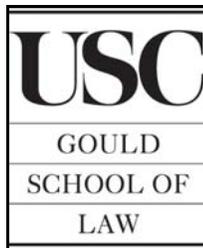


**Endogenous Institutions:
Law as a Coordinating Device**

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1. Introduction

Scholars widely agree that long-term economic growth requires a legal system providing for rule of law, contract enforcement, and impersonal exchange (Greif 2006, North 1981, 1990, North, Wallis, and Weingast 2009). In this paper, we address a piece of this broad issue by studying the question, what is law? To do so, we break this into several component questions: why does law have the attributes characteristically associated with the rule of law? why does law involve public reasoning? And, how is this system sustained as an equilibrium?

Most social science approaches to law fail to answer these questions. Students of law and economics, for example, typically define law exclusively in terms of its capacity to coercively enforce a result. Even when law and economics models outcomes reached outside of litigation, it does so in the context of ‘bargaining in the shadow of the law’ where a credible threat of a

coercive result prompts a settlement without litigation. Positive political theory of the law treats law as just another political contest over policy outcomes. Most of the work in these two fields focuses on the efficiency, distributional, or policy characteristics of outcomes of legal institutions.

Missing from both accounts is attention to the truly characteristic features of “law,” of which we distinguish two. The first concerns the nature of law itself. Fuller (1969), 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 1969 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 1969 39).¹

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¹A host of scholars have taken issue with some of the specific attributes making up Fuller’s list and whether these attributes define the concept of law or are better understood as attributes of good law, that is, a system that observes the rule of law (see, e.g., Raz 1977). For ease of

The 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). 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.

Neither economic nor positive political theory treatments of law explain why law looks like law.² We have analyses of how more or less general rules might impact efficiency, such as the “rules versus standards” literature (Kaplow 1992); and explanations about how the political circumstances affect doctrine, as in Marks’s (1988) political explanation for the 1980s Supreme Court’s narrow reading of Title IX of the Education Act. But we have no accounts of the economic or political factors that generate an institution that is characterized by legal attributes; or by distinctive processes of public, legal reasoning. Moreover, although the literature on legal philosophy focuses on these issues, it fails to provide an explanation of how law is sustained as an equilibrium.

In this paper we 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 idea that law is more than a mechanism of coercion by the state. Law in many settings is enforced by a wide variety of extra-legal mechanisms, such as

exposition, we will ignore these debates and interpret Fuller’s list as identifying what it means to have a “legal” order.

²Similarly, legal theorists who study the abstract qualities of law cannot explain how law emerges or is sustained in some countries, but not most.

reputation, retaliation, guilt, shame, and so on. The Law Merchant that emerged to govern commercial trade in medieval Europe, for example, depended heavily on voluntary compliance and reputational penalties, delivered either at the level of the individual or the community (Greif 2006, Milgrom, North, and Weingast 1990). Even though coercive state enforcement may play an essential role in fostering and making a particular legal system effective, as the efforts to generate legality in the former Soviet states demonstrate, the state's capacity to enforce compliance through sanction and threat is limited.¹

Yet we do not identify voluntary compliance with law as the absence of law; it may instead reflect a highly functioning legal order, where decentralized enforcement works more efficiently than an exclusively state-sponsored coercive system. Even in countries with a well-established rule of law, most disputes never reach courts, in part because of bargaining in the shadow of the law (Mnookin and Kornhauser 1979), but also because of decentralized enforcement. In the area of contracts, for example, firms develop reputations for their willingness to honor contracts and bargain through unforeseen problems. Ones with a bad reputation pay a price in their relations with others. Similarly, many organizations are structured to ensure routine compliance with regulatory requirements even when the risk of coercive penalties is low, in part because of the impact of non-compliance on the perceptions and behavior of employees, investors, the media, and so on. Campaigns in the entertainment industry, for example, to identify copyright violations with "theft" and "piracy" are aimed at leveraging the power of decentralized enforcement mechanisms, such as shame and guilt.

¹ Feifer's (1964) study of "justice in Moscow" shows that Soviet courts dealt tolerably well at delivering justice for everyday civil issues, such as petty crimes and simple property rights. But whenever the issue had a connection with state issues, matters were different, and often dealt with in another system that lacked legal attributes.

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 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. Decentralized enforcement thus poses a substantial coordination challenge. First, individuals must all believe that a sufficient number of others will participate in enforcement. Second, to coordinate the enforcement actions of willing participants, individuals must all share similar beliefs about what the laws requires – what is right and what is wrong. Third, these beliefs must be common knowledge.

We argue that law has developed its 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, law is a specialized system of reasoning that seeks to converge on the categorization of actions as either warranting punishment/action or not. 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) that, among other things, extends and adapts existing rules to novel circumstances.

A central concern of our argument is when will an individual participate in action against wrongful 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 & Gächter 2002).

We take a different approach in which individuals are concerned about the beliefs of others; specifically, beliefs about those who might act wrongfully toward another in the future, and those who might participate in enforcement in the future. Suppose there exists a rule, *R*, to judge right and wrongful actions. By participating in a boycott using *R*, an individual *j* can affect others' beliefs so as to influence the likelihood that they participate in a punishment in the future; in particular, that they will participate in a punishment following a wrongful action against *j*. A potential wrongdoer will make 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 boycott for wrongs (against anyone) defined by *R*. *j*'s participation today in boycotting thus increases the likelihood that a future wrong against another is effectively punished by the group by giving others confidence that they will not boycott 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 law – emphasizing 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'..

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.³

The coordination function of 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, law must be

³The growing arcane and complex nature of modern legal reasoning may be hindering this feature of law.

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, 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 two 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 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.

The second 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 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 social norms, authority and so on.

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 question, what is law, and its component questions. Section 4 pursues a range of further applications. Sections 5 and 6 apply the framework to the emergence of medieval contract law and to constitutional law, respectively. Our conclusions follow.

2. The Theory of Decentralized Legal Enforcement

We begin our theoretical discussion by considering an environment without coercion.² Consider a generic situation with a single large player, S , who interacts in a similar way with many individuals, b_i . We might consider S a seller and the b_i 's many buyers; or a firm and many employees, or a sovereign and many citizens. With each individual b_i , S has the opportunity to behave as promised or expected (that is, honorably) or to cheat in some way, imposing a loss on b_i . We suppose that S 's behavior with respect to an individual b_i is observable by all. After observing S 's behavior, each b_i chooses whether or not to punish or 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 b 's must participate for the punishment to be effective in changing S 's behavior.) As long as the one-time value of cheating for S is less than the discounted present value of behaving honorably in each period, the threat of retaliation by the b 's polices S 's behavior.

Many problems exist with the standard approach to modeling interactions between S and the b 's. The one we highlight is that, in standard accounts, S 's behavior is unambiguously classified as either cheat or honor. This holds, for example, in the repeated prisoners' dilemma. Yet in most real world settings, S 's behavior generally has many dimensions. In the context of a

seller and a buyer, for example, S's performance of a contract to deliver a good involves choices about quality, quantity, place and time of delivery, and the assumption of different kinds of risks such as the risk of damage to the goods while in transit. Is a failure to deliver a particular quality or quantity, or at a particular time and place, or in light of a fire or an increase in raw material costs, cheating or not?

In general, no obvious or unique answer exists to these questions. The buyer and the seller are likely to have different understandings of what was agreed to—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 cheater are likely to disagree about how to partition various actions into honorable and wrongful behavior. Heterogeneous views about honorable and wrongful behavior make it difficult for diverse individuals to coordinate their retaliation against wrongful behavior. 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 wrongful or not. Most importantly, this setting implies that each individual b_i has preferences over the classification of S's behavior in b_i 's interactions with S. We assume idiosyncratic logic is not accessible to others, at least not at reasonable cost. An individual b_i faces a problem: b_i wants S to expect that behavior toward b_i that b_i classifies as wrongful will result in punishment by the entire community of b 's. But the other b 's do not know what b_i considers wrongful. A possible solution to that problem of course

² This section summarizes a model developed formally in Hadfield and Weingast (2011).

would be for b_i to announce when S's behavior toward b_i is wrongful. But this then poses an incentive problem: what incentive do the other b_j 's have to participate in a costly collective punishment to deter behavior that b_i judges (in an inscrutable way) to be wrongful?

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 b's as wrongful. Call this common logic R (for reasoning). If all b's participate in a collective punishment whenever S engages in behavior—to any individual b—that is classified as wrongful by R, then the community of b's can deter S from R-wrongful behavior. An individual b_j then benefits from collective punishment coordinated by R if R is sufficiently convergent with b_j 's idiosyncratic logic; that is, if R results in a threat of punishment in response to what b_j considers to be wrongful sufficiently often.

For collective punishment of R-wrongful behavior to be a sub-game perfect equilibrium, it must be the case however that each individual b is not better off deviating from the collective punishment strategy—breaking a boycott, for example. We argue that this incentive can be found in b_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 b. By participating in collective punishment, each individual b helps to ensure that there is common knowledge observation of an effective punishment if S engages in R-wrongful behavior. Failing to do so leads S and other b's to believe that R is not capable of coordinating the buyers. (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).)

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 individuals 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 more formal model, we study two buyers who would benefit from coordinating boycotts of wrongful behavior by a seller. Recognizing this, one buyer has an incentive to engage in a boycott and announce that it is doing so under a logic accessible to the other—the “common law of England,” “the customs of this village,” “the law merchant”, for example. The second buyer has an incentive to join the boycott under that announced logic if that logic would serve to coordinate punishments that provide sufficient benefit to that buyer. The second buyer will participate in the boycott if this buyer judges the announced common logic to be sufficiently convergent with its idiosyncratic logic. By participating, the second buyer engages in observable behavior—completing an effective boycott—that communicates the information that the second buyer benefits from punishments coordinated on the announced common logic and hence alters the beliefs of the first buyer and the seller. 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 buyers generate a coordinating device. What makes it salient is its proposal by one buyer willing to bear the costs of waiting to learn whether it is acceptable to the other.³

³ For a similar 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).

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-wrongful actions generates sufficient benefit for the individual to overcome the cost of participating in boycotts to demonstrate coordination.

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 rules—the common logic—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 above 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 law. 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 order.

First, 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 b_i ’s is unlikely to gain support among b_j ’s so that they will help b_i retaliate against 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 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. Law must be publicly expressed in general terms—rules—

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. 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 b'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 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 follow the rules requires that individuals have positive expectations about how the rules will apply to them 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 the rules, the more adequately they distinguish between the circumstances considered right and wrong. Clarity therefore makes it easier for people to partition honorable from wrongful behavior. As the conventional account recognizes, clarity therefore 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.
- *Non-contradictoriness* is equally straightforward: 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 an enforcement and how the logic they are supporting will treat them.
- *Publicity* also facilitates both compliance and coordination. The coordination account, however, emphasizes a wider public than the compliance account. To serve a

coordination function, both the rules partitioning honorable from wrongful 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 the 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 the 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 law. 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 wrongful behavior. The stability of law promotes compliance today and in the future. This approach also generates some of the most 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), 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 (1980) to keep the concept of law distinct from the rule of law. He 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 law that is able to coordinate 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. The coordinating function of law 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 legal 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 transactions negotiated between individuals 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 existing transactions. 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 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 public⁴: 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.⁴ Because there typically exists multiple ways to extend an existing logic to new circumstances, a system of 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.

Law as an Equilibrium

The coordination approach also offers an explanation for how legal 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

⁴Compare, here, Macedo (2010) and his concept of “public reason.”

⁴ 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

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 wrongfully 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 help answer the larger question of what is law. Law is at once a body of rules 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 law because they will have to depend exclusively on centralized coercion, with no role for decentralized enforcement.

Our approach helps us theorize about the process of law. 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 value for the community. Failing to create value – for example, by announcing a potential

coordinate sufficiently to support an equilibrium.

focal solution that inadequately fosters compliance or decentralized coordination – risks people simply ignoring the proposed solution. 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 law cannot be arbitrary: it must be structured so as to make most citizens better off.

4. Further Implications

Our perspective yields a different way of thinking about law than existing literatures. Much of the legal literature relies on the law-as-coercion approach, including the law and economics literature. We suggest that law is about creating order by helping citizens comply with the law and to coordinate against wrongful behavior. Coercion has a role in law (see below), but this is as a complement to the more important purpose of law to create coordination.

Myerson (2004) provides another route to understanding law. We build on his notion that law is a system that creates coordination. But law is more than just an announced set of rules. Many authoritarian systems produce rules that they label as law, but these systems are rarely characterized by legal attributes. Indeed, a principal goal of most authoritarian regimes is to create an equilibrium of coordination failure among citizens so that the regime can survive. Coordination this is, but it is not law.

Binmore (1994, 1998) develops an intriguing and complex approach. We build on his work, especially his asking how people sustain a set of rules governing society. Following Rawls, he uses a veil of ignorance approach. But he differs from Rawls in important ways; for example by highlighting the question of why would people, once the veil is lifted, follow the rules. His important insight is that people must choose the rules under the veil taking into account the incentive-compatibility problem. He argues that legal rules must therefore rely on notions of fairness. Our approach to the content of law differs because we use a coordination framework rather than the veil of ignorance framework, but we rely on his insight about incentive-compatibility.

Another relevant literature focuses on deliberation. This literature has many facets, including the idea that deliberation helps reduce conflict and creates consensus. We have embedded a form of deliberation in our approach to law because public reasoning – including public input – promotes the coordination role of law. In this framework typically many ways of coordinating exist. Decentralized choice – whether under deliberation or not – cannot in general resolve these differences. Because the different ways to coordinate may have large distributive consequences, a decentralized community of citizens has no way to come to agreement. Our point about creating a steward shows that resolving differences over how to coordinate may involve public deliberation and input, but in the end, the steward must resolve the differences by picking a single, focal means of coordinating. Nonetheless, the steward cannot act arbitrarily. The incentive-compatibility constraint for individual participation requires that most people gain from the rules. A steward that consistently chose rules benefitting itself at the expense of the

community would soon create coordination failure and the collapse of individuals following the rules.

We now take up the problem of coercion. We have assumed throughout an absence of state coercion, allowing us to focus on the coordination aspect of the law. But clearly coercion has important functions. Our first observation is that third party enforcement does not require the state or coercion, as is so often believed (a point emphasized by Milgrom, North, and Weingast 1990). In our view, third parties – private parties rather than the state – are essential for the functioning of law.

So what, then, does coercion accomplish? In some circumstances, coercion by the state plays an essential role in compliance. In many cases, the state may be the least cost provider of enforcement, thereby providing a lower cost means of enforcement or creating enforcement where private enforcement is too costly. For example, coordination by third parties requires that people have sufficient knowledge of behavior. When behavior is hidden and hard for a decentralized community to observe, they are likely to experience coordination failure. There may also be significant settings in which decentralized enforcement suffers from too great a free-rider problem. Under these circumstances, state coercion may be an important complement to citizen enforcement.

We end this section with a few observations about normative issues. 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 legal process. Instead, we build a positive model of how 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 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 and others have observed.

5. The Emergence of Medieval Law Supporting Merchant Exchange

Modern commercial law developed over many centuries, and we can trace its roots far back into history. For our purposes, we discuss aspects of the origins of commercial law during the middle ages. Commercial law covered contracts for delivery of goods across Europe but also credit, bills of exchange, and insurance. In this world, prior to the rise of nation states, merchants often had only a limited state (such as a town) to enforce rulings and therefore heavily relied on various forms of decentralized, third party enforcement mechanisms.

In this section, we discuss the emergence of three mechanisms supporting third party enforcement of trade among medieval merchants: the law merchant, the merchant guilds, and the community responsibility system. The central problems of contract law in this period were different and in some ways more difficult than those of today.

The Law Merchant

Many settings of merchant trade involved bilateral exchange between two merchants where bilateral enforcement of contracts – as when, for example, a cheated party boycotts trade with the cheater – proved inadequate to enforce honest trading.⁶ In this setting third party enforcement by the entire merchant community increased the costs of punishment to a potential cheater and therefore helped to police wrongful behavior.

A major problem for third-party enforcement arose in the medieval European world because cheating was not always obvious to outsiders. Because so many trades were bilateral, third parties often observed a dispute among two merchants and could not tell whether one side or both had engaged in wrongful behavior. Indeed, at this time of innovation in systems of trade and commercial relationships, ideas about what constituted wrongful commercial behavior were in evolutionary flux. Moreover, both sides to the trade typically would have had stories about why the other was to blame. Problems of policing exchange grew larger with the expansion of trade, sometimes called the “commercial revolution of the middle ages,” from the 10th through the 14th centuries (Lopez 1976).

This setting presents enforcement of honorable behavior with two separate problems. First, third parties may disagree about how to interpret what happened and therefore fail to coordinate their punishment actions. When they must make their decisions independently, their different opinions and perhaps knowledge of the case makes it difficult for members of the community to reach the same conclusion about whether cheating occurred. (We can think of this as a dispute about the facts of the dispute.) In the absence of such shared conclusion, the

⁶The discussion of the law merchant draws on Benson (1989), Berman (1983), Greif (2006), Milgrom, North, and Weingast (1990), and Mitchell (1904).

community is unlikely to be able to coordinate their punishment. Second, as emphasized above, individuals may have different *ex ante* views about the actions that constitute wrongful behavior. (We can think of this as a dispute about the ‘law’, the normative categorization of facts.) Both these effects present coordination problems for third party enforcement of the type discussed above; both therefore inhibit the ability of the community to coordinate their punishment responses. Because these effects lower the probability of punishment, the absence of coordination, in turn, gives potentially opportunistic merchants incentives to cheat.

Consider an illustration. Merchant A from a town in the Baltic coast of Germany might, while in Bruges (a major trading market) makes a contract for delivery of goods with merchant B from London. If merchant A fails to make good on the agreement for future delivery, a ruling against A in either Bruges or London might have limited effectiveness in deterring A from cheating. While the governments of various towns were often deeply involved in the development of law and legal institutions, they could not provide merchants with protection beyond their limited borders. Nor could these town governments enforce rulings on foreign merchants once they had left the town.

In medieval Europe, beginning around the 10th C, the law merchant emerged as the solution to this problem. The law merchant was a special body of law, distinct from common or civil law, that dealt exclusively with commercial exchange and was applied and developed in courts distinct from the “ordinary courts of land” (Mitchell 1904, 38). “Market and fair formed a separate judicial unit which no royal judge could enter” (Mitchell 1904, 25). Merchant courts generally had jurisdiction that was highly localized—hearing disputes exclusively between members of a particular guild, merchants in a particular town, those from a specific foreign

locale, or those participating in a particular market or fair. Judges were chosen by merchants, guilds, the sponsors of particular markets or fairs, or the rulers of cities or towns. Over time, the commercial law implemented by these disparate and localized merchant courts slowly began to converge so as to create a distinct body of law that was relatively uniform throughout Europe, “a kind of *jus gentium* [law of nations] known to all the merchants throughout Christendom” (Mitchell 1904, 1). By the mid-17th C, Sir John Davies could assert that “The Law Merchant, as it is part of the law of nature and nations, is one and the same in all the countries in the world; and there is not one law in England, another in France, another in Germany, but the same rules of reason and the like proceedings are observed in every nation” (Davies 1656, 10).

The history of the law merchant reveals attributes that contribute to its capacity to serve as a coordination device, capable of supporting decentralized enforcement in the absence of a monopoly of coercive force. As Benson (1989, 648) concludes in his study of the origins of commercial law, this law “can be conceived of as coordinating the self-interested actions of merchants, but perhaps an equally valuable insight is gained by viewing it as coordinating the action of people with limited knowledge and trust.” It was essential to the law merchant that it was a distinct body of law developed and implemented by merchants, not by royal judges or other non-merchant officials. This ensured that the law merchant was a logic that self-consciously strove to integrate the idiosyncratic logic of the particular actors who were essential to the success of collective punishments such as boycotts. The importance of unique classification of behaviors as wrongful or not is reflected in the locality and exclusiveness of merchant court jurisdiction.

Consider a standard issue in contract law. Classifications about honorable and wrongful behavior can easily diverge about when a binding contract has been formed: is it enough to

transfer earnest money (a “God’s penny”)? Does enforceability require the uttering of specific words? The presence of particular witnesses? The creation of formal written documents? Reflecting the underlying coordination of law, these different means of identifying a contract are close substitutes. Any one will serve, so long as the community recognizes that particular one as identifying a binding contract. Although the answers these questions might vary from merchant community to merchant community, in any given dispute merchants strove to recognize a unique mechanism for making a unique determination. A unique common logic helps merchants in a given set of exchanges to ensure that they are all coordinated on the same answer to such questions.

The effort to establish a unique common logic helps to explain why, for example, “rarely during the Middle Ages would an Italian merchant cite a fellow-citizen before a foreign tribunal; all disputes between citizens of the same Italian town were in foreign cities settled as a general rule by consuls elected by the merchants themselves or appointed direct by the home authorities” (Mitchell 1904, 51). The importance of uniqueness in a shared common logic also helps us to understand why the law merchant evolved to relative uniformity across Europe, despite the limitations on coercive enforcement of legal judgments across such a vast and politically non-integrated region.

Legal attributes discussed above characterized the law merchant. Efforts to achieve universality, stability, publicity, and consistency, for example, were all part of this system. Rules were written down and read out. They were expressed in general terms, applicable to any merchant or transaction that fell within their scope. They were interpreted and applied by a wide variety of actors, often fellow merchants or townsmen who were elected to short terms in office.

Together, these attributes helped ensure that all merchants benefitted from the system and that, therefore, merchants had an incentive to participate in the system, decentralized enforcement in particular. Garnering support for a particular system was especially important in an environment which featured a multiplicity of alternatives, with rules provided by local religious bodies, cities, nobles, fair sponsors, as well as different guild organizations. The the law merchant emerged out of a hodge-podge of local and membership-based rules⁵ grew over the centuries into a relatively uniform body applicable to all who transacted. This uniformity speaks, we think, to the benefit not only of knowing what rules govern one's own transaction but also to the value of recruiting a much wider set of participants in a common punishment scheme to deter default. .

The Merchant Guilds

Another problem for merchant exchange involved long-distance trade whereby a city that served as a major market (such as Bruges) might cheat a foreign merchant (say, from Bremen or Hamburg).⁷ Here too bilateral punishment strategies were likely to have been inadequate to police the city. To the extent that the city faced diminishing marginal value of larger numbers of traders, the marginal trader could not harm the city by withdrawing its trade, creating a commitment problem for the city. To underpin long-distance trade, trading cities needed commitment mechanisms to secure the persons, property, and agreements of foreign merchants. In the era before nation states, foreign merchants could rarely rely on military force to secure compliance by trading cities. Although some foreign merchant towns, especially the larger Italian ones, such as

⁵ A 14th century treatise on the Law Merchant declared “that no one could know or ascertain the procedure of the Law Merchant” even within English fairs and towns (Michell 1904, 7).

Genoa and Venice, were large enough to punish a trading city, German towns were not; indeed, many German towns were close substitutes for one another, so the boycott of any one town did little to harm the trading city.

To police the city, foreign merchants had incentives to organize so as to coordinate their punishment actions against the city, imposing far larger penalties in the event that the city cheated a member of the organization. Merchants from particular towns therefore formed merchant guilds (merchant guilds were distinguished from the craft guilds creating local monopolies of particular trades). As De Roover (1965, 111) observed, the guild's role was "to provide collective protection in foreign lands, to secure trade privileges, if possible, and to watch over the strict observance of those already in effect." Among many other services, these organizations investigated disputes between a foreign city and members of the guild and then made common knowledge announcements about when boycotts should take place. They also created a focal solution to the coordination problem. Instead of leaving the decision to boycott up to the decentralized decisions or a widely dispersed community of merchants, the guild developed a centralized set of procedures for determining whether a particular dispute required action and then sent common knowledge signals to all of its members announcing whether a boycott was to take place.

For example, German merchants from hundreds of different towns had significant problems in dealing with the city of Bruges from the mid-thirteenth through the mid-fourteenth centuries, one of the major entrepots for merchants across all of Europe. In the beginning, German merchants lacked the ability to coordinate their enforcement actions. The city of Bruges therefore took advantage of them. Over time, German merchants developed increasingly

⁷The discussion of the merchant guilds draws on De Roover (1963), Dollinger (1970), and Greif, Milgrom, and Weingast (1994). Greif, Milgrom and Weingast also summarize the large literature

sophisticated organizations in the form of the Hanseatic League, explicitly created to allow them to coordinate on boycotts. Involving many towns, the league was “never a political federation, but always remained a loose alliance of German towns for the defense of common economic interest and exclusive [trading] privileges” (De Roover, 1963, 111).

To help ensure compliance by the city, the League’s decisions, therefore, came to have many legal attributes, such as universality – treating merchants from member towns in a similar fashion given their shared interests in avoiding the same harms. To avoid disputes about a boycott, the League’s decisions had to be clear, publicly promulgated, and consistent. Moreover, the League’s decisions were under control of a representative system that gave voice to the many different types of German towns. (In addition to towns in modern day Germany, these included a great many German settlements in the Eastern Baltic and Eastern Europe as these merchants organized long-distance trade of products (such as timber, minerals, and grain) from these regions.)

Thus the merchant guilds clearly developed the characteristics of legal institutions. The history of the law merchant, discussed above, demonstrates this. The law merchant had its roots in the systems operated by guilds to resolve disputes initially among their members. The judges of merchant courts were often appointed or elected by the guilds. Eventually the law developed within the guilds extended beyond the members of the guilds to include others engaged in commerce: whereas “the gild statutes of Brescia of the year 1313, for example, only admit the jurisdiction of the consuls over merchants who had been enrolled as members of the gild,” the Florentine city statutes by 1393 recognized the jurisdiction of the guild courts “over all those actually engaged in trade or industry, whether they were members of the gild or not” (Mitchell

emphasizing trading problems with foreign merchants in large trading cities (pp 750-62).

1904, 44). The extension of initially membership-based rules into universally applicable rules, we suggest, marks the evolution of these rule systems from club to legal order. The guilds of medieval Europe thus played a key role in the development of the concept of law as one of universal and general coverage.

The Community Responsibility System

Another problem concerning long-distance trade involved a foreign merchant who might cheat a home merchant and then disappear, leaving the city with no recourse.⁸ To mitigate this problem, cities typically controlled who had the right to trade within their boundaries. Typically, they did not grant rights to trade to individuals but to organizations of merchants, typically from particular towns. Further, if a merchant from one town cheated the city and failed to make good on a judgment, the city would hold the organization liable. This arrangement, called the “community responsibility system” (Greif 2006, ch 9), gave merchants from a particular town strong incentives to control which individuals could trade in their name.

To trade in its name, towns evolved a system of requirements for membership in the guild. Typically, these requirements were general and impersonal. Examples included: The merchant had to have a long-standing record of good behavior according to the town’s legal codes. He had to become a member of the town’s guild, typically after serving an apprenticeship period according to prescribed rules. And he had to amass property in the town that could serve as collateral if the merchant cheated the foreign city, leaving the guild responsible to make good on his judgment.

⁸The discussion of the community responsibility system draws on Greif (2006, ch 9).

The advantage of the community responsibility system is that its institutions helped reduce problems in long-distance trade, making trade more valuable for both sides of the transaction. Our model provides important insights into the community responsibility system. First, the system helped traders from different cities coordinate their decentralized behavior around higher levels of trade, supporting both a greater volume of trade and greater specialization and exchange. Second, this system was principally about enforcement of honest trade among members of different trading communities. The logic of the community responsibility system shows that much of the deterrence of cheating arises because members of a given community police each other, punishing by exclusion, criticism, and some local legal actions in order to reduce transgressions that earn them all punishment from a foreign city. This decentralized deterrence, in turn, dictates a need for a system of rules defining what is punishable that is effective in coordinating the community. The rules governing trade need to be legal in the sense of our model in order to make this system work; that is, to ensure decentralized enforcement, all local traders had to have incentives to follow the rules, including taking actions to punish when called on to do so. As we have seen, decentralized enforcement breaks down when rules lack legal characteristics; for example, those disadvantaged by non-universal rules have little incentive to participate in decentralized punishment.

To conclude this section, each of the institutional and organizational arrangements discussed in this section – the law merchant, the merchant guilds, and the community responsibility system – illustrates the theory above, namely, that legal arrangements emerge as part of the means of decentralized third-party enforcement and helping create focal solutions to

various coordination problems. Each of the problems discussed in this section involves coordination of third parties to police good behavior.

Law, legal process, and organizations all became essential institutional means of defining honorable and wrongful behavior by merchants and the cities that organized markets.

6. Coordination and Equilibrium in Constitutional Law

The discussion above used private law examples for its labeling and intuition. We often referred to S as a seller and the b's as buyers. Nonetheless, the approach also applies to public law settings, in particular, to sustaining a constitution. As many scholars have noted, constitutions help people coordinate, and non-authoritarian constitutions are more likely to survive when they create a coordination equilibrium (Hardin 1989, Ordeshook and Svetsova 1992, Weingast 1997). The model applies to problems of maintaining a constitution in the sense that it helps explain how citizens coordinate to police the sovereign. Instead of sellers and buyers, the game between S and the b's can be between a sovereign and citizens (a framework developed in Weingast 1997).

The problem of constitutional stability is a difficult one. Most new constitutions fail, with the median democratic constitution lasting but 16 years (Elkins, Ginsburg, and Melton 2009, table 6.1). Only two dozen or so countries have maintained a stable constitution for five decades. These dim facts suggest the difficulty in creating a constitutional equilibrium.

Coordination problems arise in policing potential transgressions by the sovereign against the citizens; for example, when the sovereign violates citizen rights, as is so common in constitutional failures. When the b's all act in concert, they can police the sovereign's actions and

prevent transgressions of their rights. When the b's lack the ability to act in concert, the sovereign 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 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. To solve this coordination problem, a focal point must be constructed.

The approach developed in this paper helps understand how such coordination may arise. Suppose the two players (that is, two b'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 rules that are sufficiently valuable to members of both groups so that both are willing to participate in a constitutional qua 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 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.

⁹Crises 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.

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.

Consider a few examples. In the United States of the mid-1780s, the failing 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 each time. Finally, in 1787, the Federalists proposed a new constitution that took into account 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 with legal attributes, 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 Madison observed in *Federalist 46*, states would monitor “encroachments” by the national government and not only sound the alarm, but coordinate action against to resist the national government.

An important part of the Constitution’s success, including its ability to become a focal point, 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 Federalist 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 know 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 Jeffersonians' infighting. The presence of political competition, he argued, forced each party to make the difficult political compromises necessary for a party to win. Absent that competition, they fell into separate, competing factions.

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 right. Members of this faction designed a constitution that benefitted themselves. The constitution included various forms of authoritarian enclaves, countermajoritarian constitutional features that included senators appointed for life, and the removal of various issues from political control, such as property rights and retribution for the authoritarian regime's actions. The left acceded to participate under this constitution, in part because of on-going military threat. Nonetheless, the left did not consider the constitution legitimate. 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 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. Importantly, it allowed the left to govern, holding the presidency and the lower chamber for two decades.

¹⁰This discussion draws on Alberts, Warshaw, and Weingast (2010), Londregan (2000), and **.

Over time, the political environment changed in several ways. The government 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 enclaves. In combination, the moderation of left, the successful economy, and the government's gradual control over the enclaves allowed the left to alter the constitution, removing many of the veto enclaves. This constitutional change completed the transition to stable, constitutional democracy.

More importantly, the success of the revised constitution is consistent with our model. The Pinochet constitution failed because the left acceded to it by threat. The left, therefore, had no incentive to participate in enforcement of this constitution as an equilibrium, 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. The economic success, widely valued and supported by virtually all Chileans, became an element of the left's political success. Over time, therefore, the left had greater incentives to honor the rules. With the 2005 constitutional changes, the left removed the most inimical features of Pinochet's constitution, but retained its essential core. With these revisions in place, the left had far more incentives to participate and enforce the constitution because it allowed them to rule. Similarly, the right had far less to fear from the left since the constitution guaranteed property rights and protection from prosecution for misdeeds during the authoritarian period. The new constitution therefore fostered decentralized coordination of both the left and the right to protect 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 views of the rules of the right and left became sufficiently convergent over time as to make the new constitution an equilibrium.

7. Conclusions

We have addressed the questions of what is law, why does it have legal attributes, and how is it sustained? To address these issues, we develop a new perspective on law to explain three distinct aspects of law – that law has a series of legal attributes, often associated with the rule of law, such as generality, stability, consistency, publicity; that law involves a process of public reasoning; and that law is an equilibrium. Our answer builds on earlier insights, notably, that law is in part a coordination game (Sugden 1986, Cooter 1998, Basu 2000, McAdams 2000, Mailath et al 2001, Myerson 2004, Dixit 2004) and that, to be sustained, law must be incentive compatible (Binmore 1994, 1998).

Our approach begins by emphasizing that much of law involves decentralized coordination of punishment rather than the more familiar notion of state coercion. But coordination raises significant problems: what should the law be? how do a large number of dispersed and disparate individuals with a potentially wide range of idiosyncratic views about law rely on similar rules so that their punishment strategies deter wrongful behavior?

In order for law to be an equilibrium, citizens must have incentives to abide by the law and, importantly, to participate in decentralized enforcement of the law. We argue that, to do so, law must have several characteristics. First, law must create a focal solution to the coordination game so that citizens can rely on a single set of rules. Second, law must have legal attributes.

These attributes help citizens coordinate because they raise the value of coordination to a large number of people; 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. Third, law must include a system for creating public logic around legal rules. The reason is that the circumstances under which citizens interact are so varied that law cannot simply be a list or algorithm about honorable and wrongful behavior; it must instead be a 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 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 law must be unique; that is, among the many possible legal (coordination) equilibria, the legal system 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 a legal steward, such as a hierarchical court system with a Supreme Court. The system of stewardship extends existing rules to new circumstances, especially when multiple and conflicting interpretations can be extrapolated from existing rules. This system also arbitrates differences among lower courts, again, to create a unique set of rules. The coordination approach also helps explain the stability of a legal system in that once a coordination focal solution has been selected, it is an equilibrium.

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