*Comment*

# A comment on Powell and formal models of power sharing*

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## Abstract
Ruling elites commonly concede institutional reforms such as expanding the franchise. In existing models, sharing power in this manner enables ruling elites to credibly commit to perpetual redistribution. In 'Power Sharing with Weak Institutions,' Powell (2024) explains why the commitment problem runs deeper: When institutions are weak, elites are likely to block the implementation of promised institutional concessions. I provide new insights into three foundational premises of Powell (2024) and related models. First, I identify a necessary condition for a common result: Ruling elites always minimize permanent power-sharing concessions vis-à-vis temporary concessions, subject to preventing revolt. However, unless reforming institutions is somehow costly, these two tools are perfect substitutes. Second, I discuss how to conceptualize institutional strength within this class of models. Third, in weak institutional environments, I suggest how scholars can model credible commitments to share power or democratize.

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## 1. Introduction

Authoritarian elites face a commitment problem (Acemoglu and Robinson, 2006b; Castañeda Dower et al., 2018). During emergency times in which the opposition poses a threat of rebellion, ruling elites see the writing on the wall and offer temporary concessions that redistribute spoils. However, the opposition's threat is inherently transitory; an opposition group who has mobilized a high threat today may fail to do so tomorrow. During normal times in which the opposition poses no threat, ruling elites lack an incentive to deliver spoils or implement policies desired by the opposition. Recognizing that ruling elites cannot commit to future redistribution, a forward-looking opposition might reject any *temporary* co-optation measures proposed during a fleeting moment in the sun. Thus, pacifying a temporarily strong opposition movement might require *permanent* institutional reforms. Expanding the franchise or sharing power (e.g., cabinet positions, local councils) solves the commitment problem by enabling the opposition to directly set policy or to permanently increase redistribution by other means—even when they lack a coercive threat.[1]

Powell (2024) challenges the idea that reforming institutions necessarily solves the commitment problem. Instead, the implementation of permanent concessions entails *its own commitment problem*. Elites announce their intent to share power at times in which the opposition is organized to revolt, but institutional reforms are not implemented immediately. Furthermore, the opposition's threat does not last forever—this is, in fact, the precise source of the commitment problem highlighted in Acemoglu and Robinson (2006b) and Castañeda Dower et al. (2018). After the immediate threat has passed, elites can exert costly effort to block the implementation of the promised power-sharing deal. For example, elites might promise to hold elections at some point in the future, but in the meantime strengthen their coercive position and repress the opposition before ever holding the elections. Weak institutions raise the marginal return to trying to block a power-sharing agreement, which undermines the commitment power of promised institutional reforms.

In this comment, I provide new insights into three foundational premises and results of Powell (2024) and related models. First, in the aforementioned models, elites strictly prefer to minimize the extent of permanent institutional concessions, and instead favor temporary transfers as needed to pacify the opposition. This result is, seemingly, intuitive because it confirms the widespread premise in studies of authoritarian politics that ruling elites seek to concentrate as much power in their hands as possible. But what drives this result? Suppose elites make overly generous institutional concessions—for example, conceding substantial legislative autonomy to a body in which the opposition controls a large number of seats, where 'substantial' and 'large' are relative to the opposition's prospects for succeeding in a revolt. This power-sharing deal permanently redistributes a large amount of spoils to the opposition, which detracts from the ruler's consumption. However, what prevents the opposition from fully compensating elites in the *present* for the skewed distribution of *future* rents? If this were possible, why would elites care about the exact mixture of permanent and temporary concessions?

Confirming the intuition suggested by these questions, elites are in fact *indifferent about the exact mixture of permanent institutional changes and temporary transfers*,

absent an additional friction. I derive this result by analyzing a special case of Powell's model in which institutional concessions are fully credible. Recovering the conventional intuition requires an additional assumption that institutional reform is costly, in the sense of destroying surplus akin to the foundational results on incentives to avoid costly conflict (Fearon, 1995; Powell, 2004, 2006). In Powell (2024), this occurs because elites pay endogenous effort costs to renege on a power-sharing deal, whereas Acemoglu and Robinson (2006b) and Castañeda Dower et al. (2018) impose distinct assumptions to yield a qualitatively similar result. However, raising questions for future research, 'top-down' models of institutional reform suggest how permanent institutional concessions can in fact improve efficiency vis-à-vis temporary transfers.

Second, Powell's model initiates, but does not end, a fruitful discussion about how to conceptualize strong versus weak political institutions, within this class of models. His conceptualization of institutional strength captures the stickiness of constitutional amendment procedures; once promised, how easy is it for the ruling elites to block implementation of the reform? But it is also intuitive to conceptualize the *contemporaneous* commitment to redistribution as a manifestation of institutional strength (a la North and Weingast 1989), separate from the ease of changing this arrangement in the *future*.

Third, in weak institutional environments, I suggest how scholars can model credible commitments to share power or democratize. Powell proposes one, a smoother path of shocks. Others lie outside his model: Persistent opposition mobilization, coercive enforcement of power-sharing deals, and ruling elites stepping down from power. Collectively, this discussion yields numerous suggestions for future research.

## 2. Indifference over extent of institutional reform

A common result in models of commitment problems and institutional reform is that ruling elites strictly prefer to concede *temporary* redistributive transfers rather than *permanent* institutional reforms. In Acemoglu and Robinson (2006b), if temporary redistribution suffices to prevent the opposition (the 'masses') from revolting, then elites will not expand the franchise—which would enable the opposition to set policies in every period. In Castañeda Dower et al. (2018), elites choose which fraction of periods to allow the opposition (the 'majority') to set policies; in equilibrium, they choose the minimum fraction of periods sufficient to prevent revolt. This also means that elites transfer *all* contemporaneous spoils to the opposition in any period that elites set policy and the majority poses a revolutionary threat—starkly highlighting elites' preferences for temporary transfers over permanent institutional concessions. In Powell (2024), institutional reform entails choosing a fraction of an asset to permanently transfer to the opposition, thus creating a basement level of spoils.[2] In equilibrium, elites propose the smallest level of this basement that suffices to prevent revolt. However, because institutional weakness creates leeway for elites to block implementation, imperfect institutional enforcement requires elites to share a larger fraction of the asset—compared to a baseline with perfectly credible institutional concessions.[3]

These results formalize a widespread intuition in studies of authoritarian politics: ruling elites prefer to concentrate as much power in their hands as possible. However, the microfoundations are not well understood. To make progress on this front, I

examine a special case of Powell's model in which any promise to implement institutional reforms is perfectly credible. Powell conceptualizes the strength of institutions with a parameter $w$.[4] Lower values of $w$ reduce the probability with which attempts to renege on a power-sharing deal succeed. I examine the limiting case of perfectly strong institutions, $w = 0$, meaning that subversion efforts by elites succeed with probability 0—thus, in effect, eliminating this element of Powell's stage game. The new result is that elites are *indifferent* about the exact level of permanent institutional concessions. This prompts considerations of (a) why, in existing models, ruling elites strictly prefer temporary over institutional concessions; and (b) why, in alternative models, elites might prefer institutional over temporary concessions.

## 2.1. Modified version of Powell's model: Setup

Other than setting $w = 0$, the setup and notation is identical to that in Powell. A ruling elite and opposition actor interact across an infinite horizon. Time is denoted by $t = 0, 1, 2, \ldots$ and the players share a common discount factor $\beta \in (0, 1)$. Each period begins with elites controlling a fraction $1 - f_t$ of the flow of an asset normalized to size 1, with the opposition controlling the remaining fraction $f_t$. The game begins with $f_0 = 0$. At the outset of each period, Nature chooses the magnitude of the opposition's threat, drawing a high threat (opposition wins a rebellion with probability 1) with probability $r$ and a low threat (opposition wins with probability 0) with probability $1 - r$. In a low-threat period, no strategic actions occur, and the elites and opposition respectively consume $1 - f_t$ and $f_t$. Figure 1 presents the stage game for a high-threat period. Elites choose a power-sharing concession $f_{t+1}$ and a one-period concession $y_t$, each of which are bounded by $[f_t, 1]$. Consequently, the status-quo level of power sharing creates a basement level of spoils for the opposition, which can be raised but not lowered in subsequent periods. If the opposition accepts the offer, then consumption is determined by the elites' one-period concession, yielding $1 - y_t$ for elites and $y_t$ for the opposition; and the status quo in the next period becomes $f_{t+1}$.[5] If instead the opposition rebels, they win for sure, but a fraction $\delta \in (0, 1)$ of the asset is permanently destroyed; and the ruler pays an additional one-time cost $d > 0$. The solution concept is Markov perfect equilibrium (MPE).
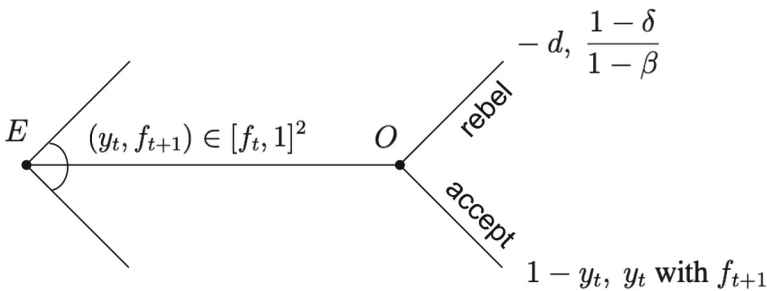


**Figure 1.** Stage game when the division of power is $f_t$ and the opposition poses a high threat.

## 2.2. Modified version of Powell's model: Analysis

Proposition 1 presents the main result: elites are indifferent about exactly how much power they share, conditional on sharing enough to prevent revolt and not sharing so much that the opposition permanently consumes more than its reservation value to revolting.

**Proposition 1.** (Indifference over institutional reform.) Assume $r < \frac{\beta - \delta}{\beta}$, and therefore the opposition will revolt in a high-threat period if $f_{t+1} = 0$.[6] A continuum of payoff-equivalent equilibria paths of play exist with the following structure. In the first high-threat period, elites offer any $f_{t+1} = f \in \left[1 - \frac{\delta}{\beta(1-r)}, 1 - \delta\right]$, and a corresponding $y_t = y^*(f)$ that satisfies

$$\underbrace{f}_{\text{Basement spoils}} + \underbrace{(1 - \beta(1 - r))(y^*(f) - f)}_{\text{Additional transfer in high-threat periods}} = \underbrace{1 - \delta}_{\text{Rebellion option}} . \qquad (1)$$

The opposition accepts the proposal. In all subsequent high-threat periods, elites offer $(f_{t+1}, y_t) = (f, y^*(f))$, and the opposition accepts.

Appendix A.1 presents and proves a proposition that characterizes the continuum of equilibria strategy profiles that yield these paths of play. Here, I present the core expressions that explain why elites are indifferent about the exact level of institutional concessions.

To avoid revolt, elites must share power beyond the initial level $f_0 = 0$. In the first high-threat period, elites face the following calculus, assuming their proposal $f_{t+1} = f$ lies within the bounds specified in the proposition (which I discuss more below). The elites' choice affects (a) the permanent concession, giving away a basement level of spoils $f$, and (b) the additional, temporary 'top-up' transfers $y^*(f) - f$ that elites make in the current high-threat period and a fraction $r$ of future high-threat periods. Consequently, from the perspective of the period in which elites propose the power-sharing deal, their choice of $f$ yields average expected per-period consumption[7]

$$(1 - \beta)V_E(f) = 1 - f - (1 - \beta(1 - r))(y^*(f) - f). \qquad (2)$$

To solve for the optimal temporary transfer, we analyze the opposition's calculus from the perspective of a high-threat period. What elites lose, the opposition gains; in addition to the spoils $f$ consumed in every period, the opposition receives the top-up transfer $y^*(f) - f$ in the present and a fraction $r$ of future periods. To induce acceptance, this lifetime stream of consumption must weakly exceed the value of rebelling, which yields $1 - \delta$ in each period. Elites optimize by making the opposition indifferent between these two options, which produces the expression in Equation 1.[8]

Raising $f$ affects elites' consumption in two, countervailing ways—which cancel out. Rewriting $(1 - \beta)V_E(f)$ as $V$ and defining the top-up transfer as $z^*(f) \equiv y^*(f) - f$, we can

use Equation 2 to take the total derivative

$$\frac{dV}{df} = \overbrace{\underbrace{\frac{\partial V}{\partial f}}_{-1}}^{\text{MC}} + \overbrace{\underbrace{\frac{\partial V}{\partial z^*}}_{-(1-\beta(1-r))} \underbrace{\frac{dz^*(f)}{df}}_{-\frac{1}{1-\beta(1-r)}}}^{\text{MB}} = 0 \tag{3}$$

The first term is the marginal cost of raising $f$, which arises from the guaranteed extra unit of surplus that the elites give away in every period. Elites *overpay* the opposition in every low-threat period if $f$ strictly exceeds the level needed to secure acquiescence in a high-threat period. The second term is the marginal benefit of raising $f$, which arises from reducing the top-up transfer. Because the opposition consumes more in low-threat periods, they can (credibly) demand less in each high-threat period. Consequently, choosing a higher-than-needed value of $f$ enables elites to *underpay* the opposition in every high-threat period.

Permanent and temporary concessions are perfect substitutes because the elites and opposition discount the stream of transfers in an identical manner. Elites make their power-sharing choice in a high-threat period, and the opposition chooses whether to accept proposals in high-threat periods. Thus, when each actor contemplates its respective decisions, it expects to pay (or receive) the temporary transfer in the current period and a fraction $r$ of future periods. Hence, a marginal increase in $f$ diminishes $z^*(f)$ by $\frac{1}{1-\beta(1-r)}$, and a marginal reduction in the temporary transfer raises elites' average consumption by $1 - \beta(1 - r)$. Collectively, this yields a marginal benefit of 1 to raising $f$, which perfectly offsets the marginal cost of 1.

Consequently, elites are indifferent about the exact choice of $f$, as long as they (a) share enough to enable buying off the opposition from revolting, and (b) do not share so much that the opposition permanently consumes more than its reservation value to revolting. These are the bounds on $f$ stated in the proposition, which formally imply $y^*(f) \in [f, 1]$. At one extreme, elites could choose the minimal level of $f$ needed to pacify the opposition, which implies the opposition consumes all spoils $y^*(f) = 1$ in every high-threat period (similar to the equilibrium path of consumption in Castañeda Dower et al. 2018). In this scenario, each players' consumption would fluctuate greatly depending on whether the period is low or high threat. At the other extreme, elites could set $f$ high enough that the opposition would accept the minimal transfer of $y^*(f) = f$ in a high-threat period—that is, demanding no consumption beyond what they receive in a low-threat period. In this scenario, neither players' consumption would fluctuate across periods. Elites are indifferent between these two choices, as well as all values of $f$ in between.

## 2.3. Application to existing models

Absent a source of friction, smaller temporary transfers perfectly offset a higher basement level of spoils for the opposition. This substitution effect raises a puzzle about the aforementioned models—what produces their respective findings that ruling elites strictly prefer temporary transfers over permanent concessions?

In the full model in Powell (2024), elites invest positive effort in undermining a proposed power-sharing deal whenever $w > 0$, hence moving beyond the special case of his model analyzed here. Thus, introducing endogenous effort to renege not only incorporates into the model Powell's core substantive interest in weak institutions but also creates a wedge that makes elites strictly prefer temporary over permanent concessions—the latter are costly.[9] Thus, institutional reform destroys surplus akin to a revolt, although the sources of inefficiency are conceptually distinct: The costs of rolling back institutional concessions arise from exerting costly effort to complete a task, as in principal-agent models, whereas revolting creates costs by killing people and destroying economic production. In Appendix A.2, I extend my simplified version of Powell's model to introduce a positive and strictly increasing cost to reforming institutions. This recovers, in a reduced-form way, the standard result that elites strictly prefer minimal institutional reforms.

In Acemoglu and Robinson (2006b), elites strictly prefer to buy off the masses with temporary transfers only, for two reasons. First, the menu of institutional reform options is discrete; either full franchise expansion in which the opposition sets policies in every period, or no reform. Consequently, reforming institutions yields a permanent payoff that strictly satisfies the masses' no-revolt constraint, which prevents elites from fully recouping their losses with lower temporary transfers.[10] Thus, a continuous space for institutional reforms (in addition to a continuous space for temporary transfers, which is common across all these models) is needed for Proposition 1. Second, total surplus is lower when the masses set policy. As opposed to Powell's setup in which elites distribute linear transfers from a budget normalized to 1, Acemoglu and Robinson incorporate a more detailed political economy setup. Each actor has a wealth endowment, and the policy choice determines per-capita taxation; and state revenues are redistributed as a lump sum to every member of society. Higher tax rates (which the masses prefer) create greater deadweight loss, and therefore total surplus is lower when the masses determine policy.

In Castañeda Dower et al. (2018), ruling elites strictly prefer temporary transfers over permanent concessions for a more subtle reason. The menu of possible institutional reforms is continuous, as in Powell, but reforming institutions does not create a direct cost. The key to the proof of my Proposition 1 is that, with probability 1, *elites* set policy in the period that institutional reform occurs. Consequently, elites and the opposition discount the equilibrium transfer in an identical manner, as discussed earlier. In Castañeda Dower et al. (2018), by contrast, the institutional reform is enacted immediately. This means that the *majority* will, with positive probability, make the policy choice in the period in which institutional reform occurs. If this contingency arises, then elites cannot offset the higher permanent concession with a lower temporary transfer today—which lowers their marginal benefit to institutional reform. This is best interpreted as a friction that prevents efficient contracting, as opposed to a concrete cost of institutional reform; the tension arises because the opposition cannot commit to fully compensate elites for the (already conceded) higher level of institutional concessions. However, if their model was altered such that elites surely set policy in the period of the institutional reform, then a modified version of Proposition 1 would apply, and elites would be indifferent

about the exact level of institutional reform. I present this result formally in Appendix A.3.

## 2.4. Which concessions are costly?

Existing models assume, through different mechanisms, that institutional reform is costly whereas temporary transfers are not. However, such assumptions are not applicable in all circumstances. For example, autocratic governance weakens protections for property rights (Ansell and Samuels, 2014). Insecure property rights discourage producers from making investments that would expand the tax base, which legislative representation (Gailmard, 2017) or institutionalized parties (Gehlbach and Keefer, 2011) could protect. Alternatively, corruption might distort the political system, which a broader franchise would alleviate (Lizzeri and Persico, 2004). Finally, certain government programs are inherently inefficient if not secured over the long term, such as mass education systems, social security programs, and central banks. Therefore, permanent rather than temporary versions of these programs bolster surplus.[11]

   These observations relate to long-standing debates about the bottom-up versus top-down nature of political transitions. In Acemoglu and Robinson (2006b), Castañeda Dower et al. (2018), and Powell (2024), transitions are driven purely by bottom-up pressures. By contrast, these alternative ideas highlight various sources of top-down pressure for reform. A core idea in top-down theories is that authoritarian institutions are inherently inefficient, which can spur reforms even absent pressure from below.[12]

## 3. Conceptualizing institutional strength

Powell (2024) focuses on the strength of institutions, and how institutional strength affects prospects for political reforms. In his model, the object of contention is an asset that yields a flow of spoils across time. The ruling elites possess this asset initially, and stronger institutions correspond with more credible promises to give away part of the asset. The microfoundations for credibility are that elites pay a sunk cost to block the implementation of a promised reform, and the marginal returns to this effort (that is, its probability of blocking implementation) decrease in a parameter $w$. Hence, lower values of $w$ correspond with stronger institutions. Under this conceptualization, institutions are perfectly strong in Acemoglu and Robinson (2006b) and Castañeda Dower et al. (2018), who assume promised institutional concessions are implemented with probability 1. By contrast, institutions are perfectly weak in Fearon and Laitin's (2008) model of civil wars. They assume that no promises by the government are credible, after the rebels have disarmed.

### 3.1. Credibility of constitutional amendment procedures

Powell's parameter $w$ is most naturally interpreted as the stickiness of constitutional amendment procedures; once promised, how easy is it for the ruling elites to block implementation of the reform? Even if rents and power are heavily concentrated among elites at

a particular point in time, in some circumstances, elites may nevertheless be able to credibly promise to expand the franchise or share power in other ways. For example, the UK's 1832 Great Reform Act roughly tripled the size of the franchise, from 5% of adult males to 17%.[13] Powell quotes policymakers who suggest that, after the act passed, even Conservatives who opposed the bill did not subsequently contemplate attempts to roll back the reform. Despite a small franchise, the UK had a long-standing constitutional system. This made promises, in the form of bills passed by Parliament, credible. By contrast, constitutional procedures were not well established in Sudan prior to its transition in 2019. This is Powell's contrast case of weak institutions, which I discuss later.[14]

Divergent outcomes in the UK and Sudan also relate to an observation in Dahl (1971) about pathways to democratic consolidation. Dahl distinguishes between contestation, the extent to which elections are free and fair; and participation, the scope of who can participate in politics. Dahl contends that establishing electoral competition among a small and cohesive elite followed later by mass franchise expansion should provide a favorable path to establishing full democracy. In such countries, 'the rule, the practices, and the culture of competitive politics developed first among a small elite. …Later, as additional social strata were admitted into politics they were more easily socialized into the norms and practices of competitive politics already developed among the elites' (p. 36). He mentions the English case when discussing this pathway to democracy, whereas cases like Sudan in 2019 lacked a foundation of competitive politics. Hence, Powell's conceptualization of $w$ may capture Dahl's assertion about democratic sequencing in a natural way: $w$ is determined mainly by the competitiveness of politics, not the size of the franchise (the endogenous outcome to be explained).

## 3.2. Alternative conceptualizations of institutional strength

Powell's conceptualization does not capture all aspects of institutional strength, an inherently multi-faceted idea. The parameter $w$ encompasses possibilities for constitutional *change*—if the government possesses the asset, can it credibly give it away? However, the *contemporaneous* level of basement spoils for the opposition (Powell's variable $f$) is another manifestation of institutional strength. When $f$ is low, elites have minimal ability to commit to redistribution; even if $w$ is low, reform will not occur until the opposition can pose a revolt threat in the future. By contrast, when $f$ is high, the elites no longer control the asset. This enables them to credibly commit to deliver a large amount of spoils to the opposition, even if further institutional reforms would lack credibility.

In Acemoglu and Robinson (2006b), authoritarian elites cannot credibly commit to promises of temporary redistribution. Thus, using Powell's notation, $f$ is low under dictatorship. Moreover, given the discrete set of institutional reform options in their model, elites (implicitly) cannot credibly commit to *any* power-sharing deal short of permanently relinquishing the keys to the car. Hence, authoritarian institutions as depicted by Acemoglu and Robinson are clearly weak in an important sense, despite their assumption that elites can credibly transition to democracy if they choose (Powell's notion of strong institutions).[15]

Conversely, many circumstances of high $f$ correspond with North and Weingast's (1989) idea that institutions of representative government 'constrain [a ruler] to obey a

set of rules that do not permit leeway for violating commitments' (p. 804). Even if $w$ is high, and thus any further institutional concessions would lack credibility, high $f$ implies high commitment to perpetually deliver spoils for the opposition. Powell's model, in fact, anticipates why a regime would simultaneously have high values of both $f$ and $w$. Along the equilibrium path, the regimes that eventually gain the highest values of $f$ are those with medium-high $w$, meaning that the marginal return to reneging on power-sharing deal is not so high that power-sharing deals are inherently untenable. This is a direct consequence of what Powell describes as the second main contribution of his model (see also his Proposition 3i). When $w$ is high, the opposition requires larger (promised) institutional concessions as compensation for the low likelihood with which a deal will stick.[16] But across the infinite horizon, the promised concession will eventually be implemented. Therefore, over the long term, elites in a regime with medium-high $w$ will share more power with the opposition—resulting in higher $f$—than will elites in a regime with 'stronger' institutions in the sense of lower $w$, per Powell's conceptualization. But once a regime has established high $f$, institutions are strong in a North-Weingast sense of facilitating perpetual commitment to redistribute spoils, even if the path to develop broad-based power sharing was rocky.

However, high $f$ does not always correspond with strong institutions. For example, in feudal European states prior to the development of parliaments, monarchs lacked institutional means to commit to promises, yet many were powerless to reclaim prior land grants to their vassals. More recently, privatization efforts in ex-Soviet states created huge windfalls for oligarchs, but were a product of weak rather than strong states. High $f$ could also reflect power-sharing deals with coercive enforcement, rather than strong institutions, as discussed below. Overall, given the equation of strong institutions with a high commitment to redistribution in touchstone pieces such as North and Weingast (1989) and Acemoglu and Robinson (2006b), Powell's theoretical framework and these examples raise the need for further conceptual elaboration.

### 3.3. The putty-clay assumption

The notable 'cheat' in Powell's model is a putty-clay assumption: institutions are assumed to be very strong in the sense that power-sharing deals, once implemented, cannot subsequently be reversed. The value-added of Powell's model is a richer structure for endogenous reneging; because this is a continuous choice, the probability of implementation is a smooth, fully endogenous characterization of the deeper parameters. The drawback of this machinery, though, is that allowing the elites to unwind a deal that has already been implemented would be restrictively complicated (see his footnote 17). By contrast, other models with a simpler structure for reneging can generate richer dynamic patterns, such as cycling over time between democratization episodes and autocratic reversions in Acemoglu and Robinson's (2006b) extension with coups.[17] Thus, Powell's model focuses solely on the difficulty of conceding power *in the first place*, as opposed to undermining a deal *already in place*.

The putty-clay assumption about delivering a permanent basement level of spoils for the opposition has more verisimilitude in some contexts than others. This approach makes sense in the context of regional autonomy deals, in which it is indeed difficult for a

government to re-establish its position *after* pulling troops out of a region (that is, after initially implementing the deal).[18] Similarly, this approach makes sense for explaining why rulers would allow an initial election. However, it does not adequately capture repeated elections over time, in which the electoral winners have to perpetually agree to contend in the next election. In this scenario, the initial concession does not facilitate a permanent basement level of spoils.[19] Overall, given the novelty of Powell's (2024) approach (although see also the setup in Powell 2019), the relative value-added of modeling continuous effort and putty-clay institutions versus a simpler reneging option that facilitates richer dynamics remains to be determined.

## 4. Sharing power despite weak institutions

Very weak institutions undermine the possibility of an equilibrium with power sharing in Powell (2024), which he describes as his first main contribution (see also his Proposition 2). When institutions are weak (high $w$), the opposition refuses even very generous terms, given the low likelihood with which a deal will be implemented. Can countries with weak institutions ever successfully share power or democratize, considering this seemingly insurmountable impediment to securing institutional reform? In addition to insights from Powell's analysis, I propose several ideas to push forward this critical question for future research.

### 4.1. Smoother distribution of shocks

A smoother path of shocks can mitigate the problem of weak institutions. In Powell's baseline model, the opposition fluctuates between high-threat periods (wins a revolt with probability 1) and low-threat periods (wins with probability 0). In an extension, Powell adds a third, intermediate-threat period in which the opposition's probability of winning lies in between these extremes.

The extension resembles the baseline model in one sense—very weak institutions disable elites from buying off the opposition in a high-threat period, assuming no institutional reform has occurred previously. However, if Nature draws one or several intermediate shocks prior the first high-threat period, then elites have an opportunity to build a stock of institutional concessions prior to the first high-threat period. Accumulating a large enough stock enables elites to buy off the opposition in the first high-threat period. Having an institutional stock reduces the stakes of undermining an agreement, which bolsters the credibility of a power-sharing proposal. Consequently, a smoother distribution of shocks substitutes for weak institutions to prevent conflict.[20]

The main problem with this extension is its analytic complexity. The associated section of the paper lacks a formal proposition, and Powell presents a numerical example in the appendix to establish existence. A simpler setup would be one in which elites pay no direct cost to changing institutions, but cannot raise the opposition's basement level of spoils in a single period by more than an exogenously determined upper bound (call it $f^{\max}$). This preserves the idea that institutional reform is costly, but the cost structure differs: 0 for any $f_{t+1} \in [f_t, f_t + f^{\max}]$, and infinite for any $f_{t+1} > f_t + f^{\max}$. If $f^{\max}$ is low enough, then elites cannot offer sufficient institutional reforms in a high-threat

period to buy off the opposition—supposing $f_t = 0$ at the time the high-threat period arises. By contrast, earlier intermediate-threat periods enable elites to build up a stock of institutional concessions. Despite losing some of the compelling microfoundations of Powell's model, this alternative would appear to be more analytically tractable while preserving the qualitative flavor of his result for multi-valued threats.

## 4.2. Persistent anti-regime mobilization

Powell highlights an unrecognized tension in existing models, which presume institutional reforms are perfectly credible. On the one hand, within a period in which reforms occur, these models implicitly assume that the opposition remains mobilized against the regime for long enough to ensure the institutional concession is implemented. On the other hand, institutional concessions are necessary in the first place only because the opposition can seldom mobilize a high threat. As Powell summarizes this tension, 'the opposition must be strong (in expectation) for long enough to enforce the agreement but not long enough to eliminate the commitment problem.' In his stage game, Powell assumes the opposition cannot coercively enforce the deal; at the node in which the elite decides how hard to undermine the deal, the opposition has already forgone its contemporaneous revolt option.

But Powell's commentary also suggests that the opposition, upon sustaining mobilization for long enough, should be able to enforce a deal—even if institutions are weak. Assume an alternative setup in which following the power-sharing promise, the opposition probabilistically remains strong throughout the transition. If this occurs, the institutional concession goes through for sure. If not, then elites have an opportunity to renege, as in Powell's model. The theoretical intuition here is straightforward, and making progress on this consideration might ultimately be an empirical question: What tactics generally succeed at enabling opposition actors to remain organized and vigilant during tenuous transition periods?

## 4.3. Coercive enforcement of power-sharing deals

In Powell's model, power-sharing deals entail elites *sharing* spoils with the opposition, but without shifting the distribution of *power* between the two actors. The distribution of threats is unaffected by the opposition's permanent share of spoils: A revolt succeeds with probability 1 in a fraction $r$ of periods, and with probability 0 in other periods (and, in the extension, with probability $\pi$ in a fraction $\mu$ of periods).

However, in weak institutional environments, ruling elites can tie their hands by providing the opposition with coercive means to defend their concessions. For example, a ruler can allow actors besides his cronies to control various branches of the security sector; or, amid a civil war, offer ceasefires or peace treaties that either permit rebels to keep their arms, or integrate them into the state military. Generalizing these examples, Meng et al. (2023) distinguish between two ideal-type means of enforcing a power-sharing deal: institutional (captured by Powell's model) and coercive (captured by the present examples).

Coercive enforcement mechanisms, despite providing a possible means to bolster the credibility of promises in weak institutional environments, may fail to prevent conflict because the *opposition faces a commitment problem*. Emboldened by the power-sharing deal, opposition leaders can renege by leveraging their favored position to seize the

throne for themselves. Thus, coercive enforcement mechanisms can, inadvertently, enable the opposition to go on the *offensive*, contrary to their intended rationale of enabling the opposition to *defend* its control over a share of spoils.[21]

In Paine (2022), I isolate a core trade off entailed in coercive enforcement. Sharing power increases both (a) the frequency with which the opposition poses a high threat, which ensures that elites redistribute more (commitment effect); and (b) the opposition's probability of winning in high-threat periods, which makes the opposition more difficult to buy off (threat-enhancing effect). This approach differs in two important ways from the main models discussed throughout this comment.

First, sharing power can either stabilize *or destabilize* the regime—depending on whether the commitment or threat-enhancing effect is larger in magnitude. By contrast, in the models discussed throughout this comment, sharing more power necessarily relaxes the opposition's no-revolt constraint; there is no countervailing threat-enhancing effect.

Second, the frequency of high-threat periods and the probability with which the opposition wins in high-threat periods are positively correlated, which relaxes the standard assumption that the latter probability is fixed at 1 (see also Little and Paine 2024, who model a continuous distribution of threats). These correlated parameters imply that prospects for conflict are not maximized when the opposition rarely poses a high threat, contrary to existing models. Instead, an *infrequent* maximum threat covaries with a *lower value* of the maximum threat, and the latter effect diminishes prospects for conflict. For this reason, the inverted U-shaped relationship that Powell characterizes between institutional strength and power sharing (Powell describes this as the third main result of his model; see Proposition 3iii) is not robust to altering the distribution of threats as modeled in Paine (2022) or Little and Paine (2024).[22]

## 4.4. Stepping down

Powell discusses the example of Sudan's negotiated transition that began in 2019 as a case of non-credible promises amid an environment of weak institutions. Political institutions are undoubtedly weak in Sudan, a country with a history of frequent coups and civil wars. Nonetheless, its leaders failed to take actions, such as immediately stepping down, that could have made their promises of institutional reform more credible. This possibility lies outside the scope of options modeled by Powell.

Following months of protests, the military deposed president Omar al-Bashir in 2019, and the newly formed Transitional Military Council promised to hold elections at the end of a 39-month transition period. Yet the military officers, who had participated in governing the country alongside al-Bashir since 1989, remained in positions of power. A coup in October 2021 derailed the original timeline, and in April 2023, fighting between rival military factions broke out in the capital, which has further blocked progress toward a transition to more democratic institutions.

Returning to 2019, how could the military have made its promises more credible, despite a weak institutional environment? Powell's model lacks an option for ruling elites to simply stand down from power. This could, conceivably, be modeled as an exogenously determined option value for elites to instantaneously relinquish power. The value of this option would reflect their electoral viability, ability to retain means of coercion, and

expectations of punishment for human rights abuses or other violations.[23] Short of the last-resort option of stepping down entirely, elites have agency to make promises of electoral power sharing more credible. Sudan's military leaders could have granted the main positions in the government to opposition leaders at the outset of the transition, promised to hold elections within a shorter time frame, or agreed to not participate in the elections. Such actions are not foolproof, but can bolster the credibility of electoral concessions in countries that lack a long-standing history of competitive elections. Future models could consider a richer array of institutional reform options.

## 5. Conclusion

Sharing political power is inherently difficult. Weak institutional environments can make this problem intractable, as Powell (2024) explains. In personal correspondence, Bob conveyed his belief that political actors usually have a hard time making credible commitments to each other. This is what he aimed to capture by modeling endogenous effort to block the implementation of concessions, a novel element for conflict bargaining models; and interpreting the feasibility of such subversion attempts as the strength of the institutional environment. Bob contemplated this issue for decades. In an early article, Acemoglu et al. (2004: 163) assert, 'A study of the political economy of [kleptocratic] regimes must depart from the standard presumptions of most research in economics and political science, which assume that rulers make choices within strongly institutionalized polities.' The footnote accompanying this sentence states, 'We owe this terminology and the distinction between strongly and weakly institutionalized polities to Robert Powell.' Bob's last completed paper offers an important contribution to this critical topic, and also raises numerous important issues that scholars can productively analyze in future research.

## A. Appendix

### A.1. Proof of Propositions 1 and A.1

Proposition A.1 presents a continuum of strategy profiles that constitute Markov Perfect Equilibria. These strategies are payoff equivalent and yield the equilibria paths of play described in Proposition 1. I focus on the class of equilibrium strategy profiles such that once the elites have chosen a power-sharing amount $f$ in the intermediate range (described below), they never subsequently choose to share additional power.

However, given their indifference among all choices within the intermediate range, there are an infinite number of additional MPE in which the elites mix over all $f_{t+1} \in [f_t, 1 - \delta]$, with the latter term corresponding with the upper bound of the intermediate range. These equilibria are payoff equivalent to those characterized below.

**Proposition A.1** (Equilibria strategy profiles) Assume the opposition poses a high threat in some period $t$.

- **High $f_t$.** Suppose $f_t = f > 1 - \delta$. Elites propose $(f_{t+1}, y_t) = (f, f)$, and the opposition accepts any proposal.
- **Intermediate $f_t$.** Suppose $f_t = f \in [1 - \frac{\delta}{\beta(1-r)}, 1 - \delta]$. Elites propose $(f_{t+1}, y_t) = (f, y^*(f))$, for $y^*(f)$ satisfying Equation 1. The opposition accepts any $(f_{t+1}, y_t)$ such that $(1 - \beta)y_t + \beta(f_{t+1} + r(\hat{y}(f_{t+1}) - f_{t+1})) \geq 1 - \delta$ and revolts otherwise, for $\hat{y} = y^*(f_{t+1})$ as characterized in Equation 1 if $f_{t+1} \leq 1 - \delta$, and $\hat{y} = f_{t+1}$ if $f_{t+1} > 1 - \delta$. In equilibrium, the opposition accepts.
- **Low $f_t$.** Suppose $f_t < 1 - \frac{\delta}{\beta(1-r)}$. Elites propose any $f_{t+1} = f$ such that $f \in [1 - \frac{\delta}{\beta(1-r)}, 1 - \delta]$, and $y_t = y^*(f)$ with $y^*(f)$ characterized in Equation 1. The opposition rejects any proposal with $f_{t+1} < 1 - \frac{\delta}{\beta(1-r)}$, and otherwise follows the same accept/revolt calculus as in the intermediate case. In equilibrium, the opposition accepts.

### Proof.

*High $f_t$.* This is the trivial case in which the opposition's basement level of spoils is so high that it will always forgo revolt in a high-threat period, even if not offered spoils beyond the basement level $f$. This result follows directly from the inequality that characterizes the case. If the opposition consumes at least $f$ in every period within the incumbent regime and $1 - \delta$ per period following a revolt, then $f > 1 - \delta$ implies that the opposition accepts $(f_{t+1}, y_t) = (f, f)$. For a fixed $f_{t+1}$, elites optimally minimize their temporary concessions, and thus lack a profitable deviation from proposing $y_t = f$, which yields a per-period consumption amount of $1 - f$. This strictly decreases in $f$, which proves that deviating upward from $f_{t+1} = f$ is strictly unprofitable.

*Intermediate $f_t$.* Fix $f_{t+1} = f$ in every period. Two standard results in this class of models, which are straightforward to verify, are

- The equilibrium transfer, denoted as $y^*(f)$, makes the opposition indifferent between accepting and revolting.
- The opposition accepts such an offer with probability 1.

Thus, the transfer solves Equation 1. The bounds on permissible transfers require $y^*(f) \in [f, 1]$. Rearranging Equation 1 demonstrates that $y^*(f)$ lies within this range when $f$ satisfies both the upper and lower bounds assumed for this case. The opposition's optimal accept/revolt behavior follows from these observations and from the result for the high $f_t$ case. Finally, to show elites cannot profitably deviate from any $f$ within the specified range, we can write their lifetime expected consumption

$$(1 - \beta)V_E(f) = \begin{cases} 1 - f - (1 - \beta(1 - r))(y^*(f) - f) & \text{iff } f \in \left[1 - \frac{\delta}{\beta(1-r)}, 1 - \delta\right] \\ 1 - f & \text{iff } f > 1 - \delta. \end{cases}$$

Substituting in $y^*(f)$ from Equation 1 and simplifying shows that the term in the top line equals $\delta$. This is not a function of $f$, therefore ruling out a profitable deviation to another value of $f$ within this range. The bottom term demonstrates that deviating to any $f > 1 - \delta$ is strictly unprofitable because

- $1 - f$ strictly decreases in $f$ (as discussed in the proof for the high $f_t$ case).
- $\lim\limits_{f \to 1-\delta^+} 1 - f = \delta$.

Low $f_t$. The only part of the proof that does not follow directly from the preceding cases is to check that deviating to any $f < 1 - \frac{\delta}{\beta(1-r)}$ would be strictly unprofitable. This deviation would trigger the opposition to revolt, in which case elites would consume $-d$. This is less than their minmax payoff of 0 along a peaceful path. ∎

## A.2. Costly reform in the simplified Powell model

In this section, I extend the simplified version of Powell's model to assume that the institutional-reform choice in each period $t$ creates a one-time, contemporaneous cost $c(f_{t+1} - f_t)$. The cost function satisfies $c(0) = 0$, $c(z) > 0$ for any $z > 0$, and $c'(z) > 0$. I also assume $c(1) < \bar{c}$, for an upper bound $\bar{c}$ defined below.

Costly reform creates a strict preference for elites to offer the minimum amount of institutional reform needed to buy off the opposition. To see why, suppose $f_t < 1 - \frac{\delta}{\beta(1-r)}$, which corresponds with the low $f_t$ case characterized in Proposition A.1. Using the elites' objective function from Equation 2 while adding the direct cost, substituting in $y^*(f)$ from Equation 1, and simplifying yields $(1 - \beta)V_E(f) = \delta - (1 - \beta)c(f - f_t)$. This term strictly decreases in $f$, because $c$ strictly increases in $f$. Therefore,

$$\arg\max_{f \in [1 - \frac{\delta}{\beta(1-r)}, \ 1-\delta]} (1 - \beta)V_E(f) = 1 - \frac{\delta}{\beta(1 - r)}.$$

Finally, we need to ensure that elites prefer to satisfy the opposition's no-revolt constraint, that is, not deviate to some $f < 1 - \frac{\delta}{\beta(1-r)}$. Given the value of $(1 - \beta)V_E(f)$ just described, this requires $\delta - (1 - \beta)c(f - f_t) > -(1 - \beta)d$, which easily simplifies to $c(f - f_t) < \frac{\delta}{1-\beta} + d$. Because $c$ is a strictly increasing function and the maximum value of its argument is 1, if this inequality holds at $c(1)$, then it holds for any values of $f$ and $f_t$. Thus, setting the upper bound $\bar{c} \equiv \frac{\delta}{1-\beta} + d$ ensures that the ruler prefers to satisfy the opposition's no-revolt constraint. This yields the main result

$$\arg\max_{f \in [f_t, \ 1]} (1 - \beta)V_E(f) = 1 - \frac{\delta}{\beta(1 - r)}.$$

### A.3. Elite indifference in the Casteñada Dower et al model

In the article, I note that a modified version of Propositions 1 and A.1 apply to the model in Castañeda Dower et al. (2018), if elites are sure to dictate the policy offer in the period of institutional reform. The mechanics of their model are largely similar to those in Powell (2024). The main difference is that sharing power in Powell yields a basement level of spoils for the opposition, whereas sharing power in Casteñada Dower et al. enables the majority to set policy in a fraction $\rho$ periods. They also use different notation. The discount factor is expressed as $\delta$ in Casteñada Dower et al. as opposed to $\beta$ in Powell; the permanent cost of revolt is $\kappa$ in Casteñada Dower et al. as opposed to $\delta$ in Powell; the probability of a high-threat period is $q$ in Casteñada Dower et al. as opposed to $r$ in Powell; the generic temporary transfer is $x$ in Casteñada Dower et al. as opposed to $y$ in Powell; and the equilibrium transfer in a high-threat period is $\tilde{x}$ in Casteñada Dower et al. as opposed to $y^*$ in Powell.

In the original setup from Castañeda Dower et al. (2018), the institutional concession is implemented instantaneously, which creates a $\rho$ probability with which the majority chooses policy in that period (the policy choice occurs later in the stage game). Consequently, from the perspective of a high-threat period in which elites offer an institutional reform of $\rho$ high enough to satisfy the majority's no-revolt constraint, the elites' lifetime average per-period consumption is

$$(1 - \delta) \quad \underbrace{(1 - \rho)}_{\text{Majority might set policy in period of reform}} \quad (1 - \tilde{x}) + \delta(1 - \rho)(1 - q(1 - \tilde{x})), \qquad (A.1)$$

with

$$\tilde{x} = \frac{1 - \kappa - \delta\rho}{1 - \delta(1 - (1 - \rho)q)}. \qquad (A.2)$$

This objective function strictly decreases in $\rho$, which yields the result from their Lemma 1 that elites strictly prefer the lowest level of institutional concessions needed to prevent revolt. However, if elites were sure to make the policy proposal in the period of the reform, we can set the $1 - \rho$ term in the period of the reform (see Equation A.1) equal to 1. After some algebraic rearranging, we can express the elites' lifetime average per-period consumption as

$$1 - \delta\rho - (1 - \delta(1 - (1 - \rho)q))\tilde{x}, \qquad (A.3)$$

with $\tilde{x}$ unchanged from above. Elites start, by default, with the entire pie of 1 in each period. In a fraction $\rho$ of future periods, elites lose all consumption because the majority sets the policy and consumes everything for itself. In the period of the institutional reform as well as a fraction $(1 - \rho)q$ of future periods, elites set policy but the majority poses a high threat. Consequently, elites give away $\tilde{x}$. In the remaining fraction $(1 - \rho)(1 - q)$ of future periods, elites set policy and the majority does not pose a threat, and therefore elites consume 1. The multiplier on $\tilde{x}$ in Equation A.3 (elites' calculus) is identical to the denominator for the transfer expressed in Equation A.2 (opposition's calculus). Thus, the power-sharing variable $\rho$ cancels out for the same reason as discussed in the article for the simplified version of Powell's model. Elites surely set policy in the period of

the institutional reform, which ensures they reap instantaneous compensation for improving the opposition's rent stream in the future while worsening their own.

## Notes

1. Throughout, I use the terms 'institutional reform,' 'institutional concessions,' and 'power-sharing deals' interchangeably.
2. This distinct conceptualization of what institutional reform entails does not qualitatively alter the core mechanics of the model.
3. Other models highlight distinct ways in which formal institutions such as parties, legislatures, and constitutions can solve governance problems; see Gandhi and Przeworski (2006); Myerson (2008); Gehlbach and Keefer (2011); Boix and Svolik (2013); Ansell and Samuels (2014); Gailmard (2017); Luo and Rozenas (2023); Little and Paine (2024). For a recent review, see Meng et al. (2023).
4. Later I discuss Powell's conceptual scheme in depth.
5. This is where my model simplifies Powell. In his, an additional strategic move occurs after the opposition accepts: elites can exert costly effort to block the implementation of a power-sharing concession. Omitting this element also makes his variable $\phi_t$ superfluous; now, elites directly choose $f_{t+1}$, the basement level of spoils for the next period.
6. This is identical to Powell's Assumption 1. The terms in the inequality $r < \frac{\beta-\delta}{\beta}$ arise from manipulating Equation 1 such that the right-hand side strictly exceeds the left-hand side, and setting $f = 0$ and $y^*(f) = 1$. In words, this inequality ensures that allowing the opposition to consume all contemporaneous spoils in every high-threat period is not sufficient to prevent revolt if not accompanied by conceding a positive amount of basement spoils.
7. Note that in the strategy profiles under consideration, elites choose a value $f_{t+1} > f_t$ only once; thus, the choice of $f$ persists forever.
8. As is standard, the elites prefer to buy off the opposition because (a) conflict is costly (captured by the parameters $\delta$ and $d$), and (b) elites make all the bargaining offers.
9. As an alternative setup, suppose instead that any power-sharing deal fails to be implemented with an exogenously determined positive probability, but reversals do not create a direct cost for elites. Elites must propose a level of institutional reforms $f_{t+1}$ that exceeds the minimum needed to buy off the opposition in a high-threat period, compared to a baseline in which the deal was implemented for sure. However, elites are (probabilistically) compensated for over-paying the opposition because they benefit if the deal falls through, and offering more (expected) permanent concessions enables them to induce acceptance with a lower temporary transfer. Therefore, as in my simplified model, elites would be indifferent about the exact amount of institutional reform.
10. Another consequence of strictly satisfying the masses' no-revolt constraint is that, for some parameter values, the only equilibrium is in mixed strategies. See Acemoglu and Robinson (2017) and Castañeda Dower et al. (2020).
11. I thank an anonymous referee for highlighting this point about long-term programs.
12. However, elites will not reform inefficient institutions if they expect the economic gains to be concentrated among the opposition. If the winners cannot credibly compensate the losers for their gains, then ruling elites prefer the status-quo institutions—despite hindering economic efficiency (Acemoglu, 2003; Acemoglu and Robinson, 2006a).
13. Data from V-Dem (Coppedge, 2023).
14. However, prior to their respective reforms, the UK and Sudan had nearly identical scores on V-Dem's aggregate polyarchy measure. The scores were 0.29 for the UK in 1831 and 0.27 for Sudan in 2018, each of which is slightly lower than that of a typical electoral authoritarian

regime in 2022 (average polyarchy score of 0.33). This suggests that measuring institutional strength as the credibility of constitutional amendment procedures across a large-N sample would require a new data collection effort.

15. In fact, the ease of changing institutions might itself be interpreted as a source of institutional weakness, as it can make the status quo less durable (see, for example, Result 5 in Acemoglu et al. 2021).

16. Thus, as Powell discusses, such rulers are less able to buy off the opposition with elite-biased, or 'gamed,' constitutions, as conceptualized by Albertus and Menaldo (2018).

17. Other models capture endogenous reneging in a different way. In Acemoglu and Robinson (2008), elites can invest effort to 'capture' democratic institutions—hence undermining the commitment value of democracy. Finkel and Gehlbach (2020) explain how local elites tasked with implementing institutional reform in weak states can undermine the effectiveness of the reforms.

18. This contrasts with the approach in Powell's (2012) model of civil wars and state consolidation. There, the faction that controls the state decides how to allocate the entire flow of spoils in each period and, hence, lacks an option to permanently give away to the opposition a portion of the asset. This implies that the government 'can renege at no direct cost on any agreement regarding the division of future benefits' (p. 627). For this reason, Powell claims that his model corresponds 'most directly to center-seeking conflicts.' If the government reneges, the *opposition* has to pay the start-up costs to organize and try to overthrow the government. By contrast, he claims that his 2012 model will typically not apply to autonomy-seeking civil wars. When a region secedes, the *government* has to pay the start-up costs to recover control over the region. This scenario exhibits greater conceptual overlap with Powell (2024).

19. Models of self-enforcing democracy endogenize this process and highlight that each side's probability of winning an election must be roughly in balance with their probability of winning a conflict (Chacón et al., 2011; Bidner et al., 2014; Przeworski et al., 2015).

20. Another notable attribute of this equilibrium is path dependence: the precise sequence of shocks, rather than differences in parameters, can determine whether a particular country experiences peaceful power sharing or conflict. Powell describes this as the fourth main contribution of his paper. Acemoglu et al. (2021) provide a broader overview of path dependence in dynamic models of institutional reform.

21. See also Dal Bó and Powell (2009), in which sharing power enables the leader to credibly reveal information about the size of state spoils while also increasing the opposition's probability of winning a revolt. For other models in which sharing power improves the opposition's coercive power see Francois et al. (2015); Meng (2019); Paine (2021); Luo (2022); Kenkel and Paine (2023). Examining a distinct form of the opposition's commitment problem, Acemoglu et al. (2015) explain how small initial reforms can engender a slippery slope by which elites eventually concede more to the opposition than originally intended. Similarly, Fearon and Francois (2020) formally examine the breakdown of elite-biased constitutions in favor of the masses.

22. See also Powell (2013), which examines endogenous state consolidation, the flip side of sharing power. He characterizes equilibria in which the balance of power shifts over time toward the government, as they permanently buy down the opposition's probability of winning in return for temporary spoils.

23. This conceptualization of a stepping-down option closely resembles the discrete democratization option in Acemoglu and Robinson (2006b), in which the level of inequality determines how elites will fare under democratic rule. For analyses of why elites are generally more tolerant of democratic transitions when they expect to fare well, see Albertus and Menaldo (2018), Riedl et al. (2020), and Miller (2021).

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