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Constitutions as Coordinating Devices

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1. Introduction

Why do successful constitutions have the attributes characteristically associated with the rule of law, such as generality, stability, universal applicability, publicity and consistency? Why do constitutions involve public reasoning? And, how is such a system sustained as an equilibrium? In this paper, we adapt the framework in our previous work on "what is law?" to the problem of constitutions and their enforcement (see Hadfield and Weingast 2012, 2013a,b).

Most accounts of the constitution take the constitution as given and study its effects. This holds for the vast majority or works in both law and economics and positive political theory and the law.[1] Most traditional legal scholarship focuses on the development of constitutional doctrine by clause of the constitution; or study a wide range of normative issues raised by constitutions.

The issue of constitutional enforcement is important because most constitutions in the world fail. Only about two dozen or so current constitutions have been in place for 60 or more

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[1] Epstein (1985), Posner (2007, part VII) are emblematic of the law and economics literature; as are Epstein and Knight (1998), Eskridge and Ferejohn (1992), and Gely and Spiller (1992) for the positive political theory and the law literature.

years. The median democratic constitution lasts only 16 years (Elkins, Ginsburg, and Melton 2009, table 6.1). Indeed, constitutional rules often change radically following violent regime. Moreover, violent regime change is surprisingly common. Using data from 1840 through the present, Cox, North, and Weingast (2013) show that the median regime in the world experiences violent regime change once every eight years. These dim facts suggest the difficulty in creating a constitutional equilibrium.

In recent years, a small body of work studies how constitutions are enforced. Many scholars have observed that a central role of constitutions is to help people coordinate, and non-authoritarian constitutions are more likely to survive when they create a coordination equilibrium (Hardin 1989, Mittal and Weingast 2013, Ordeshook and Svetsova 1992, Weingast 1997). Yet none of these approaches explain why successful constitutions have the truly characteristic features we associate with law. In the highly abstract accounts we find in the existing literature, a constitution is just a focal point.

Consider two characteristic features of law associated with successful constitutions. The first concerns the nature of law itself. Fuller (1964), for example, argued that law is a system of governance by rules characterized by eight attributes: generality, promulgation, clarity, non-contradiction, non-retroactivity, stability, feasibility, and consistency between rules as announced and rules as applied. In what follows, we will call attributes of law such as these, "legal attributes." Fuller argued that these criteria must be met not to satisfy an external moral principle but for what he called "the enterprise of subjecting human conduct to the governance of rules" to be recognizable as law as such, distinct from the exercise of arbitrary power. From this perspective, laws must be general, for example, because judgments of wrongdoing that cannot be

organized into rule-like generalizations reflect a system of decisionmaking by "patternless exercises of political power" (Fuller 1964 48) rather than law. People cannot govern their behavior in accordance with law if the law lacks any knowable and predictable pattern. "A total failure in any [of the eight attributes] does not simply result in a bad system of law; it results in something that is not properly called a legal system at all" (Fuller 1964 39).

A second characteristic feature of law concerns the process of law, namely its structure as a system of distinctive and abstract or impersonal reasoning and normative processes for reasoning and decision (Friedman 2003, Waldron 2008, 2011). Law is not simply another way of reaching an economic or political result, although law may accomplish both these ends. We recognize the presence or absence of law in a society by its structure, not simply by its results.

In this paper we draw on our recent work to present an account of law as an institution characterized by the two features noted above: a system of distinctive reasoning and process that is grounded in economic and political functionality; and a set of legal attributes, such as generality, stability, publicity, clarity, non-contradictoriness, and consistency.

To do so, we begin with the observation that no external agent exists to enforce the constitution. Instead, constitutions must be self-enforcing in the sense that all relevant actors – political officials, citizens and groups – have incentives to abide by the constitution's prescriptive rules. A major part of this enforcement, therefore, involves the actions of decentralized citizens in the absence of coercion, a setting we argue applies to law in general (Hadfield and Weingast 2013a).

Decentralized enforcement often requires that members of the community simultaneously but independently make a decision about whether to participate in a collective punishment of an

action of another agent, such as a merchant, the sovereign, or a neighbor. Widespread decentralization of enforcement therefore requires that members of the relevant community have both the incentive and the ability to coordinate. Yet people face major problems with this type of decentralized enforcement. Typically, a successful boycott requires a minimum number of individuals to refuse to deal with the rule-violator. Individuals contemplating whether to participate in an enforcement action thus must act on the basis of their beliefs about how others will act. They must also prefer the outcome under coordination to the alternative without coordination. Decentralized enforcement thus poses substantial coordination and incentive challenges. First, a sufficient number of individuals must individually conclude that coordination is preferred to the alternative. Second, these potential enforcers must all believe that a sufficient number of others will choose to participate in enforcement. Third, to coordinate the enforcement actions of willing participants, individuals must all share similar beliefs about what the law requires - what is right and what is wrong. Fourth, all these beliefs must be common knowledge.

We argue that constitutions have developed their distinctive structure, at least in part, to coordinate beliefs among diverse individuals and thus to improve the efficacy of decentralized rule enforcement mechanisms. In our account, constitutions involve a specialized system of reasoning that seeks to converge on the categorization of actions as either "constitutional" – that is, acceptable – or not, the latter warranting punishment/action. We contend that a designated system of specialized reasoning helps coordinate beliefs by undertaking two tasks: reducing ambiguity and thus serving as a focal point around which people can coordinate their enforcement behavior; and providing a process of public reasoning (Macedo 2010, Hadfield and

Macedo 2012) that, among other things, extends and adapts existing rules to novel circumstances.

One of the principal mechanisms in enforcing constitutional rules is citizen resistance, an idea emphasized by Locke in his *Second Treatise on Government* (1689). A central concern therefore is when will an individual participate in action against unconstitutional behavior despite a potential collective action problem.

Others have approached this problem using cultural beliefs or preferences (Greif 1994); standard subgame perfect arguments where people who fail to punish are themselves punished (e.g. Milgrom, North, and Weingast 1990); evolutionary game theory that demonstrates the fitness benefits of heritable strategies that punish wrongs (Boyd, Gintis & Bowles 2010); or, in an important line of experimental work on altruistic punishment, to the presence of negative emotions such as anger towards wrong-doers (Fehr & Gachter 2002).

We take a different approach in which individuals are concerned about the beliefs of others; specifically, beliefs about whether political officials might act unconstitutionally in the future, and whether other citizens might participate in resisting such officials. Suppose there exists a partition, R, that divides actions into constitutional and unconstitutional. By participating in an act to resist political officials using R as the standard to judge official behavior, an individual j can affect others' beliefs so as to influence the likelihood that they participate in resistance in the future; in particular, that they will participate in a resisting an unconstitutional action against i. A political official considering violating a constitutional rule makes his choice in part based on an estimate of the likely size of response. We show that there exist circumstances where it is rational for j to undertake costly actions to change the beliefs of others (e.g., both

potential enforcers and potential wrongdoers) about j's willingness to resist unconstitutional harms (against anyone) defined by R. j's participation today in resisting thus increases the likelihood that a future unconstitutional harm against another is effectively resisted by the group by giving each member of the group confidence that they will not participate in costly resistance without adequate numbers of others doing so as well. In this way, j's actions help create a coordination equilibrium; j will undertake the costly actions to change people's beliefs when the benefits to j of coordinating under R exceed j's costs.

This perspective on constitutions – emphasizing constitutional law and legal procedure as coordinating diverse people's actions and reactions – generates a new understanding about the ability to sustain a system of order with legal attributes. Consider generality. A legal system fails to be general if its judgments depend entirely on case-by-case specific features. In our account, legal rules need to be framed in general terms in order to give individuals a basis for predicting how the law will treat situations the details of which the law will only learn about in the future. Predictability is necessary to secure their incentive to participate in collective punishments under a common classification of "wrong" or unconstitutional.

Similarly, widely-shared, generally-available and impersonal reasoning (for example, reliance on popular principles, maxims, or simple concepts) also promotes coordination. The coordinating function of law is less effectively performed if few can conduct the reasoning (or buy expertise in the reasoning system) themselves or if judgments depend on who is doing the reasoning. Generally available principles and reason increase the chances that decentralized coordination occurs, especially under widely varied circumstances.

The coordination function of constitutional law sheds new light on several of the attributes Fuller claimed were definitive of legal order. We argue that fulfilling this coordination function requires that law be stable, clear, general, prospective, and publicly accessible. Moreover, the coordination function of law predicts attributes of law that do not appear in Fuller's list. We argue, for example, that to effectively coordinate decentralized enforcement activity, constitutions must be organized to achieve unique classifications of behavior as right or wrong and that to accomplish this a legal system is likely to place classification under the authoritative stewardship of a unique and recognized entity, such as a legal profession and hierarchical court system with clear jurisdictional boundaries. We also argue that, to accommodate the idiosyncratic perspectives and preferences of the individuals whose participation in punishment is required for efficacy, legal rules are likely to be immanent, subject to elaboration in open and public processes that allow individuals to demonstrate how their idiosyncratic information and reasoning comports with the common reasoning implemented by law. A legal system will also have to be universal in order to be effective in our account: the legal rules will have to offer the people who play a role in decentralized enforcement the benefits of deterring acts against themselves that they consider wrongful. A legal system that considers actions wrong only if the victim belongs to a particular class of people cannot draw on the enforcement support of other classes.

Others have proposed that law and legal conventions, such as property rights, can serve as a focal point for the purposes of coordination (Sugden 1986, Weingast 1997, Cooter 1998, Basu 2000, McAdams 2000, Mailath et al 2001, Myerson 2004, Dixit 2004). This literature focuses on interactions that are themselves coordination problems. Sugden (1986), for example,

offers an account of the spontaneous emergence of property rights to coordinate strategies in a hawk-dove game in which rival claimants to an object are able to coordinate which claimant plays hawk (claiming the object) and which plays dove (relinquishing the object) by referring to a focal concept of ownership. Myerson (2004) expands the idea of law as coordination to include an account of deliberate equilibrium selection by a recognized leader in games with multiple equilibria.

Our account differs in three key respects that significantly expand the explanatory framework of a coordination model of law. First, we focus on coordination of the decentralized enforcement activity that supports interactions rather than coordination of underlying interactions themselves. Our account is therefore not limited to explaining the role of constitutional law in coordinating a particular subset of underlying interactions (coordination games with multiple equilibria) but rather to explaining the role of law in coordinating decentralized enforcement of rules to support any type of interaction. An interaction beset by the risk of opportunism, for example, is not a coordination game. Our account, however, can help to explain the role of law in mitigating the problem of opportunism.

Second, and relatedly, because the underlying enforcement game is not a pure coordination game, our approach brings to the fore an incentive compatibility constraint. It is not enough just to coordinate individuals to support a constitution. It must also be common knowledge that those who are capable of punishing sovereigns who transgress the constitution, and who will bear the costs of doing so, believe they benefit from the constitutional order.

The third key difference between our account and that of the existing literature is that we expressly focus on understanding the structure and process of law as an institution in light of its

role in coordination. The existing literature, by contrast, focuses on the equilibrium selection function per se and does not distinguish constitutional law as a coordinating device from other types of coordinating devices. Myerson (2004), for example, proposes that a leader can announce equilibrium strategies and thereby coordinate agents in their strategy choices. But, as Mailath et al (2001) propose, any entity with "authority," including a dictator, can do this. Our perspective suggests that many dictators create order in the sense of an absence of violent conflict, but they do not create law. The existing law-as-focal-point literature does not help us understand why law has the particular attributes that it does or to distinguish between order coordinated by law and order coordinated by other means, such as social norms, authority or tyranny.

We develop our argument as follows. Section 2 develops the theoretical approach to law as the solution to a coordination problem. Section 3 discusses the implications of this perspective for our principal questions about constitutional enforcement. Section 4 suggests that the principal elements of our approach have been understood by political theorists for several centuries. In section 5 we apply our approach to three moments of constitutional change, the English Glorious Revolution of 1689, the early American Constitution, and the recent constitution of Chile. Our conclusions follow.

2. The Theory of Decentralized Constitutional Enforcement

We begin our theoretical discussion by considering an environment without coercion.[2] Consider a generic situation with a single large player, a political official whom we will label the sovereign or S. S interacts in a similar way with many citizens, c_i (a framework developed in

[2] This section summarizes the model developed formally in Hadfield and Weingast (2012).

Weingast 1997). With each individual c_i, S has the opportunity to behave according to the constitutional rules or to violate those rules, imposing a loss on c_i. We suppose that S's behavior with respect to an individual b_i is observable by all. After observing S's behavior, each c_i chooses whether or not to retaliate against S. Critically for our results, we assume that for punishment to be effective in deterring undesired behavior by S, many individuals must participate in the punishment. (For concreteness we assume all c's must participate for the punishment to be effective in changing S's behavior.) As long as the one-time value of violating the constitution for S is less than the discounted present value of behaving according to the constitution in each period, the threat of retaliation by the c's polices S's behavior.

Many problems exist with the standard approach to modeling interactions between S and the c's. The one we highlight is that, in standard accounts, S's behavior is unambiguously classified as either constitutional or not. This holds, for example, in the many models that employ the repeated prisoners' dilemma. Yet in most real world settings, S's behavior generally has many dimensions. In the context of a sovereign and a citizen S's actions often involve ambiguities and what is "necessary and proper" to undertake public actions. For example, can an individual's rights of privacy be violated in the interests of national security? Does a national emergency constitute sufficient reason to compromise citizen rights?

In general, no obvious or unique answer exists to these questions. The public official and the citizens are likely to have different understandings of what the meaning of the various constitutional provisions — or at least to profess such differences, keeping any information to the contrary private. More importantly for our purposes, other members of the community who have to decide whether to participate in punishment of a prospective constitutional violation are

likely to disagree about how to partition various actions into constitutional and unconstitutional categories. Heterogeneous views about honorable and wrongful behavior make it difficult for diverse individuals to coordinate their retaliation against wrongful behavior (Weingast 1997). Milgrom, North and Weingast (1990) show that coordination for decentralized punishment breaks down when members of the community act on their idiosyncratic information.

To gain purchase on this problem, we assume that each individual possesses an idiosyncratic logic to classify S's behavior as constitutional or not. Most importantly, this setting implies that each individual c_i has preferences over the classification of S's behavior in c_i's interactions with S. We assume idiosyncratic logic is not accessible to others, at least not at reasonable cost. An individual c_i faces a problem: c_i wants S to expect that behavior toward c_i that c_i classifies as wrongful will result in punishment by the entire community of c's. But the other c's do not know what c_i considers wrongful. A possible solution to that problem of course would be for c_i to announce when S's behavior toward c_i is wrongful. But this then poses an incentive problem: what incentive do the other c_j's have to participate in a costly collective punishment to deter behavior that c_i judges (in an inscrutable way) to be unconstitutional?

We propose a solution to this incentive problem in the designation of a common logic—accessible to all—that classifies S's behavior in its interactions with all individual c's, designating actions as either constitutional or unconstitutional. Call this common logic R (for reasoning). If all c's participate in a collective punishment whenever S engages in behavior—to any individual c—that is classified as unconstitutional by R, then the community of c's can deter S from R-unconstitutional behavior. An individual c_j then benefits from collective punishment coordinated by R if R is sufficiently convergent with c_j's idiosyncratic logic; that is, if R results

in a threat of punishment in response to what c_j considers to be unconstitutional sufficiently often.

Our model shows that, for collective punishment of R-unconstitutional behavior to be a sub-game perfect equilibrium, it must be that each individual c is not better off deviating from the collective punishment strategy—supporting S's actions, for example. We argue that this incentive can be found in c_j's self-interest in ensuring that S and the other b's all maintain the belief that R is sufficiently convergent with idiosyncratic logics to generate a benefit for each individual c. By participating in collective punishment in reaction to R-unconstitutional actions, each individual c helps to ensure that there is common knowledge observation of an effective punishment if S engages in unconstitutional behavior. Failing to do so leads S and other c's to believe that R is not capable of coordinating the citizens.[3]

Note that we do not start with the idea that the parties simultaneously search out a uniquely salient focal point—such as Schelling's (1960) separated parachutists searching for a landmark on a common map—from the landscape. Rather we start with the idea that citizens have an incentive to help identify a coordinating device for collective punishment because they will benefit from communicating to a third party that they have coordinated. In our formal model, we study two citizens who would benefit from coordinating punishment of unconstitutional behavior by the sovereign. Recognizing this, one citizen has an incentive to retaliate against the sovereign and announce that it is doing so under a logic accessible to the other—"the right of free speech," "the ancient constitution of England," or "the sanctity of private property," for example. The second citizen has an incentive to join the withdrawal of

[3] In this sense, each participant in the boycott is a pivotal participant. For an evolutionary game theoretic approach to collective punishment that predicts the emergence of equilibria in which each participant in a collective punishment is pivotal, see Boyd, Gintis, and Bowles (2010).

support of S under that announced logic if that logic would serve to coordinate punishments that provide sufficient benefit to that citizen. The second citizen will participate in the retaliation if this citizen judges the announced common logic to be sufficiently convergent with its idiosyncratic logic. By participating, the second citizen engages in observable behavior—completing an effective retaliation—that communicates the information that the second citizen benefits from punishments coordinated on the announced common logic and hence alters the beliefs of the first citizen and the sovereign. By engaging in costly self-conscious efforts to identify a coordinating logic (echoing the self-consciousness of the coordination problem that Schelling argued would lead to the identification of a focal point), the citizens generate a coordinating device. What makes it salient is its proposal by one citizen willing to bear the costs of waiting to learn whether it is acceptable to the other.[4]

For a common logic R to coordinate collective punishment, it must be the case that it is more than a focal point. R must also be sufficiently convergent with the idiosyncratic logic of individuals needed for the punishment to be effective. More precisely, each individual has to be able to reach the conclusion that R is sufficiently convergent with its own idiosyncratic logic that the threat of collective punishment of R-unconstitutional actions generates sufficient benefit for the individual to overcome the cost of participating in punishments to demonstrate coordination.

[4] In Hadfield and Weingast (2012), we do not expressly model this proposal process; we evaluate the stability of equilibrium under a candidate system R given beliefs about the likelihood that individuals judge R to be good enough to support participation. It is relatively straightforward to generalize to a proposal process, which would imply that the gains from coordination are sufficiently great and the grounds for expecting others to participate sufficiently strong that a first-mover is willing to attempt to secure coordination. For a model that considers how players who lack a common language to describe a game might learn to coordinate by taking observable actions, see Crawford and Haller (1990).

Our claim is that a common logic—both the reasoning of the classification system itself and the institution that implements it—that can achieve equilibrium coordination in the face of substantial idiosyncratic reasoning will possess certain distinctive attributes. Those attributes, we claim, are the attributes that characterize law. We turn to a discussion of those attributes in the next section.

3. Law and Legal Process as the Solution to the Coordination Problem

The approach has thus far left abstract the nature of the principles—the common logic, R—around which people coordinate. In this section, we discuss what characteristics a logic must have in order to serve as a coordinating device for decentralized punishment and explore the claim that these are the characteristics we associate with law.

Legal Attributes

We emphasized that, for a common logic to serve as a coordinating device, individuals must be able to assess the logic and reach the conclusion that it is sufficiently convergent with their idiosyncratic reasoning so that they will benefit from coordination on a proposed logic. We predict, therefore, that the logic must be universal in its coverage: it must contain rules that address, at least to some extent, the circumstances of all those who participate in supporting it. Universality is in fact one of the most distinctive features of constitutional law, typically prescribing rights that apply to all citizens. We recognize the existence of the rule of law in a society in large part on the basis of whether neutral and independent courts that follow the law are

available to all who may be the victims of wrong. Our approach suggests a new reason why universal coverage is an attribute of legal and constitutional order.

A legal system that lacks universal coverage – for example, a system that protects only particular people or classes—makes it less likely that those excluded from the law's protections will value the system sufficiently to participate in its (costly) enforcement. Recall our framework with a single S interacting with many diverse b's. A common logic that benefits exclusively a subset of b_i's is unlikely to gain support among other b_j's so that they will help b_i resist S.

To attract the support of others in helping defend against potential problems from S, b_i must rely on a logic that benefits others rather than a rule that primarily benefits himself. Others in the community are far more likely to follow a logic with universal coverage which applies to b_i today but will equally apply to themselves when they interact with S in the future. In this way, universality helps facilitate the community-wide reciprocity system whereby all the b's coordinate their retaliations against S.

Our account of the coordination function of law also sheds light on several of the legal and constitutional attributes emphasized by legal philosophers. In the conventional account, legal attributes are explained by the need to create a workable system in which individuals are able to guide their behavior in order to comply with law. Constitutions must be publicly expressed in general terms—abstract principles—so that people can reason from these public expressions of the law's content (announcements of decisions or codified rules) to determine how it will apply to their particular circumstances in the future so that they can coordinate their resistance when necessary. Legal rules must be prospective, open, clear, non-contradictory, capable of being followed and stable because, as Raz (1977, 192-93) puts it, "one cannot be guided by a retroactive

law [and] if it is to guide people they must be able to find out what it is." "An ambiguous, vague, obscure or imprecise law is likely to mislead or confuse at least some of those who desire to be guided by it." And "stability is essential if people are to be guided by law in their long-term decisions." Similarly, those who are subject to the law must anticipate that the rules as announced will be consistent with the rules as applied. "Litigants can be guided by law only if the judges apply the law correctly." (Raz 1977, 201)

Our model predicts these same attributes as part of the equilibrium that supports the compliance (deterrence) of S. But our focus on the coordination problem facing the c's offers a different perspective on several of them. Consider:

- *Generality* is definitive of Fuller's concept that law is the "enterprise of subjecting human conduct to the governance of rules." Generality is necessary for the same reason as *prospectivity*: individuals must be able to predict from the public pronouncements of the law how it will treat particular situations that it may not yet have encountered. But the capacity to evaluate how the law will treat particular situations in our account follows from the need to predict whether one will be a beneficiary of the law, not (only) from the need for guidance to avoid running afoul of the law.

- *Stability* is also central to constitutional law. In our coordination account, stability plays an additional role, beyond that predicted by a focus on compliance. Coordination considerations predict that in equilibrium law will show stability over a longer time horizon than that strictly needed to support compliance. The incentive compatibility-constraint for individuals to support the constitutional order requires that individuals have positive expectations about how constitutional principles will apply to situations they care about in the future. Because unstable rules raise uncertainty about the future value of today's rules, instability lowers the value of the rule and hence of participating in decentralized punishment for wrongful behavior. Instability therefore lowers the likelihood that people will coordinate today. Because instability implies much higher costs of coordination, people are likely to fail to coordinate when the rules change frequently.

- *Clarity* serves a straightforward role in reducing ambiguity. The clearer are a set of principles, the more adequately they distinguish between the circumstances considered right and wrong. Clarity therefore makes it easier for citizens to partition constitutional from unconstitutional behavior. As the conventional account recognizes, clarity reduces ambiguity so that potential wrongdoers can more easily comply with the law. But it also increases the number of circumstances under which people are likely to succeed in

coordinating decentralized enforcement against wrongful behavior. "Brightlines" – constitutional provisions that are unambiguous so that citizens can readily and independently understand violations – are an important feature of clarity that helps coordinate resistance. Examples of brightlines include the U.S. Constitution's provision that grants the power to regulate interstate commerce solely to the national government; or the supremacy clause that says in the event of a conflict between a state and a national law, the national law is supreme.[5]

- *Non-contradictoriness* is equally straightforward: constitutional rules that contradict one another imply circumstances where different rules present conflicting prescriptions about compliance. They also interfere with coordination by generating ambiguity in the predictions enforcers make about when they should participate in enforcement and how the logic they are supporting will treat them.

- *Publicity* also facilities both compliance and coordination. The coordination account, however, emphasizes a wider public than the compliance account. To serve a coordination function, both the principles partitioning constitutional from unconstitutional behavior and the logic underlying the partition must be known by the entire enforcement community, not merely those who need to know what is required of them for compliance and the avoidance of penalty. Moreover, coordination requires publicity not only of constitutional rules but also of the logic on which the rules are based, in order to allow those who must decide whether to participate in collective punishment to determine how the rules, once elaborated, would apply to their idiosyncratic circumstances. Public announcement thus facilitates a coordinated equilibrium by members of a decentralized community.

- Finally, consider *consistency* between an announced rule and its implementation. Inconsistencies are likely to lead to coordination failure. As with clarity and promulgation, an inconsistency raises the problem that some people will know the announced rule and use that to guide their choices (including their punishment choices) while others use the rule as implemented. When these conflict, compliance and coordination failure is likely.

In short, the legal attributes identified by legal philosophy are all consistent with promoting the coordination function of constitutions. By eliminating a degree of ambiguity in prediction about how others will interpret conduct today, these attributes facilitate both compliance and coordination of punishment of unconstitutional behavior. The stability of law promotes compliance today and in the future. This approach also generates some of the most

[5] Mittal and Weingast (2013) discuss the theoretical importance of brightlines; Jacobi and Weingast (2013) demonstrate that a surprising number of provisions in the U.S. Constitution involve brightlines.

fundamental aspects of the rule of law: generality, universality, impersonality and stability (Hayek 1960).

Law and Legal Reasoning

In addition to providing a deeper account of the legal attributes emphasized by legal philosophers, our coordination model brings to the fore features of law that have been overlooked, deemphasized, or treated as controversial by legal philosophy. Waldron (2008, 2011), for example, has argued that the conventional concept of law is too thin an account of what we understand as a legal system, being too narrowly focused on formal rule-attributes, such as those listed by Fuller and the even narrower account offered by Raz (1977) to keep the concept of law distinct from the rule of law. Waldron argues that the concept of law should include procedural and argumentation requirements such as open courts that hear evidence and reasoning from both sides in formal processes. Dworkin (1986) claims that law inherently includes the ideal of integrity of reasoning and the concept that there is a "right answer" to hard legal questions, however contested they may be (particularly in the domain of constitutional law) in practice.

Our positive model predicts that constitutional law that succeeds in coordinating decentralized enforcement will have features like those emphasized by these more controversial accounts. Widely-shared, generally-available reasoning (for example, reliance on popular principles, maxims, simple concepts) also promotes compliance and coordination. A constitution's coordinating function is less effective if few can conduct the reasoning (or access expertise in the reasoning system) themselves. Generally available logic and principles increase the chances that decentralized coordination occurs. Moreover, because the world is constantly

changing and presenting new circumstances, compliance and coordination require some form of judicial process to deal with them. New and unforeseen circumstances bring the risk of coordination failure. An important role of constitutional process, therefore, is to make rulings that reduce ambiguity, fostering private coordination.

Coordination requires not only that the judiciary rule in a particular case but that they announce a reason articulating why they ruled in this manner. These reasons help a decentralized community extend the logic of the specific circumstances of the case to other circumstances. The more important and the more complex the issue, the greater number of cases will emerge, thereby moving the law toward the goal of greater thoroughness, reducing ambiguity and fostering private coordination.

A publically accessible logic must be such that all players can use it to make common knowledge predictions about future classifications, in particular about the classification of possibly as-yet unobserved and unknown sets of circumstances. This conclusion follows from the premise that the behaviors citizens engage in and the impact of sovereign intervention are in some fundamental sense made valuable by the private information and idiosyncratic reasoning processes of individuals. The set of classifications cannot be based exclusively on already-observed characteristics that describe circumstances experienced in the past. For this reason, the community must have a logic and not merely an accumulated set of observations about classification: even if the logic is derived from observed classifications, it must contain generalizable principles to predict the classification of new and perhaps as yet unimagined circumstances. Moreover, the application of these generalized principles to new circumstances that are (at least initially) inaccessible to some of the players must lead to a relatively unique

classification: the community must possess a means of deciding what the logic uniquely implies about classification.

This conclusion suggests that the constitution's common logic must be under the stewardship of an authoritative person, body, or mechanism. The community is therefore likely to create a specified system of reasoning – with specialized keepers of the reasoning (lawyers, judges, and, earlier, wise men, rabbis, clerics). This conclusion also suggests that the process of determining the implications of the logic for a new and/or initially private set of circumstances must be to some degree open: individuals must see an opportunity to introduce evidence and argument based on their about their private circumstances in an effort to allow the stewards of legal reasoning to apply and elaborate the common logic on the basis of that information. The process must also be public[4]: the application of the logic can lead to common knowledge classifications only if the information and reasoning with which the logic is elaborated in novel and otherwise private circumstances are shared.[6] Because multiple ways typically exist to extend an existing logic to new circumstances, a system of constitutional law must have some form of final arbiter that resolves these differences. Failure to have such an arbiter leads to coordination failure and even potential conflict as different groups seek to promote their approach to coordination at the expense of others.

The Constitution as an Equilibrium

[4]Compare, here, Macedo (2010) and his concept of "public reason."

[6] The qualifiers "relatively" and "to some degree" are intended to reflect the fact that a robust coordination could tolerate some noise but that if these features of generalizability, clarity, openness and so on were not present in the main then the proposed logic would likely fail to coordinate sufficiently to support an equilibrium.

The coordination approach also offers an explanation for how constitutional order is sustained. The coordination features of law support an equilibrium. The third party enforcement aspects of the law require that individuals use the same definition of honoring and wrongful behavior. Once coordination has been established, citizens have no incentive to deviate from it, so long as the coordinated outcome is at least as good as the uncoordinated outcome (as Hume 1739-40, Schelling 1960, and Hardin 1989 have emphasized). Moreover, this conclusion holds even if individuals disagree about the best way to coordinate so that many prefer a different way to coordinate to the adopted focal solution. The decentralized coordination equilibrium means that third parties will help punish when S has acted unconstitutionally according to the focal system of reasoning *R* and not otherwise. Therefore, acting alone and using a different logic to guide a given b_i's actions makes i worse off; this deviation from the focal point is costly to i but, because I acts alone, does not impose affect S's behavior.

Summary

Taken together, these implications of the coordination function of constitutions help answer the larger questions we asked at the opening of this paper. Constitutional law is at once a body of rules and principles that facilitate private ordering and decentralized coordination on enforcement; a system of public reasoning to explain and extend that system; and an equilibrium that sustains stability. Many countries have a system of announced rules. But if those systems do not also possess legal attributes, they are likely to support authoritarian regimes rather than constitutional law because they will have to depend exclusively on centralized coercion, with no role for decentralized enforcement.

Our approach helps us theorize about constitutional process. Taken together, the ever-changing nature of the world and our inability to conceive of all possible contingencies mean that new contingencies are constantly arising. As mentioned, these effects lead to an organization that provides stewardship over the law. To maintain their position, the stewards have incentives to create and maintain value for the community. Failing to create value – for example, by announcing a potential focal solution that inadequately fosters compliance or decentralized coordination – holds the risk that people simply ignore the constitution. For this reason, stewards have incentives to extend the existing focal solution to cover new circumstances and to reduce ambiguities as they arise.

Moreover, the coordination perspective suggests that there exists many different ways to define the specifics of law so that the law is not unique. Nonetheless, the participation constraint for individuals requires that the law provide value for citizens, so the substance of the constitution cannot be arbitrary: it must be structured so as to make most citizens better off.[7]

Our approach differs from normative legal literature in that we do not, for example, begin with normative principles and derive their consequences for doctrine or constitutional process. Instead, we build a positive model of how constitutional law emerges and is sustained. We then show that, as part of the equilibrium, the system sustains desirable characteristics. Universality and impersonality, both central features of a rule of law (Fuller 1969, Hayek 1960, Raz 1977), emerge as elements to support coordination. Our model suggests that the content of the rules in a legal system also possesses certain normatively attractive features: individuals in the system must

[7] Alberts, Warshaw, and Weingast (2012) show that successful constitutions must also protect the interests of those with the power to disrupt the constitution if they are made worse off. Examples include slaveholders in the early United States and those associated with the pre-constitutional regime in Chile, Spain, and South Africa. Because the interests with such power differ across states, every constitution must be different.

perceive themselves to be better off with the rules than without them. This does not mean that they will all be equally well off, or that the benefit is large—the outcome without coordination may be sufficiently bad that almost anything is better. We do not explore these normative features in depth here. Our principal observation is that the study of how normative principles are sustained in equilibrium is a potentially important addition to the normative literature, as Binmore (1994) and others have observed.

4. Political Theorists Have Understood Many of These Principles for Centuries

In this section, we show that principal elements of our approach to sustaining constitutions have been understood for several centuries. Importantly, the two main theorists whose ideas we report were both deeply involved with critical moments creating constitutional stability: Locke with the Glorious Revolution and Madison at the American founding.

One of our basic principles is that constitutions must be self-enforcing in the sense that political officials and citizens have incentives to abide by the rules. Hobbes in Leviathan (1651) famously argued that mere rules are not self-enforcing: "Covenants, without the Sword, are but Words, and of no strength to secure a man at all." [II,17;117]. Madison echoed these sentiments in *Federalist* 48: "The conclusion which I am warranted in drawing from these observations is, that a mere demarcation on parchment of the constitutional limits of the several departments [of the federal government], is not a sufficient guard against those encroachments which lead to a tyrannical concentration of all the powers of government in the same hands." [M,326]

We argue that the principal mechanism in enforcing constitutional rules is citizen resistance. When citizens react in concert to resist unconstitutional actions by political officials,

they can either force those officials to back down or remove them from office. This principle has been understood by political theorist for centuries. Demosthenes, discussing the maintenance of democracy in 4th century BCE Athens, observed:

> And what is the power of the laws? Is it that, if any of you is attacked and gives a shout, they'll come running to your aid? No, they are just inscribed letters and have no ability to do that. What then is their motive power? You are, if you secure them and make them authoritative whenever anyone asks for aid. So the laws are powerful through you and you through the laws. You must therefore stand up for them in just the same way as any individual would stand up for himself if attacked; you must take the view that offenses against the law are common concerns... (Demosthenes speech 21, Against Meidias, sections 223-225).

Locke, writing during the constitutional controversies of the late 17th century England, argued in his famous *Second Treatise on Government* (1689), "if the king … sets himself against the body of the commonwealth, whereof he is the head, and shall, with intolerable ill usage, cruelly tyrannize over the whole, or a considerable part of the people, in this case the people have a right to resist and defend themselves from injury." [118, §233]

In 1689, Locke's thesis about resistance was a radical doctrine. It remained so a century later at the American Revolution when the founders used this logic to support their resistance to the British. The Declaration of Independence declared: "when a long train of abuses and usurpations, pursuing invariably the same Object evinces a design to reduce them under absolute Despotism, it is their right, it is their duty, to throw off such Government, and to provide new Guards for their future security."

Locke also understood the idea of publicity and stability. He argued that: "the ruling power ought to govern by declared and received laws, and not by extemporary dictates and undetermined resolutions: for then mankind will be in a fare worse condition than in the state of nature ... [if one man can] force them to obey at pleasure the exorbitant and unlimited decrees of

their sudden thoughts, or unrestrained, and till that moment unknown wills, without having any measures set down which may guide and justify their actions." [72-73, §137]

Central to Alexander Hamilton and James Madison's concerns at the American founding in the *Federalist Papers* were problems of arbitrary power and tyranny: "In every political institution, a power to advance the public happiness involves a discretion which may be misapplied and abused" (*Federalist* 41). Further, Madison, emphasizing the role of ordinary citizens in controlling government, can be read as recognizing that this form of control rests at least in part on "auxiliary precautions" – that is, constitutional provisions that expressly obligate political officials to observe limits; we can understand these internal controls as coordinating the external controls of the citizenry:

> If men were angels, no government would be necessary. If angels were to govern men, neither external nor internal controls on government would be necessary. In framing a government which is to be administered by men over men, the great difficulty lies in this: you must first enable the government to control the governed; and in the next place oblige it to control itself. A dependence on the people is, no doubt, the primary control on the government; but experience has taught mankind the necessity of auxiliary precautions. [M, 337]

In logic closely paralleling our view of the citizen resistance in the face of the coordination problem underlying constitutional enforcement, Hamilton and Madison explained at several points in the *Federalist Papers* how citizen coordination would work, often through their agents at the state level. Both writers,used the term "encroachment" to mean unconstitutional actions, such as abusing citizen rights or grasping powers that were not delegated by the Constitution; further, both saw collective resistance as the primary means of enforcing constitutional limits on the federal government.

Hamilton argued in *Federalist* 26 that:

> the state legislatures, who will always be not only vigilant but suspicious and jealous guardians of the rights of the citizens against encroachments from the federal government, will constantly have their attention away to the conduct of the national rulers, and will be ready enough, if anything improper appears, to sound the alarm to the people, and not only to be the voice, but, if necessary, the arm of their discontent.

Pursuing this line, Madison further argued in *Federalist* 46 about the important role of the states in monitoring the federal government and in organizing states, citizens, and their militias against possible violations and abuse:

> But ambitious encroachments of the federal government, on the authority of the State government, would not excite the opportunity of a single state, or a few States only. They would be signals of general alarm. Every government would espouse the common cause. A correspondence would be opened. Plans of resistance would be concerted. One spirit would animate and conduct the whole."

Madison also understood the importance of the bill of rights as helping to coordinate citizens and resistance. In his view this worked somewhat differently in constitutional monarchies than in popular governments. In England following the Glorious Revolution, a constitutional monarchy, the bill of rights contained a great many brightlines. For example, taxation was the sole domain of Parliament: "That levying money for or to use of the crown, by pretence of prerogative, without grant of Parliament, for longer time, or in other manner than the same is or shall be granted, is illegal." As another example, the king had to obey the law: "That the pretended power of suspending of laws, or the execution of laws by regal authority, without consent of Parliament, is illegal."

The English bill of rights improved clarity, reduced ambiguity, and therefore facilitated citizen resistance. Madison explained this in a letter to Thomas Jefferson dated October 17, 1788: "the efficacy of a bill of rights in controuling abuses of power - lies in this: that in a monarchy the latent force of the nation is superior to that of the Sovereign, and a solemn charter of popular

rights must have a great effect, as a standard for trying the validity of public acts, and a *signal for rousing & uniting the superior force of the community*." (emphasis added)

The bill of rights in the United States Constitution also aided citizens in the face of "usurped acts of the government" from which "evil may spring." As Madison explained to Jefferson, in the face of such acts, "a bill of rights will be good ground for an appeal to the sense of the community. Perhaps too there may be a certain degree of danger, that a succession of artful and ambitious rulers may by gradual & well timed advances, finally erect an independent Government on the subversion of liberty."

Public reasoning was also a major part of the American constitutional experience and design. The ratification debates, pitting Federalists against Anti-Federalists, focused public attention on key issues involving the meaning of the proposed Constitution. Indeed, the *Federalist Papers* themselves represent a monumental effort to explain the Constitution and make clear the meaning of a wide variety of the Constitution's provisions. In a similar manner, the English Bill of rights make public the new rules of the constitutional process in a manner that settled and clarified many of the constitutional debates at issue during the contention rule of the Stuarts prior to the Revolution (i.e., 1603-1688). More than this, however, the American Constitution committed the political process to the protection of a platform for public reasoning, guaranteeing freedom of the press and laying the groundwork for federal courts to assume a central role as stewards of public conversation about constitutional principle.

This short section demonstrates that several of the historic political theorists and constitutional architects understood, even if in fragmented ways, many of the central aspects of our approach. We thus see our contribution as one that is well-grounded in existing constitutional

theory but which provides a more concrete formulation of these key components of constitutional stability.

5. Coordination and Equilibrium in Particular Constitutional Contexts

As we observed at the outset, sustaining a constitution in practice is a difficult problem. Coordination problems arise in policing potential unconstitutional actions by the sovereign against the citizens; for example, when the sovereign violates citizen rights, as is so common in constitutional failures; or when the sovereign begins issuing and enforcing decrees that ignore constitutional procedures to produce laws. When the b's (the citizens) all act in concert, they can police S's (the sovereign) actions and prevent unconstitutional transgressions of their rights. When the b's lack the ability to act in concert, the S can exploit them and avoid punishment. Creating a long-term, stable constitutional equilibrium therefore requires solving a complex form of coordination game. A host of issues central to creating a constitution reflect this form of coordination problem: what rights should citizens have? what should the process of producing sovereign commands be?

In practice, coordination difficulties arise because no natural or unique solution exists for the specification of citizen rights or the processes that produce sovereign commands. Indeed, too many solutions to these problems exist. The United States Constitution has a right to bear arms, while many others do not. Some have proportional representation and parliamentary systems while others have a presidential system with winner-take-all elections. Other constitutions charge

the military with a duty to protect public peace, allowing them legal authority to suspend the democratic government (see Loveman 1993).

The wide range of possible constitutional provisions implies that, here too, the different positions and experiences of citizens are likely to produce widely varying preferences over procedures and rights, making organic or spontaneous coordination especially difficult. Rational citizens can disagree about the appropriate form of government or the best rights to enshrine in a constitution. Because citizens' situations differ so markedly, they will typically prefer to coordinate on different forms of rights and governmental procedures. Therefore, no natural focal solutions exist to the coordination problem. In terms of the model, if citizens use their own idiosyncratic logic to decide when to punish the sovereign or government, they will fail to coordinate effective resistance. To solve this coordination problem, a focal point that is incentive compatible for all the citizens needed for enforcement must be constructed.

The approach developed in this paper helps understand how such coordination may arise. Suppose the two players (that is, two c's) represent members of two opposing groups in society; the Federalists and Anti-Federalists in the 1780s United States; the Whigs and Tories in late seventeenth century England; the royalists and the republicans in nineteenth century France; and the left and the right in both mid-to-late twentieth century Spain and late twentieth and early twenty-first century Chile.

In each of these settings, two sides held opposing views about the appropriate constitution, the allocation of political power, and the constitution's specification of citizen rights. Abstractly, creating a stable constitution by means of a focal point-coordination equilibrium requires rules that benefit both groups. To succeed in creating a constitution that fosters coordination, neither

side can impose a set of rules that provide benefits exclusively to its group (for example, if one of the b's forms a coalition with S against the other b). Instead the players must arrive at a set of constitutional principles that are sufficiently convergent – and hence valuable – to members of both groups so that both are willing to participate in a constitutional coordination equilibrium. Put another way, the incentive-compatibility constraint requires that both players be better off under the constitution for them to be willing to take costly actions to defend it.

Constitutions with impersonal rights for all citizens are unlikely to emerge if one of the two sides has the upper hand and dominates politics. Under these circumstances, it is generally not feasible to create a focal solution that supports law and legal attributes. A dominant side typically has little incentive to foster creation of a focal solution that grants rights to the other faction. By virtue of domination, this side gets what it wants without attracting the support of its opponents. Dominant groups instead create societies with privileges rather than rights, excluding the opposition, in what North, Wallis, and Weingast (2009) call natural states. In so many of these societies, allowing the opposition to participate does not lead to open access with a stable democratic constitution, but risks a change in the dominant party in which the former opposition takes power and suppresses the previous dominant party.

For this reason, many new constitutions emerge during crises or settings where neither party dominates, so the two parties must accommodate each other, creating a constitution that makes both sides better off. Elster (2000, ch 2) observes that most long-term stable constitutions emerged during crises.[9] The United States Constitution emerged in the crisis over the failure of the Articles of Confederation; Spain's constitution during the unstable years following the death

[9]Crises are not a sufficient condition for stable constitutions. As North, Wallis, and Weingast (2009, chs 2-3) observe, most natural states face recurrent crises which alter the natural state (e.g., who holds power) but does not move the natural state along the transition to open access order.

of long-term dictator, Francisco Franco; Fifth Republic France emerged during the failures of the Fourth Republic and threats of a military coup; and Chile's during the transition to democracy in the wake of coup followed by a military government.

In each case, the new constitution represented a pact or compromise between the opposing factions. These pacts had several features that made them self-enforcing in the sense that all the parties to the pact had incentives to maintain it (Mittal and Weingast 2010, Weingast 2004). First, neither side dominated. Second, both sides were made better off by the pact. Third, the pact created new rights and public procedures of government. Finally, each side was willing to help defend the constitution, including the provisions that protected their opposition. The latter holds when both sides are better off under the constitution and when failing to defend the constitution destroys its, making them worse off.

For our purposes, we consider the third feature of self-enforcing pacts, namely, rights and process. Impersonal, universal rights are attractive when creating a focal point solution to help citizens coordinate against sovereign transgressions. First, universal rights provide protections for those out of power. Universal and general rules are also attractive to each side because they structure the absence of privilege. Treating citizens in like circumstances alike—achieving a particular kind of generality—limits the ability of those in power to take advantage of those out of power. Finally, generality and universality are economizing. As we have emphasized, coordination to police sovereign transgressions requires that decentralized citizens react in concert to sovereign behavior. Systems of privilege are more difficult to police because they require more information and they reduce the benefits to those not privileged; they are therefore less likely to foster coordination among large groups of decentralized citizens. Other attributes of legal process

are important here as well. As with private law, in constitutional law, stability of the rules, clarity, public promulgation, and consistency, for example, all foster economizing and coordination; and they help limit the ability of the majority to take advantage of the minority.

As an example, consider 17th century England, with the two groups being the Whigs and Tories. These groups had markedly different understandings of the constitution, and as a consequence failed to coordinate against the king who favored the Tories while transgressing the rights of the Whigs. Tories followed Filmore (1690) who argued for the "divine right of kings." In the constitutional context, this doctrine implied that while kings could do wrong, citizens nonetheless had a duty to obey. In this view, citizens had no right to resist. Whigs, in contrast, were followers of Locke, a major Whig theorist, who argued that citizens had the right to resist unconstitutional actions by the king (Locke 1689). Because the citizens were so deeply divided over constitutional issues, they failed to coordinate against the king, who abused citizen rights.

This setting characterized much of post-restoration England, from 1660 until the Glorious Revolution of 1688, which occurred when King James II turned on his own supporters, the Tories. A sufficient number of Tories at this moment set aside their beliefs in the divine right, coming to agree with the Whigs so that, in concert, they made several constitutional changes. First, taking active resistance to the king, they displaced King James and brought William and Mary to the throne. Second, they made an explicit agreement, negotiated in Parliament, which explained the reasons for this action and announcing that any future king who violated these constitutional provisions would risk the same treatment as James.

During the Glorious Revolution, Parliament assumed the role of constitutional steward. The new rules limiting the king, as embodied in the bill of rights, had the various features of legal

attributes predicted by our model. For example, the constitution became general and universal in practice, which it had not been before. Similarly, although the constitution had always held Kings to respect laws of Parliament, both Tudor and Stuart monarchs honored this in the breach. Laws of parliament became sacrosanct following the Glorious Revolution, regardless of whom they benefited or harmed. Kings who violated them were subject to resistance. The rules were also prospective, clear, and public.

In the United States of the mid-1780s, the failure of the first U.S. Constitution, the Articles of Confederation, meant that Americans could not provide valued public goods, some desperately needed, especially national security, but also a common market and a stable monetary system. At this time, the Federalists proposed to improve the national government's powers to accomplish these goals while the Anti-Federalists opposed new powers as dangerous to liberty. Under the Article's unanimity rules, the Federalists failed. Finally, in 1787, the Federalists proposed a new constitution that took into account many of the Anti-Federalists' concerns, incorporating a series of rights and governmental procedures designed to mitigate the Anti-Federalists' fears of a national government too strong. They did so by creating a new focal point which embodied legal attributes in the new document, thereby helping citizens to coordinate, including the well-known system of checks and balance, a series of bright line constitutional restrictions (such as limits on direct taxation or the taking of property), a national government solely of enumerated powers targeted to national problems, and a strong system of federalism that at once decentralized powers to the states and ensured that states would remain strong and be vigilant monitors of the national government. As our quote from Madison in the last section emphasized, states would monitor

"encroachments" by the national government and not only sound the alarm, but coordinate citizen action against to resist the national government.

An important part of the Constitution's success, including its ability to become a stable focal equilibrium, involved legal attributes. Creating a constitution characterized by universality, generality, stability, public promulgation, clarity, and consistency all worked to secure support of pivotal Antifederalists. In particular, the Federalist Founders did not create a system of privilege that advantaged holders of national power. They instead created a system that fostered the provision of widely valued, public goods while protecting citizen rights and limiting the national government's potential intrusion in other policy areas. A wide variety of universal general rights, including the Bill of Rights, applied to the Antifederalists even if the Federalists were to control the national government (as most believed would occur with Washington likely to become the first president).

Hofstadter (1969) describes the emergence of another important piece of constitutional liberty, namely, that the opposition party came to be seen as necessary and legal part of a competitive democracy rather than as a form of sedition. This shift in perspective changed the notion of honorable and wrongful behavior, making it more general and universal and less personal, that is, less tied to which party held power at any given moment.

To see how this shift in perspective arose, we observe that two parties arose very quickly under the new American Constitution, the Federalists under the leadership of Washington, Adams, and Hamilton, and the Republicans under Jefferson and Madison. Each party questioned the other's legitimacy and sought to vanquish it. This period did not embrace the idea of the loyal opposition.

With the demise of the Federalists in the second decade of the 19th century, many Jeffersonians thought they would be able to implement their programs without opposition. They failed. Instead, the Jeffersonians fell into different factions, each vying to implement their own vision of the Jeffersonian legacy. Martin Van Buren, a major political innovator (creating, for example, the party nomination convention), understood the problem. He realized that absence of an opposition led to the Jeffersonian infighting among different factions of the party. The presence of political competition, he argued, forced factions in each party to make the difficult political compromises necessary for a party to win..

The idea of a loyal opposition emerged in this context, when people recognized that party competition for power was a positive thing (Hofstadter 1969). This idea also represented a coordination equilibrium in which citizens came to see that political competition by parties had positive effects and that restrictions against the opposition were illegitimate. The new coordination equilibrium had legal attributes, treating those out of power in the same way as those who held power today. In order for individual factions of the ruling party to participate in upholding the rules— to punish their fellow faction members for attempting to silence opposition; or not to punish the opposition, for example, for voicing difference—they had to know what the rules defining 'loyal' opposition were. The same point holds for members of the opposition—they had to punish each other for overstepping the bounds of *loyal* opposition. Finally, the system had to exhibit universality – members of all parties had to be confident that the boundaries of loyal would be applied equally to themselves whenever their party was in the opposition. Throughout the country, states began to pass new laws regulating party entry and competition, including creating primary systems.

Chile's transition from a natural state to a stable constitutional democracy took a different path but nonetheless reflects the lessons of our approach.[10] As with the United States, the process of writing a new constitution began with action by one side – the authoritarian dictatorship of President Augusto Pinochet, representing the political right. Members of this faction designed a constitution that benefitted themselves. The constitution included various forms of authoritarian "enclaves" as they are called —countermajoritarian constitutional features that included senators appointed for life — and the removal of various issues from politics, such as property rights and retribution for the authoritarian regime's actions. The political left acceded to participate under this constitution, but the left did not consider the constitution legitimate, notably because the right's control of the military meant on-going military threat.[8] In addition, the constitution's countermajoritarian features protecting the right not only constrained the government in ways that the right sought to protect, but also hobbled the government's ability to address many important policy problems.

By design, the constitution created divided government – allowing the right to retain veto power over the government through its control of the senate, in part through its enclaves. The right accurately forecasted that they would win about 40 percent of the vote. Adding senators for life appointed by the right granted the right a majority in the senate and hence veto power over all legislation. Importantly, the constitution also allowed the left to govern as the left won majorities for both the presidency and the lower chamber for two decades.

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[10]This discussion draws on Alberts, Warshaw, and Weingast (2012), Londregan (2000), Scully (1996) and Valenzuela (1994).

[8] Despite being forced to operate under the military-imposed constitution, the opposition (and subsequently the new government) "wanted to avoid giving Pinochet any excuse to renege on the constitutional deal that had been struck" (Siavelis 2008:193).

Over time, the political environment changed in several ways. The political left retained power in part because it continued to promote stable economic growth and did not threaten the right's biggest concerns. Perhaps most important, the original appointees to various enclaves changed, some through expiration of their long terms and others through death of the officeholder. This allowed the left government to replace many right-wing holders of enclaves with individuals sympathetic to their interests. Throughout, the left moderated many of its views, for example, no longer questioning property rights. These factors combined with the successful economy and the government's gradual control over the enclaves to allow the left to alter the constitution, removing many of the veto enclaves. Importantly, it did so within the existing rules for constitutional amendment, enhancing the legitimacy of the changes. This constitutional change completed the transition to stable, constitutional democracy.

The success of the revised constitution is consistent with our model. The Pinochet constitution failed to obtain widespread legitimacy because the left acceded to it by threat. The left had no incentive to support this constitution over the long-term, although the left constrained its behavior due to the threat of military intervention. Over time, the left came to control more of the veto enclaves and the military. Economic success, widely valued and supported by most Chileans, became an element of the left's political success. Over time, the left had greater incentives to honor the rules as they allowed the left to compete successfully in elections. With the 2005 constitutional changes, the left removed the most inimical features of Pinochet's constitution, such as all nonelected Senate seats and restoring the president's powers to name, fire, and promote high level military officials. The left nonetheless retained the constitution's essential core.

With these revisions in place, both sides came to support the constitution. The left had strong incentives to enforce the constitution. The revisions at once removed the parts the left deemed illegitimate; and, as we have observed, the constitution allowed them to rule. Because the left came to support and honor the constitution, the right had far less to fear from the left: the constitution protected the right's more important interests by guaranteeing property rights and protecting them from prosecution for misdeeds during the authoritarian period. The new constitution therefore fostered decentralized coordination of both the left and the right to protect constitutional provisions and rights, including those that were subject to uncertainty in the democratic regime that preceded the military coup in 1973. In terms of our model, the modifications in the constitution allowed both right and left to see the constitutional order as sufficiently convergent with their interests over time as to make the new constitution an equilibrium.

5. Conclusions

We ask how is a stable constitutional order sustained? To address this issue, we develop a new perspective on constitutions to explain three distinct aspects of constitutions – (i) that constitutions have a series of legal attributes, often associated with the rule of law, such as generality, stability, consistency, publicity; (ii) that constitutions involve a process of public reasoning, particularly as they are applied over time and in new circumstances; and (iii) that successful constitutions support an equilibrium in which citizens of divergent views and interests are nonetheless willing to coordinate to uphold the constitution and retaliate against those who

violate constitutional provisions. Our answer builds on earlier insights, notably, that constitutions reflect in part a coordination game (Sugden 1986, Weingast 1997, Cooter 1998, Basu 2000, McAdams 2000, Mailath et al 2001, Myerson 2004, Dixit 2004) and that, to be sustained, constitutions must be incentive compatible (Binmore 1994, 1998; Weingast 1997).

Our approach begins by emphasizing that sustaining a constitution involves decentralized coordination of resistance. No higher authority exists with coercive power to exogenously enforce a constitution. But coordination raises significant problems: what should the constitution entail? How do a large number of dispersed and disparate individuals with a potentially wide range of idiosyncratic views about constitutional issues rely on similar rules so that their resistance strategies deter unconstitutional actions?

In order for a constitution to be an equilibrium, citizens must have incentives to abide by the constitution and, importantly, to participate in decentralized enforcement of the constitution. We argue that, to do so, a constitution must have several characteristics. First, it must create a focal solution to the coordination game so that citizens can rely on a single set of rules. Second, that focal point must secure a constitutional order that is sufficiently convergent with the interests of diverse citizens to incentivize enough of them to participate in upholding the constitution. Third, the constitutional regime must have legal attributes. These attributes help citizens coordinate because they raise the value of coordination to a large number of people; they support confidence in the durability of an order that citizens prefer to the alternatives; and they economize on the costs of coordination by ruling out more complex systems of rules, such as those that involve not only the circumstances of the case, but personal variables, such as where a person sits in the social hierarchy. Fourth, the constitution must include a system for creating public logic

around legal rules. The reason is that the circumstances under which citizens interact with the state are so varied that successful constitutions cannot simply be comprised of a list or algorithm about constitutional and unconstitutional behavior; it must instead be a common knowledge set of rules in combination with a logic so that people can extrapolate the logic from rules into a wide variety of new circumstances.

Our approach differs from standard philosophy of the law and constitutions in several ways. We agree about the normative value of many of the legal attributes, such as generality, stability, and consistency. Yet we also emphasize that constitutions must also be unique; that is, among the many possible legal (coordination) equilibria, the constitution must create a unique set of rules and legal reasoning around which people can coordinate. Reflecting the ever-changing world, the legal system must have an authoritative steward, such as a hierarchical court system with a supreme or constitutional court. The system of stewardship extends existing rules to new circumstances in a unique way, resolving problems of ambiguity—which threaten coordination--when multiple and conflicting interpretations can be extrapolated from existing rules. This system may also arbitrate differences among lower courts, again, to create a unique set of rules.

We applied this perspective to issues in constitutional law, suggesting that our approach yields important lessons about how constitutions are sustained. Given that most constitutions fail, assuring defense of the constitution is a major – and clearly difficult – function. Many have observed the coordination function of a constitution (Hardin 1989, Ordeshook and Svetsova 1992, Weingast 1997). We build on the observation that constitutions facilitate coordination, adding that constitutions that systematically incorporate legal attributes are more likely to induce citizen participation in defending the constitution against violations.

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