Power to the People: Credible Communication in the Quotidian Use of Authoritarian Institutions*

William Spaniel[†] Iza Ding[‡] September 25, 2018

Abstract

Authoritarian regimes often develop "input institutions" to gather information on societal preferences. However, these institutions face two underlying challenges. First, more information does not mean good information; citizens may have incentives to misrepresent their preferences. Second, some input institutions can also be "coordination goods" that increase citizens' capacity and willingness to organize and thus their bargaining power vis-à-vis the state. What, then, is the logic of permitting them? We develop a model to investigate the trade-off between information and power in authoritarian institutions. We show that the underlying power transfer through input institutions makes otherwise non-credible elite-mass communication credible. Empirical evidence from East Germany, contemporary China, and contemporary Vietnam illustrates how the balance of power between state and society predicts when and why the regimes promote input institutions.

^{*}The authors contributed equally to the article.

[†]Assistant Professor, Department of Political Science, University of Pittsburgh. (williamspaniel@gmail.com, http://williamspaniel.com).

[‡]Assistant Professor, Department of Political Science, University of Pittsburgh. (yud30@pitt.edu, http://www.izading.com).

1 Introduction

A fundamental challenge states face is the acquisition of accurate information from society (Scott 1998). This is particularly critical for authoritarian regimes, where citizens often act "as if" they revered the regime (Wedeen 1999) or speak in "public transcripts" while concealing their true beliefs (Scott 1990). Preference falsification is a real threat not only to autocratic survival but also to social scientific predictions of regime durability (Kuran 1991; 1995). In Vaclav Havel's famous essay "Power of the Powerless" (1985), a fruit-and-vegetable shopkeeper places a slogan "Workers of the world, unite!" in his window, yet there are myriad of ways in which the subliminal message may be interpreted, ranging from the shop keeper declaring his loyalty to the regime to the shop keeper sarcastically and clandestinely subverting the regime. The information problem modern autocrats face is not so much the lack of information, but poor information.

Poor information about society may lead to unexpected uprisings, as seen in 1953 in the German Democratic Republic and in 1989 in China (Dimitrov 2017). It may also lead to suboptimal policies that can bring about disastrous consequences. During the Great Leap Forward (1958-1962), poor information on commune grain production led to over-procurement of grain and the exacerbation of the famine (Bernstein 1984; Becker 1998; Dikotter 2010; Kung and Chen 2011). Thus, incentivizing society to reveal their true preferences and beliefs—uncovering the "hidden transcripts" of society (Scott 1990)—is critical to authoritarian governance and survival.

Cognizant of this problem, autocrats develop institutions to elicit information (e.g., Little 1976; Reddick, Abdelsalam and Elkadi 2011; Dimitrov 2014a, 2014b). Information can be coercively extracted by surveillance and secret policing. A second method—and the one we focus on in this article—is voluntary information transmission through "input institutions." Input institutions, defined as "institutions that people can use to apprise the state of their concerns" (Nathan 2003: 14), include quasi-responsive petition systems, quasi-independent media, quasi-competitive elections, quasi-representative legislatures, and contained protests (Chen and Xu 2017; Distelhorst and Hou 2017; Lorentzen 2013, 2014; Magaloni 2008; Malesky and Schuler 2010; Manion 2016; Truex 2016).¹

¹In extreme cases, media, electoral, and parliamentary systems do not allow communication from society to the state. These do not meet our definition of input institutions.

Authoritarian regimes face two underlying challenges when using input institutions. First, more information does not necessarily mean good information: the information revealed in elections, parliamentary query sessions, or online petitions may not represent the true preferences of the messengers. Although institutions provide avenues of state-society communication, citizens may still have incentives to lie about their true desires. In highly repressive systems, fear of retaliation may cause citizens to under-represent their preferences. In less extreme circumstances—the case we focus on here—citizens may over-represent their preferences to obtain a better bargain vis-à-vis the state. Hence, the autocrat needs to calculate how to give just enough policy concessions to avoid conflict in the absence of complete information.

Second, input institutions come with an unappreciated risk. Although existing research emphasizes the grievance-diffusing, revolution-proofing aspect of such institutions (King, Pan and Roberts 2013; Nathan 2003), the same institutions can serve as "coordination goods," giving citizens the *incentives* and *tools* to organize against the regime (Bueno de Mesquita and Downs 2005; Dimitrov 2018; Kuran 1991). Elite opposition can use the legislature to coordinate against the autocrat (Svolik 2012). Citizens can use the media to identify shared grievances and communicate with like-minded individuals (Chen and Xu 2017; Dimitrov 2017). In the late 1980s, elections and the liberalization of media during perestroika ushered in regime change in the Soviet Union (Dimitrov 2018). Today, the Internet and social media facilitate regime-threatening protests worldwide (Koesel and Bunce 2013). In short, by providing society with coordination goods, the state effectively transfers power from itself into society's hands.

Why, then, do authoritarian regimes allow input institutions to function, knowing that they can empower a society whose preferences do not necessarily align with the regime? In this paper, we focus on *why* and *when* some autocrats allow and promote input institutions. For instance, why did input institutions expand in East Germany after 1953 and in China after 1989? Further, why have China and Vietnam moved away from input institutions to focus on surveillance-driven information gathering and repression in recent years?

We argue that the twin problems of information-elicitation and power-sharing solve each other in authoritarian institutions. The inherent power transfer from the state to society through input institutions turns otherwise non-credible elite-mass communication credible. For some authoritarian regimes, the state's loss of power is outweighed by policy outputs that fall within the acceptable range of both state and society. Put differently, power loss is not a bug but a feature of input institutions. However, power transfers only occur under certain conditions; we further demonstrate that when society is sufficiently weak or strong, such power transfers are unlikely.

To unravel this logic, we develop a spatial model of elite-mass communication and policy bargaining. An important intuition that drives our model choice is that, for ordinary citizens living under authoritarianism, state-society interactions rarely involve system-challenging claims. On most days, citizens are busy with their lives and are not preoccupied with thoughts of revolution. When they do make claims to the state, they often focus on concrete policy problems and work with or within the established system to obtain the best outcomes (Mertha 2009; O'Brien 1996).² Spatial bargaining is a fundamental part of policymaking in any regime and covers multiple critical domains, such as taxation, environmental protection, and even foreign policy. However, governments face uncertainty about these preferences, and society may wish to misrepresent their ideal points if doing so yields greater concessions from the state.

In search for valuable information on societal preferences, the model begins as the state determines how much power it must transfer to society. Afterward, society sends a cheap talk message regarding its most preferred policy position. There is no quid-pro-quo here; society is free to lie no matter how much power the state gives them. Following that, the state makes a policy proposal. Society can either accept the offer and comply with policy implementation or reject it and resist policy implementation.

Our analysis shows that whether the state initiates a power transfer is a function of the baseline level of societal power. First, when society is already sufficiently powerful, no transfer of power is necessary. Society speaks truthfully about its preferences in the cheap talk stage without additional power. Any additional transfer is a needless concession.

Second, when the baseline level of societal power falls in a moderate range, cheap talk communication from society does not provide meaningful information to the state. Without accurate information, the state's offer will either fail to satisfy society if societal preference is extreme, or it will result in the state giving unnecessary concessions if societal preference is moderate. In this case, the state has an incentive to transfer some

 $^{^2}$ Not all information the state extracts is about policy preferences. However, surveillance institutions rarely transfer power to society as input institutions do.

power to society to acquire better information on societal types.

Finally, when the baseline level of societal power is low, the state faces an identical dilemma if it does not shift power. Transferring power solves the problem. However, because societal power is low, the state must initiate a great transfer to obtain credible information. The state finds making mistakes in its offers cheaper than paying to resolve the information problem. It therefore maintains the status quo distribution of power.

These mechanisms lead to two counterintuitive results. First, power transfer should not be treated as proof positive of a regime's underlying weakness. Surely, governments sometimes cede power to citizens when they are threatened by organized resistance. However, we show that governments can also transfer power to the opposition for their benefit because the information subsequently provided lowers the likelihood of conflict.

Second, greater initial uncertainty can lead to less conflict in bargaining. A common take away from the crisis bargaining literature (e.g., Fearon 1995) is that greater uncertainty increases the likelihood of the miscalculation of an offer and hence conflict. However, we show that a state that is uncertain about the opposition's type is more likely to cede power to obtain better information, whereas a highly confident state would not do so.

2 Information, Power, and Authoritarianism

Authoritarian institutions have yielded a fruitful research agenda in comparative politics. Scholars are especially interested in how institutions bolster or threaten to undermine authoritarian rule. To be clear, not all authoritarian institutions are strategic creations of autocrats: some may predate the incumbent regime and persist due to path-dependency, others emerge due to exogenous or stochastic circumstances (Boettke et al. 2009; Brownlee 2007; Pepinsky 2014). However, others have observed the malleability of authoritarian institutions in both their forms and functions by the regime—especially when compared to their democratic counterparts. The institutionalization of the Malaysian party-state in the 1980s did not prevent Mahathir Mohamad from centralizing power through "packing, rigging, and circumventing" the institutions during his term (Slater 2003). Deng Xiaoping wrote a presidential term limit into the Chinese Constitution—a formal rule of leadership transition that has been thought to have had contributed to the resilience of the Chinese Communist Party (CCP)—only

to be annulled by Xi Jinping some three decades later.

More pertinent for our research question, the literature points to two overall problems these institutions (at both elite and mass levels) resolve, namely, power-sharing (including cooptation and rent-sharing) and information-gathering. Curiously, the literature on elite institutions primarily focuses on the problem of power-sharing (to prevent coups) whereas the literature on societal institutions primarily focuses on the problem of information-gathering (to prevent revolutions).

This distinction is evident in Svolik's book *The Politics of Authoritarian Rule*, in which he argues that the two problems of authoritarian rule are "authoritarian power-sharing" among elites and "authoritarian control" of society (Svolik 2012, 5-13). This expectation is reasonable given the opaque and repressive nature of authoritarian regimes. Yet, there is little reason to believe that the information problem should not exist between regime insiders. Scholars of elite institutions such as parties and legislatures—usually understood as cooptation, rent-sharing, and power-sharing devices—acknowledge that these institutions increase transparency and hence credible commitment among elites (Boix 2003; Boix and Svolik 2013; Gandhi and Przeworski 2006; Jensen, Malesky and Weymouth 2014; Svolik 2009, 2012; Wright 2008).

More importantly, there is little reason to believe that the problem of power-sharing should not exist between the regime and its citizens, as "authoritarian control" is never just about repression, and many institutions have the potential to shift the balance of power in the direction of society. While scholars of authoritarian input institutions argue that they help facilitate regime-society communication (Chen 2012; Nathan 2003; Lorentzen 2013, 2014), the very same institutions may be conceptualized as "coordination goods" that empower potential societal resistance (Bueno de Mesquita and Downs 2005). Protests, the petition system, and the media allow citizens to identify likeminded fellow citizens. Modern communication tools such as the Internet and social media helps coordinate opposition movements.

We demonstrate how the two problems—power-sharing and information-gathering—solve each other in input institutions, which are primarily used to gather policy preferences of citizens. The authoritarian regime's information problem is pronounced in policy-bargaining, which is often *not* a zero-sum game. Using environmental protection as an example, most people do not want 100% economic development or 100% environmental protection in their localities. Most desire a balance between the two.

However, citizens hold this information in secret. Suppose a state that ideally wants to spend 90% of its budget on development and 10% on environmental protection, and it faces two possible types of society: a "moderate" type with an ideal point closer to the state's (e.g., 70% development and 30% environment) and an "extreme" type with an ideal point further away from the states (e.g., 30% development and 70% environment). Both societal types have an acceptable range around their ideal points, and if the state's policy offer falls outside of their acceptable ranges, conflict ensues. We assume that both state and society seek to avoid conflict while trying to obtain the best deal for themselves. During bargaining, a moderate society may pretend to be an extremist to obtain greater concessions from the state. The state, therefore, seeks a deal that is closer to its own ideal point while avoiding conflict by making an offer that falls within society's acceptance range, without knowing society's type.

How, then, can the regime get society to reveal its type? We show that the regime can obtain credible information on societal types by transferring some power. Our framework spatial bargaining is closest to Matthews (1989) and Bils and Spaniel (2018). However, we extend these works by endogenizing power at the beginning of the interaction. This revision has major ramifications: institutional power transfers increase the chances of agreement.

3 Modeling Power to the People

We now formalize the theoretical results. Because we are interested in tensions between society and the state rather than conflicts within society, the game consists of two actors: the state (or \mathbf{G} for "the government") and society (or \mathbf{S}).³ S may be one of two types: "extremist" or "moderate", which we define below. The two parties have preferences over a policy space on the real line. Without loss of generality, let G's ideal point be 0 and S's be $\theta > 0$. Each actor's utility strictly decreases as the implemented policy moves away from its ideal point.

A policy can be implemented in one of two ways. First, the parties can reach an efficient agreement to place the policy at $x \in \mathbb{R}$. In this case, G's payoff is simply

 $^{^{3}}$ We use these labels for convenience. The basic framework extends to other domestic negotiations, including between autocrats and elites.

-|x-0| and S's payoff is $-|x-\theta|$.⁴ Second, the parties can engage in costly conflict to attempt to impose a policy. In other words, S may reject a deal, resulting in protests, strikes, or militarized fighting. In this case, each actor still receives the negative distance between its ideal point and the policy ultimately implemented post-conflict, but they also suffer respective costs c_G , $c_S > 0$.

Play proceeds as follows. Consistent with the notion that these institutions convey information to the government about citizens' policy preferences, we include uncertainty over those preferences. That is, G does not know S's type. To model this, the game begins with Nature drawing S as a "moderate" type with ideal point $\underline{\theta}$ with probability q and as an "extreme" type with ideal point $\overline{\theta} > \underline{\theta}$ with probability 1 - q. One could conceptualize this belief as G's best guess given existing knowledge gathered through its surveillance apparatus. S sees its type but G only knows the prior.

Following this, G chooses $p \in [\underline{p}, 1]$, where \underline{p} represents the current distribution of power in the absence of a transfer. Higher values of p imply that S is more likely to obtain its preferred policy should bargaining break down and conflict begins. Substantively, one can interpret the institutional choice as G designing a forum for discussion of policy preferences or decreasing censorship of the Internet. Choosing a greater value for p means developing an institution that more readily helps citizens overcome collective action problems should conflict begin.

Afterward, S sends a cheap talk message to the government about its type. By definition, whatever message S sends has no direct effect on anyone's payoffs. However, the message can possibly have an indirect effect on payoffs if G can learn about S's type based on the message. Note any information revealed here has no effect on p, which was locked in during the previous stage. This would seem to stack the deck against power transfers and credible communication; it would be comparatively easy to design quid-pro-quo agreements in which G agreed to transfer power in exchange for truthful information revelation. It is therefore all the more surprising that equilibria exist in which G gives away some of its bargaining power.

Negotiations commence in the next stage. We model this as an ultimatum in which G chooses $x \in \mathbb{R}^{5}$ S accepts or rejects it. Accepting implements the policy. Rejecting

⁴Negative Euclidean distance are the simplest utility function that decreases away from an actor's ideal point. Our results extend to other single-peaked loss functions.

⁵In practice, power shifts can have long-lasting effects beyond the single policy decision we analyze here. Our key result—that power shifts can be informative and benefit G by reducing uncertainty—

leads to a costly conflict that probabilistically determines an outcome. Following crisis bargaining models, S emerges victorious with probability p, the level of power G bestowed on S previously. G wins with probability 1-p. The winner then implements its own ideal point. Both pay their respective costs $c_G, c_S > 0$ regardless of the outcome. These costs reflect the lost output of a labor strike, the general economic instability that follows protests, or the loss of life due to armed conflict. Authoritarian regimes fear these costs of instability, which incentivizes them to find solutions (e.g., Chen 2013).

To recap, the sequence of the game is:

- 1. Nature draws S's ideal point as $\underline{\theta}$ or $\overline{\theta}$
- 2. G chooses a level of power for S as $p \in [p, 1]$
- 3. S announces a cheap talk message
- 4. G proposes a policy $x \in \mathbb{R}$
- 5. S sees the proposal and accepts or rejects it

Because this is a sequential game with incomplete information, we search for its perfect Bayesian equilibria. More specifically, we narrow our search to equilibria in which S messages according to a separating equilibrium in the post-shift subgame if one exists. This is because cheap talk games with influential equilibria necessarily also have equilibria in babbling strategies.

Before delving into results with incomplete information, it is worth quickly describing equilibria with complete information. Much of the logic transfers to the richer setting; indeed, if fully separating equilibria in the cheap talk phase exist, then G plays an as-if complete information game for the remainder of the interaction. Consequently, we must know how the complete information game unfolds to check whether the moderate type has any incentive to misrepresent its ideal point.

A type with ideal point θ earns $-|x-\theta|$ for accepting an offer x and earns $-|\theta-\theta|-c_S$ with probability p and $-|0-\theta|-c_S$ with probability 1-p for rejecting. By backward induction, it therefore is therefore willing to accept if:

holds under such circumstances. G may be less willing to initiate transfers if they would be unnecessary for later communication, however.

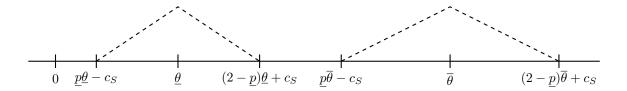


Figure 1: An example parameter space for Proposition 1. The set of acceptable policies for each type (the policies beneath the respective dashed lines) are non-overlapping, which allows separating cheap talk to be credible in the absence of a power shift.

$$-|x - \theta| > -p|\theta - \theta| - (1 - p)|0 - \theta| - c_S$$
$$x \in [p\theta - c_S, (2 - p)\theta + c_S]$$

If 0 is within that range, G can implement its ideal point and does so. If 0 is not within that range, the optimal acceptable offer is $p\theta - c_S$, as that point is the closest to 0 within S's acceptance set. G prefers this to war (due to the inefficiency) and thus proposes that policy.

For the remainder of this paper, we restrict focus to cases where neither type's acceptance set never includes G's ideal point and that G's cost of conflict is sufficiently high.⁶ These cases have similar implications for societal power transfers as the outcomes described below but require separate calculations, so we omit them.

We are now ready to describe the equilibrium outcomes of the full game.

3.1 When Power Transfer Is Unnecessary

To begin, consider cases where the opposition is already in a privileged position:

Proposition 1. Suppose the baseline level of S's power is sufficiently high (i.e., $\underline{p} > \frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \underline{\theta}}$). Then G does not shift power. The types fully separate. G offers $x = \underline{p}\underline{\theta} - c_S$ to the moderate and $x = \underline{p}\overline{\theta} - c_S$ to the extremist. Both types accept.

Figure 1 illustrates this parameter space. When \underline{p} is large, the acceptance sets for each player shrink. In fact, if p is sufficiently large, they no longer overlap. Recalling

⁶Formally, $0 \notin [\underline{p}\underline{\theta} - c_S, (2 - \underline{p})\underline{\theta} + c_S]$ and $c_G > 2\underline{\theta} + c_S$. The former condition implies that the extremist's acceptance set does not include G's ideal point.

that $p\theta - c_S$ is the lower end of a type's acceptance set and $(2 - p)\theta + c_S$ is the upper end, the two types' acceptance sets are non-overlapping even if G chooses p = p when:

$$(2 - \underline{p})\underline{\theta} + c_S < \underline{p}\overline{\theta} - c_S$$

$$\underline{p} > \frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \theta} \equiv p^*$$
(1)

This condition is important because it implies that neither type has incentive to misrepresent; what is acceptable to the moderate is unacceptable to the extremist, and what is acceptable to the extremist is unacceptable to the moderate. Absent communication, G's offer can only appease one type. It would therefore offer just enough to induce that chosen type to accept and finish in conflict with the other type.

Nevertheless, without offers simultaneously acceptable to both types, the types can credibly separate in the cheap talk phase. Suppose that each reports the truth. Then G knows with certainty which type it is facing. The complete information description showed that G offers just enough to induce that type to accept. Neither has incentive to misrepresent during cheap talk because doing so results in an unacceptable offer.

Because the cutpoint showed that the acceptance sets are non-overlapping when the government picks $p = \underline{p}$ and because the acceptance sets shrink in p, any choice for p yields separation. Thus, the government must simply optimize its utility function for p given full information revelation. Increasing p shifts power to the masses and therefore makes the range of mutually acceptable outcomes less favorable to the government. Therefore, the government optimally picks the smallest possible value for p, which is p.

3.2 When Is Buying Information Worth the Power Shift?

The remaining propositions cover cases where the types' acceptance sets are not naturally overlapping, as depicted in Figure 2. Under this condition, cheap talk no longer works without a power shift. This is due to the standard logic of incentives to misrepresent. If G knew it was facing the moderate, it would offer just enough to induce its acceptance, or $p\underline{\theta} - c_S$. If G knew it was facing the extremist, it would offer just enough to induce its acceptance, or $p\overline{\theta} - c_S$. Note that this offer to the extremist lies strictly inside the moderate's acceptance set. Thus, the moderate benefits from tricking G into believing that it is the extremist. Cheap talk fails.

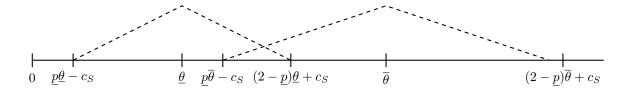


Figure 2: An example parameter space for Propositions 2 through 5. The set of policies preferable to conflict for each type overlap. Consequently, in the absence of a power shift, the moderate type has incentive to misrepresent its ideal point.

The power shift gives the state a solution to society's incentive to misrepresent. If it pushes p to p^* , the acceptance sets no longer overlap.⁷ The types can then separate, alleviate G of its information problem, and allow for efficient settlements. While avoiding costly conflict is attractive to everyone, it is unclear that G would choose this option because doing so comes at a price—namely, the efficient settlements must reflect the opponent's newfound power. The remaining propositions therefore partition the parameter space by the proposal strategy G would choose in the absence of a power shift and whether shifting power is preferable.

Without credible separation, G faces a classic risk-return tradeoff. Its safe strategy is to propose just enough to obtain the extremist's acceptance. This is also sufficiently attractive to the moderate. The benefit here is that the government avoids conflict but sacrifices more favorable settlements that the moderate would have accepted. Alternatively, G could offer just enough to induce the moderate to accept. This outcome is optimal for G if S is the moderate type but results in conflict against the extremist.

When G believes that its opponent is sufficiently likely to be the moderate type, gambling on the aggressive demand (and risking war against the extremist) is preferable to the safe offer. The appendix shows that "sufficiently likely" in this context is:

$$q > \frac{c_G + c_S}{p(\bar{\theta} - \underline{\theta}) + c_G + c_S} \tag{2}$$

The next two propositions cover this case, while the two after cover the opposite.

Proposition 2. Suppose Condition 2 holds but Condition 1 does not. If G's baseline power remains sufficiently high (i.e., $\underline{p} > \frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \underline{\theta}} - \frac{(1-q)(c_G + c_S)}{(1-q)\overline{\theta} + q\underline{\theta}}$), G shifts power to $p = p^*$.

⁷They instead intersect at the singleton point $(2 - p^*)\underline{\theta} + c_S = p^*\overline{\theta} - c_S$. The appendix shows that this is the unique optimal transfer to induce separation.

The types fully separate. G offers $x = p\underline{\theta} - c_S$ to the moderate and $x = p\overline{\theta} - c_S$ to the extremist. Both types accept.

Because Condition 1 does not hold, the types will not separate in the absence of the power shift; because Condition 2 holds, G prefers making the aggressive offer that only the moderate type would accept in the absence of a power shift. G therefore has a simple decision to make. First, it can maintain the current distribution of power and accept some risk of bargaining breakdown. Second, it can increase S's power to exactly p^* to induce the types to separate and then make an offer just big enough to appease the revealed type it is facing.

The final condition of Proposition 2 states that G prefers shifting power when S's baseline level of power is relatively high. Thinking of the extreme case clarifies the logic. Suppose that \underline{p} falls just below p^* . The drawback to paying for effective cheap talk is that it forces G to increase its concessions regardless of what communication reveals. But if shifting to p^* only barely changes the overall balance of power, those extra concessions are essentially irrelevant. Meanwhile, gaining the information saves G its cost of war against the extremist type and also allows it to extract some of the surplus through a settlement. The gains far outweigh the lost bargaining power, and so the government opts to shift to p^* .

This same logic applies in less extreme cases when \underline{p} is not too small. Eventually, learning requires giving up too much bargaining power, causing the government to press its luck in the risk-return tradeoff. The cutpoint $\underline{p} = \frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \underline{\theta}} - \frac{(1-q)(c_G + c_S)}{(1-q)\overline{\theta} + q\underline{\theta}}$ appearing in Proposition 2 defines the starting value of power for which shifting all the way to p^* is no longer worthwhile. The appendix derives this value by calculating G's expected payoff for offering an amount the moderate type is just willing to accept absent a power shift to its payoff for full information revelation after having shifted power to p^* .

An analogous strategic reasoning applies when \underline{p} is less than that critical cutpoint:

Proposition 3. Suppose Condition 2 holds but Condition 1 does not. If S's baseline power is sufficiently low (i.e., $\underline{p} < \frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}} - \frac{(1-q)(c_G+c_S)}{(1-q)\overline{\theta}+q\underline{\theta}}$), G does not shift power. No influential equilibria exist. G offers $x = p\underline{\theta} - c_S$ in all equilibria. The moderate type accepts and the extremist rejects.

Here, G can still buy effective cheap talk by shifting power to p^* . However, because S is relatively weak at the start of the interaction for this parameter space, G must

sacrifice a large percentage of its bargaining leverage to obtain complete information—so much so that it prefers staying unsure. G therefore keeps $p = \underline{p}$. Because the moderate type is sufficiently likely here, G offers just enough to induce the moderate type to accept. Inefficient conflict results if the opposition is an extremist type.

All that remains now is the parameter space where, without a power shift, cheap talk does not convey meaningful information and G prefers making a safe offer that both types accept. The following propositions give the equilibrium outcomes. Broadly, they take on similar forms as Propositions 2 and 3. If \underline{p} is sufficiently large, G prefers buying information; otherwise, it accepts making an offer in the shadow of uncertainty.

Proposition 4. Suppose Conditions 1 and 2 do not hold. If S's baseline power remains sufficiently high (i.e., $\underline{p} > \frac{\left(\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}\right)[(1-q)\overline{\theta}+q\underline{\theta}]}{\overline{\theta}}$), G shifts power to $p=p^*$. The types fully separate. G offers $x=p\underline{\theta}-c_S$ to the moderate and $x=p\overline{\theta}-c_S$ to the extremist. Both types accept.

In fact, Proposition 4 is identical to Proposition 2 except for the different cutpoint. It varies because G's utility function for not shifting power changes. Before, the drawback to its optimal offer was that the extremist type would reject; here, it is that the optimal offer makes an unnecessary concession to the moderate type. As such, G's cost of conflict has no direct impact on its utility function, which partially explains the distinct cutpoint. The appendix derives that cutpoint through the familiar process of comparing G's expected payoff for offering the smallest amount that both types accept under \underline{p} to its payoff for full information revelation under p^* .

As before, the status quo power distribution is a critical determinant of whether shifting bargaining power to S is worth the information gained. If G only needs to shift power a small amount, doing so is worthwhile. This explains the third condition within Proposition 4, which requires \underline{p} to be sufficiently large. It also hints at the outcome when p is not sufficiently large, which the following proposition covers:

Proposition 5. Suppose Conditions 1 and 2 do not hold. If S's baseline power remains sufficiently low (i.e., $\underline{p} < \frac{\left(\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}\right)[(1-q)\overline{\theta}+q\underline{\theta}]}{\overline{\theta}}$), G does not shift power. No influential equilibria exist. G offers $x=p\overline{\theta}-c_S$ in all equilibria. The moderate type accepts and the extremist rejects.

The logic is analogous to Proposition 4: obtaining information requires too great of a power transfer. Thus, G optimizes given the information it has. Because S is

sufficiently likely to be extreme, it offers just enough to convince that type to accept. This amount also falls within the moderate type's acceptance set, so no conflict occurs. G gives the moderate an unnecessary concession because resolving that problem requires giving both types too much additional bargaining power.

3.3 Empirical Implications

To obtain a better understanding of how the propositions fit together, Figure 3 plots the equilibrium outcomes as a function of S's baseline power level (\underline{p}) and prior belief that S is moderate (q). There are two main takeaways from the plot. First, the prevalence of power-shifting institutions is nonmonotonic. When S is initially weak (Propositions 3 and 5), credible cheap talk requires a large power transfer. G instead prefers testing its luck in the risk-return tradeoff. When S is initially strong (Proposition 1), cheap talk works without any transfers, so none are necessary. G only builds power-shifting institutions in the middling cases (Proposition 2 and 4). Note that as the baseline level of power increases within those regions, the size of the power transfer decreases. This is because the goal of the transfer is to shift power to p^* , so larger initial values require less movement to reach that point.

Second, Figure 3 reveals that G has less incentive to acquire information as the probability is facing moderate type goes to 0 or 1. A straightforward intuition explains this. Suppose that G is virtually certain it is facing a moderate. If G does not pay for effective cheap talk, it offers just enough to induce the moderate type to accept. This backfires against the extremist and results in costly conflict, but G perceives of such an outcome as extremely unlikely. Shifting bargaining power to make communication credible eliminates the chances of conflict but requires giving more to the moderate to reach an amicable settlement. However, because the probability of settlement is already close to 1 in the absence of a power shift, avoiding a small chance of conflict is not worth having to pay more to the moderate.

A similar logic prevails when G is virtually certain it is facing an extremist. Here, if G fails to induce separation, it offers just enough for the extremist to accept. This is also within the acceptance set of the moderate, though G gives an unnecessary concession to the moderate in this case. Shifting bargaining power to make communication credible eliminates that overpayment but requires giving both types additional concessions.

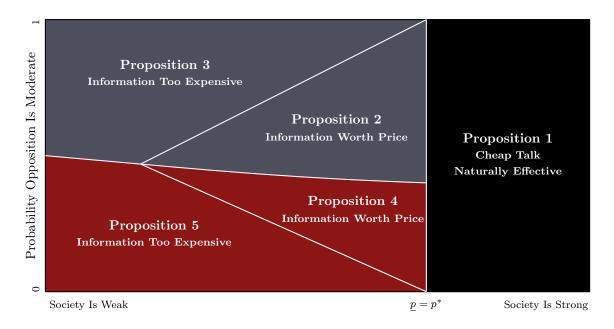


Figure 3: Equilibrium outcomes for as a function of p and q.

However, because the probability of overpaying the moderate is close to 0 (because G is almost certainly facing the extremist), minimizing the probability of overpayment is not worth having to concede bargaining power to both types.

This suggests that regimes facing less uncertainty are less inclined to institutionalize power transfers. To see why, note that a prior distribution of either q=0 or q=1 minimizes G's uncertainty.⁸ Such prior beliefs correspond to regimes with strong domestic surveillance capable of discovering citizen preferences. These regimes likely know whether their citizens have moderate or extreme preferences. Under such conditions, governments do not feel the need to concede bargaining power. Meanwhile, pushing away from those points of certainty forces regimes to substitute surveillance capability with power shifts. In short, poorly-informed regimes are more likely to initiate power transfers to remedy their surveillance problems.

The ability to compensate for intelligence problems by shifting power leads to an unexpected result. Intuitively, one would expect that poorly-informed regimes are those most likely to encounter protests, strikes, or open rebellion. The model qualifies that intuition. Conflict only occurs under the parameters of Proposition 3, in which cheap

⁸This is because the variance of a Bernoulli distribution is 0 when q equals 0 or 1.

talk fails and G gambles on a proposal only the moderate type accepts. As Figure 3 illustrates, that parameter space persists when G has a strong prior belief (i.e., when q is close to 1). Dropping to a less informed prior belief can push the parameters to Proposition 2, in which peace occurs with certainty. Put differently, when G is more poorly informed, conflict becomes less likely.

What accounts for this counterintuitive result? When G is almost certain it is facing a moderate, improving S's outside option to acquire information is not worth the loss of bargaining power. This is because such a power shift hurts G whenever S is moderate, which is likely. In turn, G's proposal leads the extreme type to fight. Conflict is not likely in expectation due to the low probability of facing an extreme type but nevertheless occurs with strictly positive probability.

However, when the prior belief drops to the parameters of Proposition 2, G's information problem deepens. Yet the greater uncertainty incentivizes G to buy information. That is, not giving up power to learn S's type costs G more than before because S is more likely to reject. Recognizing the informational quandary, G prefers giving a better deal to moderates so as to avoid conflict with extremists. Situations that resulted in conflict with positive probability before now see no chance of bargaining breakdown.

4 Discussion

What do the strategies autocratic regimes pursue in practice look like? We now operationalize key independent variables (i.e., a model's parameters) and investigate whether the game's dependent variables (i.e., the equilibrium and associated comparative statics) match the model's expectations (Goemans and Spaniel 2016; Lorentzen, Fravel, and Paine 2017). As highlighted in the empirical implications section, our key independent variable is society's baseline level of power (\underline{p}) , with and the government's prior belief about societal types (q) also influencing the equilibrium outcome. Our main dependent variable is whether power-transfer through the creation or utilization of information institutions takes place.

Specifically, we select three historical or contemporary communist regimes: East Germany to represent low societal power, contemporary China to represent moderate societal power, and contemporary Vietnam to represent high societal power. We argue that each inhabits a different point within Figure 3's parameter space and then explore

the state's logic of institutionalized power transfers. We also explore critical junctures within each regime. In the cases of East Germany, we explain the logic of institutional development after 1953. In the cases of China and Vietnam, we demonstrate the logic behind a cessation of institutionalized power transfer in recent years.

4.1 When Societal Power is Low: East Germany

Closed communist regimes are often thought to be irrationally ideological and sadistic. From the perspective of regime survival, perceived regime irrationality is overblown (Lankov 2014). The Soviet Union and its satellite states were among the longest-lasting modern autocracies (Geddes 1999); North Korea's seemingly erratic nuclear brinksmanship has successfully prolonged a small power with a stagnant economy. Communist authoritarian regimes are also known to be repressive, yet the vast variation of state power vis-à-vis society across communist regimes as well as the longitudinal changes in state-society relations within single regimes remain rarely tapped.

East Germany represents a distinct case of low societal power vis-à-vis the state. Effective state repression in East Germany is often attributed to its Ministry for State Security, also known as the Stasi: "Probably no other dictatorship in modern history has had such an extensive and fanatically thorough secret police as East Germany had" (Ash 1998, 163-164). The Stasi served two functions: first, to identify foreign spies and domestic collaborators; second, to gauge public opinion: "to know everything about everyone, using any means it chose" (Funder 2011, 15). The East German regime's high coercive power means that it had few incentives to promote institutions that gather *voluntary* information revelation from society.

However, the Stasi's ability to reconnoiter and repress was not foolproof, and its functions evolved over time in response to changing societal power. In the 1940s and early 1950s, the Stasi was primarily interested in identifying foreign enemies within society and paid less attention to general public opinion (Bruce 2003). In June 1953, following Stalin's death and economic difficulties, East German authorities raised the prices on sugar and working demands. Workers in East Berlin went on strike, which quickly turned into a nationwide uprising involving more than a million people.

The 1953 uprising came as a shock to authorities in East Germany and led to two institutional changes. First, the regime had recognized its information problem: that

"overt discontent" did not reflect "latent discontent" (Dimitrov 2017: 26-27). The failure of the Stasi to predict and prevent the 1953 uprising led to an intensification of its surveillance operations. The Zentrale Auswertungs und Informationsgruppe (ZAIG; Central Evaluation and Information Group) was created to closely "monitor the public mood" (Dimitrov 2017: 24). The regime also enlisted a large number of citizen informers to provide information on others—about one out of fifty adult East Germans directly worked for the Stasi (Ash 1998).

More importantly, authorities realized that they had under-estimated societal power, and, as a result, started promoting the use of *Eingabenwesen* ("input processing" or "grievance processing") to collect and resolve societal grievances at the local level. Although the first constitution in East Germany allowed citizens the right to "submit petitions to the popular representative body" (Class, Kohler and Krawietz 2018: 2), the use of *Eingabenwesen* became far more prevalent to the regime after the 1953 crisis.

The Stasi's remarkable repression and coercive information extraction capability partly explains why no more uprisings occurred in East Germany between 1953 and 1989. However, repression was not the only answer. *Eingaben*, like its counterparts in other East European communist regimes, served as a "barometer of public opinion" for authorities, allowing them to "identify problems with policy implementation, track corruption, and to monitor the level of popular trust in the regime" (Dimitrov 2014: 271). Contrary to conventional wisdom, the relative domestic stability of the East German regime lied not only in repression but also in the "olive branch to the population through conciliation and compromise" (Bunce 2007; Port 2007). Even though the balance of power heavily favored the state throughout the regime's lifespan, and input institutions functioned at a much smaller scale compared to its contemporary Chinese or Vietnamese counterparts, the East German regime's response to the 1953 protests sheds light on how *voluntary* input institutions lead to better information for the regime.

4.2 When Societal Power is Moderate: Contemporary China

Contemporary China represents a case of moderate societal power among communist authoritarian regimes. The 1989 student movement on Tiananman Square was many things, but from the perspective of policy negotiation, the violent conflict in June was partly caused by a bargaining breakdown between state and society. The student move-

ment taught the CCP two lessons. First, society was willing and capable of organizing into large-scale resistance to challenge its mandate. Second, better information was needed to avoid similar surprises in the future.

In the immediate aftermath of the Tiananmen protests, central authorities sent decrees to local governments demanding the strengthening of "letters and visits" (the petitioning system) work (Dimitrov 2017: 35). As a result, petitions increased in the decade that followed. Dimitrov (2018) argues that the state's strategic expansion of the utilization of petitions was indeed to improve its information on societal preferences. Petitions, along with other input institutions, such as local elections and quasi-independent mass media give citizens channels to voice their opinion and express their concerns to the state, while the state actively collects, analyzes, and responds to public opinion expressed through input institutions. According to Nathan (2003), input institutions contributed to the surprising resilience of the Chinese Communist Party (CCP) following the 1989 events.

It is worth noting that a prevailing view about input institutions is that they individualize and localize societal grievances and make citizens believe that they have power and influence on policy decisions (Nathan 2003). This argument is supported by existing research. King, Pan and Roberts (2013) show that the state censors online posts with collective action potential but not criticism of the government. Lorentzen (2014) argues that strategic censorship—allowing lower-level reporting, but silencing information on collective action—helps improve governance without sacrificing stability. Chen and Xu (2017) argue that allowing citizens to communicate with each other online may disorganize the public when they realize that they disagree over policy issues.

However, it is questionable whether the intention of breaking up collective expression of group-based grievances through input institutions has been successful. After all, the number of protests has been steadily increasing since the 1990s (Tanner 2004; Chen 2012). Although, with the exception of the Falungong protests, there have been few large-scale, regime-threatening protests since 1989, cross-cutting social movements are not rare, spanning various policy domains such as environmental protection, labor relations, and foreign policy, drawing vast amounts of protesters from various socioeconomic backgrounds (Lee 2007; Weiss 2014). The rise in the frequency of collective grievance articulation is not only due to rising "rights consciousness" but also the growing numbers of institutional tools that allow communication and coordination among citizens.

The Internet—social media in particular—facilitates protest organization (Koesel and Bunce 2013). For a few months in 2016, Walmart workers across China—from the northern "rustbelt" to the southern "sunbelt"—went on strike through coordination on a popular messenger app WeChat (Hernandez 2016). Suffice to say, input institutions give society real power to organize against the state.

In recent years, propaganda, censorship as well as state-sponsored manipulation of public information has been increasingly rampant (Huang 2017; King, Pan and Roberts 2017; Stockman 2013; Stockmann and Gallagher 2011). This, however, does not conflict with our model's expectations. As society grows stronger, the state would cap the use of input institutions because information is not worth the price in the face of a sufficiently strong society. Furthermore, the CCP under Xi has been vigorously developing its surveillance capacity to compensate for the problem of *poor* information without having to cede more power through input institutions.

4.3 When Societal Power is High: Contemporary Vietnam

Contemporary Vietnam offers an example of a relatively strong society in a single-party communist regime, especially compared to its Chinese neighbor. Though both China and Vietnam receive the worst score on political rights from Freedom House, Vietnam's society is stronger on two fronts. First, for historical reasons, Vietnam's political institutions are more competitive than China's, with "greater checks and balances" and "a larger governing coalition" (Abrami, Malesky and Zheng 2013; Malesky, Abrami and Zheng 2011). It may be argued that more competitiveness in the political sphere leads to a stronger society that can exploit elite cleavages. Freedom House places Vietnam's civil liberty score consistently above China's. Political dissidents receive more lenient sentencing in Vietnam than in China.

A second source of societal power in Vietnam is the uncontrolled rise of the Internet and social media. While the Chinese government developed domestic counterparts to Facebook, Twitter, and Google (Weibo, WeChat, and Baidu), the Vietnamese government has not. First, the Vietnamese government lacks the technological and administrative capacity to develop powerful domestic social media alternatives; the domestic search engine CocCoc has simply failed to attract users. Second, to keep attracting FDI for developmental purposes, the Vietnamese state lacks the political capacity to censor

western sites and social media applications. The OpenNet Initiative (2012) found that the level of content filtering is higher in China than in Vietnam. An uncontrolled expansion of information institutions has given Vietnamese society an exogenous dose of baseline power. The Internet has become a "contested space": dissidents use blogging tools to spread anti-governmental discourses and use social networking sites—Facebook in particular—to organize against the state (OpenNet Initiative 2012).

Strong societal power points to Proposition 1's parameter space, where p is large. The model predicts that the government would not want to transfer additional leverage, as society can already transmit credible information. How the Vietnamese state has responded to uncontrolled societal power is consistent with our model's expectation. In this case, the state sees little utility in further expanding input institutions because it believes that society is communicating their preferences truthfully. In turn, the state minimizes societal power to the best of its abilities. We correspondingly observe a clear increase in repression and censorship in recent years. In summer 2017, a popular blogger Nguyen Ngoc Nhu Quynh—known online as "Mother Mushroom"—was sentenced to 10 years in prison for conducting "anti-state propaganda." It is the one of the longest sentences a dissident has received in reform-era Vietnam. A high baseline level of societal power means the state has little incentive in acquiring better information through institutionalized power transfer.

5 Conclusion

In this paper, we call attention to two under-appreciated problems in authoritarian governance. First, rather than a lack of information, contemporary autocrats face the problem of *poor* information, which may lead to the breakdown of state-society bargaining. Second, just as how elite institutions facilitate power-sharing among the ruling coalition, input institutions of elite-mass communication also empower society with coordination goods, which may potentially endanger regime survival.

With these puzzles in mind, we develop a spatial bargaining model that endogenizes societal power vis-à-vis the state at the beginning of the interaction to demonstrate how institutionalized power-transfers lead to a more certain informational environment. We also demonstrate why power-transfers occur when societal power is not overly high or low. In other words, the two problems of authoritarian rule—information-gathering

and power-sharing—solve each other.

Our model explains why the communist regime in East Germany expanded input institutions after the 1953 uprising; why the Chinese Communist Party expanded input institutions after 1989, but in recent years has shifted its strategy to developing surveillance apparatus while constraining input institutions; and why the Communist Party in Vietnam has cracked down on input institutions in recent years after they gave Vietnamese society an exogenous dose of power. Finally, we contribute to the literature of authoritarian governance by acknowledging the non-zero-sumness of many forms of policy bargaining and applying spatial bargaining to authoritarian governance.

Although we have primarily focused on state-society relations in domestic politics, our model has implications for international relations. Unlike our substantive discussion, however, bilateral power shifts between countries face a barrier not present in intrastate negotiations. For example, Country A might wish to reduce its military allotment to obtain better information about Country B. Although doing so may increase its bilateral bargaining welfare, reducing power has negative consequences in bargaining with Country C and Country D. Thus, any resolution in international affairs must overcome that problem.

6 Appendix

Our proof method has two steps. We begin by developing two lemmas that describe the subgames for all values of p possible. From there, G's optimization problem is picking the value of p that maximizes its payoff. This second part covers the propositions found in the main text.

6.1 Solution to the Post-Shift Subgame

There are two possibilities, which we differentiate by whether a separating equilibrium exists or not.

Lemma 1. Suppose $p \geq \frac{2(\underline{\theta} + c_S)}{\underline{\theta} + \overline{\theta}}$. A separating equilibrium exists. G offers $p\underline{\theta} - c_S$ following a low signal and $p\overline{\theta} - c_S$ following a high signal.

Suppose the types separate. Then G has complete information about the opposition's preferences. So suppose G receives the moderate signal. The moderate's payoff

for war is therefore:

$$-p|\theta - \theta| - (1-p)|0 - \theta| - c_S$$

Its payoff for peace is just $-|x-\underline{\theta}|$. It therefore accepts x if

$$-|x - \underline{\theta}| \ge -(1 - p)\underline{\theta} - c_S$$

 $|x - \underline{\theta}| \le (1 - p) + c_S$

Solving for the cases, x is acceptable if $x \in [p\underline{\theta} - c_S, (2-p)\underline{\theta} + c_S]$.⁹ If G offers something outside that acceptance set, its war payoff equals:

$$-p|0 - \underline{\theta}| - (1-p)|0 - 0| - c_G$$
$$-p\theta - c_G$$

Because G's payoff decreases going away from its ideal point, its optimal acceptable offer is the smallest value inside of the moderate's acceptance set. This is preferable to war if:

$$-p\underline{\theta} + c_S \ge -p\underline{\theta} - c_G$$
$$c_G + c_S \ge 0$$

This is true. So G offers $p\underline{\theta} - c_S$, and moderate accepts.

By analogous argument, if the extreme type sends the extreme signal, G offers $p\bar{\theta} - c_S$ and the extremist accepts.

Now check for profitable deviations. If the extremist sends the moderate signal, it receives an offer of $p\underline{\theta} - c_S$. It would reject this because $p\underline{\theta} - c_S < p\overline{\theta} - c_S$ and receive its war payoff. But maintaining the proposed equilibrium strategy already generates its war payoff, so this is not a profitable deviation.

If the moderate sends the extreme signal instead, it receives an offer of $p\theta - c_S$. This is not strictly within the moderate's acceptance set if:

⁹We assume that S accepts an offer on the bound of its acceptance set. For the standard reasons found in the ultimatum game, no equilibria exist if S were to take any other action instead.

$$(2-p)\underline{\theta} + c_S \le p\overline{\theta} - c_S$$
$$p \ge \frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \theta}$$

This is given by Lemma 1's parameters. One of two things is true. If the inequality holds strictly, then the moderate rejects and receives its war payoff. But maintaining the proposed equilibrium strategy already generates its war payoff, so this is not a profitable deviation. If the inequality holds with equality, then the moderate is indifferent between accepting that amount and accepting the amount it would receive if it maintained its strategy. Again, this is not a profitable deviation.

Lemma 2. Suppose $p < \frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \underline{\theta}}$. No influential equilibria exist. In all equilibria, if $q > \frac{c_G + c_S}{\overline{p(\overline{\theta} - \underline{\theta})} + c_G + c_S}$, then G offers $x = p\underline{\theta} - c_S$. The moderate accepts and the extremist rejects. In all equilibria, if $q < \frac{c_G + c_S}{\overline{p(\overline{\theta} - \underline{\theta})} + c_G + c_S}$, then G offers $x = p\overline{\theta} - c_S$. Both types accept.

We begin by demonstrating that these are the equilibrium strategies for the babbling equilibrium. If the types babble, then G's posterior is its prior. The optimal offer must be $p\underline{\theta} - c_S$, $p\overline{\theta} - c_S$, or $(2-p)\underline{\theta} + c_S$. The reasoning is as follows. First, any offer less than $p\underline{\theta} - c_S$ results in rejection from both types. G could improve by offers $p\underline{\theta}$ to capture some of the surplus from the moderate while maintaining its war payoff against the extreme type.

Second, any offer greater than $(2-p)\underline{\theta} + c_S$ results in rejection from the moderate and either rejection or acceptance from the extremist. If the extremist rejects, then the deviation from the first case is also profitable here. If the extremist accepts, then the offer gives a needless concession. G could profitably deviate to a slightly smaller offer that is still greater than $(2-p)\underline{\theta} + c_S$. This maintains the same response strategies but results in a strictly preferable policy against the extremist.

Third, any offer between $p\underline{\theta} - c_S$ and $p\overline{\theta} - c_S$ maintains the extremist's rejection while unnecessarily placing the offer accepted by the moderate further from G's ideal point. G can therefore profitably deviate to a policy slightly smaller offer still bounded above $p\underline{\theta} - c_S$. This generates a strictly greater payoff against the moderate while maintaining its breakdown payoff against the extremist.

Finally, any offer between $p\overline{\theta} - c_S$ and $(2-p)\underline{\theta} + c_S$ results in both types accepting.

But G could deviate to a policy strictly between that one and $p\overline{\theta} - c_S$. Both types must still accept. However, with the deviation, G pulls the policy closer to its ideal point.

We now compare G's utility for offering $p\overline{\theta} - c_S$ and $(2 - p)\underline{\theta} + c_S$. The offer $(2 - p)\underline{\theta} + c_S$ is on the upper bound of the moderate's acceptance set. We assume that the moderate rejects under these circumstances.¹⁰ Given that, G prefers the safe $p\overline{\theta} - c_S$ if:

$$-(p\overline{\theta} - c_S) > -q(p\underline{\theta} + c_G) - (1 - q)((2 - p)\underline{\theta} + c_S)$$
$$p < \frac{2\underline{\theta}(1 - q) + qc_G + (2 - q)c_S}{\overline{\theta} + \underline{\theta} - 2q\underline{\theta}}$$

For this to be possible within the parameter space, it must be that this cutpoint on p is less than the cutpoint for the existence of a separating equilibrium, or $\frac{2\underline{\theta}+c_S}{\overline{\theta}+\underline{\theta}}$. Thus, G would never offer $(2-p)\underline{\theta}+c_S$ within this parameter space if:

$$\frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \underline{\theta}} < \frac{2\underline{\theta}(1 - q) + qc_G + (2 - q)c_S}{\overline{\theta} + \underline{\theta} - 2q\underline{\theta}}$$

Both are positive values. The denominator of the right hand side is less than the denominator of the left hand side. Therefore, a sufficient condition for this to hold is that the numerator of the left hand side is less than the numerator of the right hand side, or

$$2(\underline{\theta} + c_S) < 2\underline{\theta}(1 - q) + qc_G + (2 - q)c_S$$
$$c_G > 2\underline{\theta} + c_S$$

This is the condition that appeared in the main body.

With $(2-p)\overline{\theta} + c_S$ eliminated, we now compare G's utility for offering $p\underline{\theta} - c_S$ versus $p\overline{\theta} - c_S$. The first option results in peace with the moderate and war with the extremist; the latter induces peace with certainty. Thus, G prefers the riskier offer targeted toward the moderate if:

$$-q(p\underline{\theta} - c_S) + (1 - q)(-p\overline{\theta} - c_G) > -(p\overline{\theta} - c_S)$$

¹⁰Like before, this is just a simplifying assumption. No equilibria exist where the moderate accepts with positive probability because G could make a profitable deviation to a different offer for any other response strategy.

$$q > \frac{c_G + c_S}{p(\overline{\theta} - \underline{\theta}) + c_G + c_S} \equiv q^*$$

By analogous argument, G prefers the safe offer if q is less than q^* and is indifferent when q equals q^* .

Now we show that there cannot be any influential equilibria. For this game, an influential equilibrium entails a different offer strategy from G following the communication from S than what occurs in the babbling equilibrium. Note for the rest of this proof that the above logic dictates that G can only offer $p\underline{\theta} - c_S$ or $p\overline{\theta} - c_S$ regardless of its posterior belief following communication.

First, consider influential equilibria in which the optimal offer is $p\underline{\theta}-c_S$. An influential equilibrium would require G to offer $p\overline{\theta}-c_S$ with positive probability. This cannot happen with probability 1 because the partition of signaling strategies would have to result in both posterior beliefs being below q^* , which is not possible when q starts weakly above q^* . Thus, an influential equilibrium must have G offer $p\overline{\theta}-c_S$ with some probability strictly between 0 and 1. This cannot happen with signaling strategies in which the moderate type mixes. Mixing requires the moderate to be indifferent between the two signals, but the moderate has a strict preference to receive the $p\overline{\theta}-c_S$ offer. It cannot happen if the moderate type uses a pure signaling strategy either. This would require the moderate to receive the $p\overline{\theta}-c_S$ offer for the moderate to not have a profitable deviation. But then the extremist must be frequent enough to warrant G to make that offer optimally. This is not possible because the posterior would still be below q^* even if the extremist issued the same signal as a pure strategy. Therefore, no influential equilibria exist here.¹¹

Second, consider influential equilibria in which the optimal offer is $p\overline{\theta}-c_S$. Because $q \leq q^*$, some posterior belief following the signals must result in G having a strict preference for the offer $p\overline{\theta}-c_S$. The moderate can therefore never signal something that results in an offer of $p\underline{\theta}-c_S$ because it could instead deviate to whatever signal generates the offer $p\overline{\theta}-c_S$. Thus, if G offers $p\underline{\theta}-c_S$, S must be the extremist. But G would only want to offer $p\overline{\theta}-C_S$ to an extremist. Therefore, no influential equilibria exist here as well.¹²

¹¹Informative equilibria—equilibria in which G's belief following the signal is not equal to its prior—do exist here. However, all posteriors following the messaging strategies still equal a value above q^* , maintaining G's optimal offer of $p\underline{\theta} - c_S$.

¹²Informative equilibria exist here also. However, all posteriors following messaging strategies still

6.2 Proof of the Main Propositions

We now prove the paper's main claims. All that is left is to solve for G's optimal power shift value p. This is a constrained optimization problem complicated by the fact that the cutpoint between the parameters of Lemmas 1 and 2 is a function of p. In fact, shifting p to sufficiently high values can move the parameters from Lemma 1 to Lemma 2.

We begin by analyzing G's utility for p values at least as large as $\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}$. The types separate, with the moderate receiving an offer of $p\underline{\theta}-c_S$ and the extremist receiving an offer of $p\overline{\theta}-c_S$. Weighing each of those cases by their relative likelihoods, G's utility equals:

$$-q(p\underline{\theta} - c_S) - (1 - q)(p\overline{\theta} - c_S)$$
$$-p[(1 - q)\overline{\theta} + q\underline{\theta}] + c_S$$

Simple examination of this shows that the value strictly decreases in p. Thus, if G wishes to choose a value of p within this range, it chooses the minimum value. This proves Proposition 1, which investigated parameters where $\underline{p} > \frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \underline{\theta}}$ and concluded that G selects the minimum value \underline{p} . Note also that it implies that should G wish to increase p beyond $\frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \theta}$ for parameters in which $\underline{p} < \frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \theta}$, it would select $\frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \theta}$.

increase p beyond $\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}$ for parameters in which $\underline{p}<\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}$, it would select $\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}$. With that in mind, suppose $\underline{p}<\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}$ and $q>\frac{c_G+c_S}{p(\overline{\theta}-\underline{\theta})+c_G+c_S}$. G's utility for choosing a p value below the $\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\theta}$ threshold is:

$$-q(p\underline{\theta} - c_S) + (1 - q)(-p\overline{\theta} - c_G)$$
$$-p[(1 - q)\overline{\theta} + q\underline{\theta}] + q(c_G + c_S) - c_G$$

Simple examination of this shows that the value strictly decreases in p. Thus, if G wishes to choose a value of p within this range, it chooses the minimum value. For this parameter range, that minimum value is \underline{p} . Thus, G can only improve its welfare if there is some jump in its utility at the cutpoint between Lemmas 1 and Lemma 2. We can check this by comparing the utility for $p = \frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \theta}$ to the utility for $p = \underline{p}$:

equal a value below q^* , maintaining G's optimal offer of $p\bar{\theta} - c_S$.

$$-\left(\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}\right)\left[(1-q)\overline{\theta}+q\underline{\theta}\right]+c_S > -\underline{p}\left[(1-q)\overline{\theta}+q\underline{\theta}\right]+q(c_G+c_S)-c_G$$

$$\underline{p} > \frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}-\frac{(1-q)(c_G+c_S)}{(1-q)\overline{\theta}+q\underline{\theta}}$$

Thus, if \underline{p} is greater than that critical threshold, G moves p to $\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}$. By analogous argument, if \underline{p} is less than that critical threshold, G maintains \underline{p} . This completes the proof for Propositions 2 and 3.

Now suppose $\underline{p} < \frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \underline{\theta}}$ and $q < \frac{c_G + c_S}{p(\overline{\theta} - \underline{\theta}) + c_G + c_S}$. If G chooses a p value below the $\frac{2(\underline{\theta} + c_S)}{\overline{\theta} + \underline{\theta}}$ threshold, one of two things can happen. First, its optimal offer could stay $p\overline{\theta} - c_S$. In that case, G's utility equals $-p\overline{\theta} + c_S$. This clearly decreases in p, so choosing something less than the threshold is never optimal. It is also possible that it switches G's optimal offer to $p\underline{\theta} - c_S$. However, we already know that G's utility for such an offer decreases in p and also that choosing \underline{p} and keeping the offer at $\underline{p}\overline{\theta} - c_S$ is better than offering $p\underline{\theta} - c_S$.

Thus, G's optimal p is either $\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\theta}$ or $\underline{p}\overline{\theta}-c_S$. The former is better if:

$$-\left(\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}\right)\left[(1-q)\overline{\theta}+q\underline{\theta}\right]+c_S > -\underline{p}\overline{\theta}+c_S$$

$$\underline{p} > \frac{\left(\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}\right)\left[(1-q)\overline{\theta}+q\underline{\theta}\right]}{\overline{\theta}}$$

Thus, if \underline{p} is greater than that critical threshold, G moves p to $\frac{2(\underline{\theta}+c_S)}{\overline{\theta}+\underline{\theta}}$. By analogous argument, if \underline{p} is less than that critical threshold, G maintains \underline{p} . This completes the proof for Propositions 4 and 5.

7 Works Cited

Ash, Timothy. 1997. The File: A Personal History. Random House LLC.

¹³This can happen because the cutpoint on q is a function of p.

- Abrami, Regina M., Edmund Malesky, and Yu Zheng. 2013. "Vietnam through Chinese Eyes: Divergent Accountability in Single-Party Regimes." In Why Communism Did Not Collapse: Understanding Authoritarian Regime Resilience in Asia and Europe, edited by Martin Dimitrov. New York: Cambridge University Press.
- Becker, Jasper. 1998. Hungry Ghosts: Maos Secret Famine. Macmillan.
- Bernstein, Thomas P. 1984. "Stalinism, famine, and Chinese peasants." Theory and Society 13 (3): 339-377.
- Bils, Peter and William Spaniel. 2018. "Policy Bargaining and Militarized Conflict."

 Journal of Theoretical Politics. 29 (4): 647-678.
- Boix, Carles. 2003. Democracy and Distribution. New York: Cambridge University Press.
- Boix, Carles, and Milan W. Svolik. 2013. "The Foundations of Limited Authoritarian Government: Institutions, Commitment, and Power-Sharing in Dictatorships Journal of Politics 75 (2): 300-316.
- Brownlee, Jason. 2007. Authoritarianism in an Age of Democratization. New York:

 Cambridge University Press.
- Bruce, Gary S. 2003. "The prelude to nationwide surveillance in East Germany: Stasi operations and threat perceptions, 19451953." Journal of Cold War Studies 5 (2): 3-31.
- Bruce, Gary. 2007. "The GDR as a Responsive Dictatorship." in H-Net Reviews in the Humanities & Social Sciences. https://www.h-net.org/reviews/showpdf.php?id=13766

- Bueno de Mesquita, Bruce, and George W. Downs. 2005. "Development and Democracy." Foreign Affairs 84 (5): 77-86.
- Chen, Jidong, and Yiqing Xu. 2017. "Why Do Authoritarian Regimes Allow Citizens to Voice Opinions Publicly?" *Journal of Politics* 79 (3): 792-803.
- Chen, Xi. 2013. "The Rising Cost of Stability." Journal of Democracy 24 (1): 57-64.
- Class, Fabian, Ulrich Kohler, and Marian Krawietz. 2018. "The Potsdam Grievance Statistics File." Historical Methods: A Journal of Quantitative and Interdisciplinary History.
- Diktter, Frank. 2010. Mao's great famine: The history of China's most devastating catastrophe, 1958-1962. Bloomsbury Publishing USA.
- Dimitrov, Martin K. 2014a. "Tracking Public Opinion under Authoritarianism." Russian History 41 (3): 329-353.
- Dimitrov, Martin K. 2014b. "What the Party Wanted to Know: Citizen Complaints as a 'Barometer of Public Opinion' in Communist Bulgaria." East European Politics and Societies 28 (2): 271-295.
- Dimitrov, Martin K. 2017. "Anticipating Crises in Autocracies." In *Crisis in Autocratic Regimes*, edited by Johannes Gerschewski and Christoph H. Stefes, 21-42. Boulder: Lynne Rienner Publishers.
- Distelhorst, Greg and Yue Hou. 2017. "Constituency Service under Nondemocratic Rule: Evidence from China." *Journal of Politics* 79 (3): 1024-1040.
- Fearon, James D. 1995. "Rationalist Explanations for War." International Organiza-

- tion 49 (3): 379-414.
- Funder, Anna. 2011. Stasiland: Stories from Behind the Berlin Wall. London: Granta Books.
- Gandhi, Jennifer, and Adam Przeworski. 2006. "Cooperation, cooptation, and rebellion under dictatorships." Economics & politics 18 (1): 1-26.
- Geddes, Barbara. 1999. "What do we know about democratization after twenty years?"

 Annual review of political science 2 (1): 115-144.
- Goemans, Hein and William Spaniel. 2016. "Multi-Method Research: The Case for Formal Theory." Security Studies 25 (1): 25-33.
- Havel, Vaclav, and Paul Wilson. 1985. "The power of the powerless." *International Journal of Politics* 15 (3/4): 23-96.
- Huang, Haifeng. 2017. "A war of (mis) information: The political effects of rumors and rumor rebuttals in an authoritarian country." *British Journal of Political Science* 47 (2): 283-311.
- Jensen, Nathan M, Edmund Malesky and Stephen Weymouth. 2014. "Unbundling the Relationship between Authoritarian Legislatures and Political Risk. British Journal of Political Science 44 (3):655-84.
- King, Gary, Jennifer Pan and Margaret E. Roberts. 2013. "How Censorship in China Allows Government Criticism but Silences Collective Expression." American Political Science Review 107 (2): 326-43.
- Koesel, Karrie J., and Valerie J. Bunce. 2013. "Diffusion-Proofing: Russian and Chi-

- nese Responses to Waves of Popular Mobilizations against Authoritarian Rulers.

 Perspectives on Politics 11(3): 753-68.
- Kung James, and Chen Shuo. 2011. "The Tragedy of the Nomenklatura: Career Incentives and Political Radicalism during China's Great Leap Famine. American Political Science Review 105: 2745.
- Kuran, Timur. 1991. "Now out of Never: The Element of Surprise in the East European Revolution of 1989." World Politics 44 (1): 7-48.
- Kuran, Timur. 1995. "The Inevitability of Future Revolutionary Surprises. American Journal of Sociology 100 (6): 1528-51.
- Lee, Ching-Kwan. 2007. Against the Law: Labor Protests in China's Rustbelt and Sunbelt. Berkeley CA: University of California Press.
- Levi, Margaret, Audrey Sacks, and Tom Tyler. 2009. "Conceptualizing Legitimacy, Measuring Legitimating Beliefs." American Behavioral Scientist 53 (3): 354-375.
- Little, Andrew T. 2017. "Are Non-Competitive Elections Good for Citizens?" *Journal* of Theoretical Politics 29 (2): 214-242.
- Little, D. Richard. 1976. "Mass Political Participation in The US and the USSR A Conceptual Analysis." Comparative Political Studies 8 (4): 437-460.
- Lorentzen, Peter. 2013. "Regularizing Rioting: Permitting Public Protest in an Authoritarian Regime." Quarterly Journal of Political Science 8 (2): 127-158.
- Lorentzen, Peter. 2014. "China's Strategic Censorship." American Journal of Political Science 58 (2): 402-414.

- Lorentzen, Peter, M Taylor Fravel, and Jack Paine. 2017. "Qualitative Investigation of Theoretical Models: The Value of Process Tracing." Journal of Theoretical Politics 29 (3): 467-491.
- Magaloni, Beatriz. 2008. Voting for Autocracy: Hegemonic Party Survival and its Demise in Mexico. Cambridge: Cambridge University Press.
- Malesky Edmund, Regina Abrami, and Yu Zheng. 2011. "Institutions and Inequality in Single-Party Regimes: A Comparative Analysis of Vietnam and China Comparative Politics 43 (4): 409-27.
- Manion, Melanie. 2016. Information for Autocrats: Representation in Chinese Local Congresses. Cambridge: Cambridge University Press.
- Matthews, Stephen A. 1989. "Veto Threats: Rhetoric in a Bargaining Game." Quarterly Journal of Economics 104 (2): 347369.
- Mertha, Andrew. 2009. "Fragmented authoritarianism 2.0": political pluralization in the Chinese policy process." *The China Quarterly* 200: 995-1012.
- Nathan, Andrew J. 2003. "Authoritarian Resilience." Journal of Democracy 14 (1): 6-17.
- O'Brien, Kevin J. 1996. "Rightful Resistance" World Politics, 49 (1): 31-55.
- OpenNet Initiative. 2012. "Vietnam" (ONI Country Profile). https://opennet.net/research/profiles/viet Accessed 17 February, 2018.
- Pepinsky, Thomas. 2014. "The Institutional Turn in Comparative Authoritarianism."

 British Journal of Political Science 44 (3): 631-653.

- Port, Andrew. 2007. Conflict and Stability in the German Democratic Republic. New York: Cambridge University Press.
- Reddick, Christopher G., Hisham M. Abdelsalam, and Hatem Elkadi. 2011. "The Influence of E-Government on Administrative Discretion: The Case of Local Governments in Egypt." *Public Administration and Development* 31 (5): 390-407.
- Scott, James C. 1990. Domination and the Arts of Resistance: Hidden Transcripts.

 New Haven: Yale University Press.
- Scott, James C. 1998. Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven: Yale University Press.
- Slater, Dan. 2003. "Iron Cage in an Iron Fist: Authoritarian Institutions and the Personalization of Power in Malaysia." Comparative Politics 36 (1): 81-101.
- Shi, Tianjian and Jie Lu. 2010. "The Shadow of Confucianism." Journal of Democracy 21 (4): 123-130.
- Stockmann, Daniela, and Mary E. Gallagher. 2011. "Remote Control: How the Media Sustain Authoritarian Rule in China. Comparative Politics Studies 44 (4): 436-67.
- Stockman, Daniela. 2013. Media Commercialization and Authoritarian Rule in China.

 New York: Cambridge University Press.
- Svolik, Milan W. 2009. "Power Sharing and Leadership Dynamics in Authoritarian Regimes. American Journal of Political Science 53 (2): 477-494.
- Svolik, Milan W. 2012. The Politics of Authoritarian Rule. New York: Cambridge University Press.

- Tanner, Murray Scot. 2004. "China rethinks unrest." The Washington Quarterly 27 (3): 137-156.
- Truex, Rory. 2016. Making Autocracy Work: Representation and Responsiveness in Modern China. New York: Cambridge University Press.
- Wedeen, Lisa. 2015. Ambiguities of Domination: Politics, Rhetoric, and Symbols in Contemporary Syria. Chicago: University of Chicago Press.
- Weiss, Jessica Chen. 2014. Powerful Patriots: Nationalist Protest in Chinas Foreign Relations. Oxford: Oxford University Press.
- Wright, Joseph. 2008. "Do Authoritarian Institutions Constrain? How Legislatures Affect Economic Growth and Investment. American Journal of Political Science 52 (2): 322-43.