\psi}_A(p(2-t)-1)}{1-t}$$

18. A lexicographic preference relation for A by which A first tries to maximize what is presently given as its Stage 1 utility function and next tries to minimize its Stage 2 cost of contributions would yield this as the optimum, as optimal contributions will be lower under pooling. Then $EU_A^{\mathbb{S}} \ge EU_A^{\mathbb{P}}$ implies (and is implied by)

(6)
$$\overline{\psi}_A \ge \frac{(1-p(2-t)-t)^2(1-t)^2}{p(2-t)-1} \underline{\psi}_B$$

Then clearly A will induce separation by setting $\psi_A = \overline{\psi}_A$ if this condition holds and will induce pooling by setting $\psi_A = (1-t)\underline{\psi}_B$ otherwise. Applying the facts that we are in Case 3 and B always prefers separation, the condition can be rearranged as

(7)
$$p \ge \frac{\overline{\psi}_A - \sqrt{t\overline{\psi}_A \left(\overline{\psi}_A - 4(1-t)^2 \underline{\psi}_B\right)}}{2(1-t)^2(2-t)\underline{\psi}_B} + \frac{1-t}{2-t}$$

Examining the right-hand side of (6), observe that whenever t > 0, we have

$$\lim_{p \downarrow \frac{1}{2-t}} \frac{(1 - p(2 - t) - t)^2 (1 - t)^2}{p(2 - t) - 1} \underline{\psi}_B = \infty$$

implying that approaching the boundary of Case 3 from within the case, (6) will never be satisfied. Next, if t = 0, to be in Case 3 we must have $p \ge 1/2$. Given this, B will be indifferent to separation rather than strictly dispreferring it (implying that A is indifferent) only when p = 1/2. These observations imply that the right-hand side of (7) must be greater than or equal to $\frac{1}{2-t}$. The proposition follows.

Proof to Proposition 6. This follows from the fact that the left-hand side of (6) is increasing in $\overline{\psi}_A$ and the right-hand side is increasing in $\underline{\psi}_B$.

Proof to Lemma 3. As discussed in text, A's choice of t_A cannot determine whether pooling or separation occurs. If pooling will occur, A's Stage 1 expected utility is

$$EU_A^{\mathbb{P}} = \left((1-p)t_A - (1-2p) \right) c_A^*(p; t_A) - \left(pt_B - (2p-1) \right) c_B^*(p; t_B) - q$$

Suppose $p \leq 1/2$ and $t_A < \frac{1-2p}{1+p}$. Then $\frac{\partial EU_A^{\mathbb{P}}}{\partial t_A} = 0$. Suppose instead that either $t_A > \frac{1-2p}{1+p}$ or $p \geq 1/2$ (or both). We have

$$\frac{\partial EU_A^{\mathbb{P}}}{\partial t_A} = 2(1-p)((1-p)t_A - (1-2p))\psi_A > 0$$

Then given that pooling occurs, $t_A = \overline{t}_A$ will always be optimal. Given that separation occurs, A's expected utility is not a function of t_A and similarly, $t_A = \overline{t}_A$ will always be optimal.

A symmetric argument applies to B, except any $t_B > 1 - \frac{\psi_A}{\psi_B}$ will cause the separating equilibrium to exist in the Stage 2 subgame.

Proof to Proposition 7. Analysis of the Stage 2 subgame is discussed in-text an analogous to before.

Next, Lemma 3 tells us two things. First, for A, $t_A = \bar{t}_A$ will always be optimal. Second, given that B chooses to induce pooling, the largest value of t_B compatible with pooling will be selected, namely $1 - \frac{\psi_A}{\psi_B}$. We are left to determine which of two candidates is optimal for B: pooling with $t_B = 1 - \frac{\psi_A}{\psi_B}$ or separation with $t_B = \bar{t}_B$.

Utility to B from separation will be

$$EU_B^{\mathbb{S}} = q - p\psi_A + (1-p)\psi_B$$

To determine utility to B from pooling, allow two cases: $p \leq 1/2$ and p > 1/2. Suppose first that $p \leq 1/2$. Then utility from pooling will be

$$EU_B^{\mathbb{P}} = q + \frac{(-p\psi_A + (1-p)\psi_B)^2}{\psi_B} - c_A^*(p;\bar{t}_A)\big((1-p)\bar{t}_A - (1-2p)\big)$$

Given the assumed constraints on possible parameter values, it can be shown that $EU_B^{\mathbb{S}} \geq$

 $EU_B^{\mathbb{P}}$ must follow.

Suppose instead that p > 1/2. Then utility from pooling will be

$$EU_B^{\mathbb{P}} = q + \frac{(-p\psi_A + (1-p)\psi_B)c_B^*\left(p; 1-\frac{\psi_A}{\psi_B}\right)}{\psi_B} - \psi_A\left((1-p)\bar{t}_A - (1-2p)\right)^2$$

Then $EU_B^{\mathbb{S}} \ge EU_B^{\mathbb{P}}$ implies (and is implied by) $p \le T$.

Suppose that $p \ge T$ and B induces pooling. To see that $c_B^* = 0$, observe that $c_B^*(p; 1 - \frac{\psi_A}{\psi_B}) > 0$ implies $p < \frac{\psi_B}{\psi_A + \psi_B}$, which contradicts $p \ge T$.

Finally, observing that T > 1/2, we find that T will always be the threshold dividing the region of p in which the specified separating equilibrium exists from that in which the specified pooling equilibrium exists.

Proof to Proposition 8. Observe that

$$\begin{split} \frac{\partial T}{\partial \psi_A} &= -\frac{\psi_B}{\psi_A^2 (2 - \bar{t}_A)^2} < 0\\ \frac{\partial T}{\partial \psi_B} &= \frac{1}{\psi_A (2 - \bar{t}_A)^2} > 0\\ \frac{\partial T}{\partial \bar{t}_A} &= \frac{2(\psi_B - (1 - \bar{t}_A)\psi_A)}{\psi_A (\bar{t}_A - 2)^3} > 0 \end{split}$$

Proof to Proposition 2A. Denote S of type $\sigma = 1$ as S_L and S of type $\sigma = 0$ as S_D . A separating equilibrium will take the following form:

- 1. Strategy for S_L : set m = L.
- 2. Strategy for S_D : set m = D.
- 3. Strategy for $I \in \{A, B\}$: contribute $c_I^{*'}(1)$ upon observing m = L and contribute $c_I^{*'}(0)$ upon observing m = D.

4. Beliefs: $\mu_L = 1$ and $\mu_D = 0$.

Holding fixed the behavior of Receivers, we must check when both Sender types have no incentive to deviate. The utility to S_L from setting m = L will be $-q_1 + \psi_A + t(1-t)\psi_B$ while the utility to S_L from misrepresenting and setting m = D will be $-q_1 + t\psi_A + (1-t)\psi_B$. Then the utility of being truthful will exceed that of misrepresenting when $\frac{\psi_A}{\psi_B} \ge 1 - t$. Next, the utility to S_D from setting m = D will be $-q_2 + t(1-t)\psi_A + \psi_B$ while the utility to S_D from misrepresenting m = L will be $-q_2 + t(1-t)\psi_A + \psi_B$. Then the utility of being truthful will exceed that of misrepresenting when $\frac{\psi_A}{\psi_B} \ge 1 - t$. Next, the utility to S_D from setting m = L will be $-q_2 + (1-t)\psi_A + t\psi_B$. Then the utility of being truthful will exceed that of misrepresenting when $\frac{\psi_B}{\psi_A} \ge 1 - t$ or equivalently, $\frac{\psi_A}{\psi_B} \le \frac{1}{1-t}$. Taken together, we require $1 - t \le \frac{\psi_A}{\psi_B} \le \frac{1}{1-t}$. Given this, Beliefs are consistent. Finally, $c_I^{*'}: I \in \{A, B\}$ was already constructed to be optimal.