Coordination and Coercion:

The Nature of Rules, Governments, States, and Social Dynamics

John Wallis and Douglass North

June 2012

This is version of the paper is incomplete. It was prepared for presentation at the ISNIE Meetings in Los Angeles, June 2012. We apologize for the abrupt end to this version of the paper.

Please do not quote, cite, or post on a web site without the authors's permission.

1. The Problem of Impersonal Rules

Throughout the long history of thinking about the nature of governments, states, and societies in western political thought, governments have been intertwined with the importance of coercion as a tool of governance. The ability use coercion, the threat of violence, to enforce rules gives the coercer the positive ability to enable greater social coordination and so enable a higher degree of specialization and division of labor. Conversely, those who possess access to coercive power are able to resist the coercive enforcement of rules by others. As a result "elites," whether they are part of the government or not, are able to command special privileges. These privileges come both in the form of rules that treat them differently and in the expectation that the enforcement of rules will not apply to them in the same way as everyone else. The negative consequences of elites for social welfare result less from distortions caused by their special treatment, than the disabling effect that special privileges have on the ability of rules to coordinate human interaction and the specialization and division of labor that result from coordination.

Over the last three centuries the organization of some societies have changed in ways that affect both coercion and elites. Some societies have come to possess governments with a Weberian "monopoly on the legitimate use of violence." Elites, voluntarily or under duress, have conceded their privileged status to rules and enforcement and accepted a set of "impersonal rules" that apply equally to all citizens. Both the form of the rules and the methods of enforcement are impersonal.¹ The rise of modern societies is intimately tied up with the creation

¹Impersonal rules are not universal rules, since not everyone in society is citizen and the full rights of citizenship are often not available to certain groups. The key question is not

and enforcement of impersonal rules that apply to citizens and governments. Impersonal rules, therefore, serve as the basis for limits on a government with a monopoly of coercive force. We seek to understand how and why societies are able to create and enforce impersonal rules.

The role of elites in this process is critical. Those who enjoy special rules or exceptions must somehow be coopted or overwhelmed if impersonal rules are to be sustained. The process must be dynamic, as the appearance of new elite rules and exemptions must be prevented from reappearing. Impersonal rules can only be created and enforced by a public organization, that is a government, because both the rules and the means of enforcement must be visible and verifiable. The historical appearance of impersonal rules, then, must be associated with a change in the relationship between elites and governments: governments must become capable of disciplining elites and their organizations.

All theories and histories of the transition to modern politically and economically developed societies face the challenge of explaining the changed relationship between governments and elites. Acemoglu and Robinson theorize about how elites, faced with a short run situation where the masses can overrun them, evade destruction by using democracy to credibly commit to honor their promises to the masses.² The government becomes the agency through which the elite commitments to the masses are made credible. A host of theories of revolutions involve the ability of the masses to organize and overthrow, or reform, the elites. These frameworks implicitly or explicitly assume that elites yield control of violence to the

whether impersonal rules apply to everyone, but whether they apply to a large enough segment of society to change the nature of social dynamics.

²Greif 2008 starts with the following: "

government.³ Elites do not concede their power to the masses, but to the government.

How is it that governments change from being part of the elite coalition to an organization capable of disciplining elites? How and why do elites concede the use of violence to a government? It cannot be that simply that a government organization attains a monopoly of violence sufficient to constrain elites. History is full of societies with very powerful military/government organizations that do not approach anything like the ability to create and enforce impersonal rules.

In her presidential address to the American Political Science Association, Margaret Levi argues that we need "a new theory of government." (2006) We agree with Levi's call for a new theory of government capable of explaining social dynamics and the transition to impersonal rules. We attempt to provide the outlines of such a theory here. What turns out to be surprising, however, is that a theory of government alone is not enough to explain how and why societies become capable of impersonal rules. In order to understand why elites are willing to concede control of violence to the government, we also need a theory of elites. More generally, we need a theory about the configuration of power in a society, where power comes from coercion as well as control of economic, political, religious, and social resources and organizations.

Here we get into far murkier territory. While there is wide spread agreement that a government is a recognizable, public organization that performs various functions (although the list of functions varies widely), all governments are embedded in a larger set of social relationships, importantly power relationships, with powerful non-government organizations like churches, economic organizations, criminal organizations, and other actually or potentially

³ Charles Tilly (1993) calls this process "disarming the population."

coercion using groups. The "state" is not just the government, it is the configuration of powerful organizations within which the government operates.⁴ The government, of course, is almost always one (or more) of the powerful organizations. A dynamic theory of government would require an additional theory about the nature of the dynamic relationship between governments and other powerful organization. Such a theory would truly be a "theory of the state."

As we puzzled through how a government might come into being that was capable of creating and enforcing impersonal rules, it became clear to us that the tension between ability of the government to coerce and its ability to coordinate had to be resolved in favor of government's ability to coordinate. In a dynamic story, the continued willingness of elite organizations to forego the use of violence cannot to be based solely on the fear of coercive measures by the government, but a genuine willingness to voluntarily obey the impersonal rules. Levi suggests that "Governments are more able to carry out their policies when they achieve

⁴The literature on theories of the state is very confusing in this regard. For example, a good bit of the recent literature on the theory of the state assumes that states do not exist unless they have a monopoly on violence, essentially arguing that only modern societies have "states." Vincent's (1987) helpful review of theories of the state begins by noting that "The primary concern of this study is the state. However, for the sake of clarity the category of Stateless societies will be examined. This is not the place to engage in a full-scale anthropological discussion of such societies, yet it is worth stating the central thesis of this book, namely that the State is a comparatively recent phenomenon dating from the sixteenth century." (p. 10) "Most scholars now agree that the State is a comparatively recent phenomenon in terms of the long history of social existence. If these societies were subject to some authority and rules, it is feasible to speak of politics existing but not the State." (p. 5) Vincent is not alone in focusing on modern states, although not all authors are as clear. We do not want a theory of governments or the state that applies only modern societies.

Vincent, however, provides a very useful definition of the state that parallels ours: "The most crucial of these features [of states] is the idea of the State as a continuous public power above both ruler and ruled." (p. 19) The definition of the state as a public power is problematic, but the idea that the state is the configuration of power that is above both the ruler (the formal government) and the ruled (the individuals and organizations that make up society) is precisely what we want to describe as the state.

For other surveys and theories of the state see Poggi (1978), Migdal (19),...

quasi-voluntary compliance – that is, compliance motivated by a willingness to cooperate but backed by coercion." We want to go a step further and argue that the government's ability to monopolize violence and so use coercion to enforce some rules, is backed up ultimately by the government's ability to coordinate. Powerful actors voluntarily agree to concede power to the government because of the value of coordination, not because of the threat of violence. What we have to explain is how and why powerful elites find government coordination so attractive.

We argue that focusing on the coercive power of the government, ala Hobbes, gets us started on the wrong foot. In the traditional approach, impersonal rules become possible when the government is able to credibly enforce rules by coercing both elites and the masses. We think that is the wrong way to think about the problem both conceptually and historically. If elites are voluntarily willing to subject themselves to government enforced rules that treat all elites the same, then the government will eventually acquires a monopoly on the legitimate use of violence. Think about the simple society depicted in Figure 1. There are three powerful groups, A, B, and G and the masses. Assume that the government, G, can coerce A or B, but not A and B.⁵ How does the government get the ability to impose rules on A and B? One way to think about the dynamic interaction that leads to impersonal rules is that the government acquires more "capacity," in a way that enables them to coerce A and B even when they act together (Tilly, Besley and Persson, etc.) But what jumps right out of Figure 1, however, is a question that is rarely asked: what determines the *relative* power of elites and the government?

Most of us have labored under a quasi-Marxian assumption that the government is the executive committee of the elites (the bourgeoisie in the capitalist stage), and that the internal

⁵Forego, for the moment, the possibility of A, B, or G coordinating with the masses.

coordination problem of the government and elites does not matter much. But clearly that isn't right. The capacity of the government to do anything depends on the government's capacity relative to powerful elite organizations. Since the elite organizations are in coalitions amongst themselves and with the government, what really determines the "capacity" of the government is the dynamics of what we will call the "dominant coalition." Dominant coalition will be our stand in for the term "state." The dominant coalition is the configuration of and dynamic interaction between the powerful organizations in the society, including whatever government organizations exist.

The main conclusion of this paper is quite simple. The ability of a society to create and enforce impersonal rules depends on the dynamics of the society's dominant coalition. Coercion plays a role in rule enforcement. But impersonal rules are only possible when powerful organizations, public and private, want to use the government to coordinate some dimensions of their coalition relationships through impersonal rules. Until then, impersonal rules are not credible, because powerful organizations will evade or ignore them. Governments that attempt to enforce rules through only coercion will degrade the possibility of coordination within the coalition. The key feature of governments is not their ability to coerce, but to coordinate. Until societies reach the point where governments can credibly coordinate powerful organizations and those organizations voluntarily comply with impersonal rules, it is impossible for the government to acquire a monopoly on the legitimate use of violence. It is the coordinating power of government that leads to coercive power, not the other way around.

We can put this as a prediction: any government organization that happens to acquire a monopoly on the use of violence is unlikely to be able to implement impersonal rules in a credible and sustainable way. In a society that happens to acquire the capacity create and

enforce some impersonal rules, powerful organizations may be able concede to their government a monopoly on violence in a way that is credible and sustainable.

The details of our argument require a deep background in the theory of institutions. Before we can understand how dominant coalitions and governments work, we need to be explicit about the nature of institutions, the nature of rules, and the nature of organizations. Only then can we understand how the credible third party enforcement of rules may arise. As we show, the emergence of credible third party enforcement is typically not enforcement of impersonal rules. Indeed, most societies are capable of third party enforcement, but not of rules that treat every one the same. When the form and enforcement of rules depends on the organizational identity of the people to whom the rules applies we call those "anonymous rules." Most societies are capable of enforcing anonymous rules. The special treatment of elites is a manifestation of anonymous rules.

The first half of the paper presents the concepts necessary to understand how and why societies are able to create and enforce anonymous rules. From there, the second half of the paper analyzes the dynamics of organizations, coalitions, and governments to see the conditions under which impersonal rules can credibly arise. We conclude by showing why the ability to create and enforce impersonal rules can suddenly produce a discontinuous increase in government "capacity" and the government's monopoly on legitimate violence.

I. The Nature of Institutions

The term institutions is so widely used and variously defined that a short review of how we define institutions may help make clear how we think of the problem of impersonal rules. As defined by North (1990): institutions are the rules of the game and the means of enforcement and organizations are the teams that play the game. The definition has three elements – rules,

8

enforcement and organizations – all of which play key roles in what follow.

Rules vary across a wide spectrum of behavior. All humans interact and coordinate their actions. At one end of the spectrum, personal rules cover the pattern of repeated interaction we have within our families and close friends (e.g. rules in families). From there rules merge into norms or social rules, which are shared patterns of behavior between people who may or may not know one another. Formal rules are explicit rules, which may or may not be written down. Formal rules differ from norms, in that norms are often not explicit and very often hard to figure out. The formality of rules has to do with being explicit rather than being enforced in a particular way, as we will consider shortly. Legal rules are publicly known rules enforced by a public organization, a government. The boundary between personal rules, norms (social rules), formal rules, and legal rules is porous and of infinite gradation. Rules also appear in a variety of forms that we discuss in section 3.

Enforcement of rules comes in various types that, again, grade seamlessly into one another. Some rules are enforced by actions within the group where the rule applies. Actions range from laughter, criticism, exclusion, shunning, teasing, pushing, hitting, and seriously injuring right up to causing death. Sometimes enforcement depends on the voluntary actions of those who the rule violating behavior affects. Sometimes the responsibility of enforcement is explicitly delegated to a member of the organization or community the individual belongs to. Sometimes the responsibility is explicitly assumed by and delegated to a public organization, a government, that enforces legal rules within a given geographic area or over a specific group of citizens.

Organizations are a key element of institutions because they provide both the venue in which many rules are articulated and enforced, and because organizations are the primary actors

9

who change rules. Because we are concerned with the dynamics of institutional change, as well as the nature of institutions, we want to understand the forces at work in society to accept rules, to ignore them (cheat), or to change them. The role of organizations will be explored in much greater detail in section 4.

Rules, enforcement, and organizations are the three dynamic elements of institutions and institutional change. Institutions result in repeated patterns of behavior. Because humans form beliefs and values about the world around them from their genetic predispositions as well as their experiences, institutions have a major impact on beliefs and values. Culture, the shared beliefs and values passed through time from individuals to individuals, interact with institutions to produce the values and beliefs any individual holds at a particular point in time. But beliefs, values, and culture are not institutions. Institutions are the rules of the game, the means of enforcement, and the teams that play the game. Institutions may, or may not, constrain human behavior. While all human social interaction is played out in the shadow of institutions, institutions allow ample freedom for individual choice. Social dynamics results from the interaction of institutions and behavior. The shadow of rules looms large in any discussion of social dynamics, but what are rules?

3. The Nature of Rules

Although we are all familiar with rules, indeed human experience is "bathed in rules," our ideas about institutions and institutional change will be sharper if we are clear about three dimensions over which rules vary: coercive and coordinating rules; rules as constraints and rules as defaults; and personal, anonymous, and impersonal rules.

3A. The Individual Perspective

Jean Piaget wrote that "From its earliest months the child therefore is bathed in an

atmosphere of rules, so that the task of discerning what comes from itself in the rites that it respects and what results from the pressure of things or the constraint of the social environment is one of extreme difficulty." (1997, p. 52) Piaget studied the developing sense of rules and morality in children, and frames his results in the two ways that individuals perceive rules. Some rules are perceived as heteronomous, that is, rules that are given by authority (parents, God, the society) that the individual cannot influence.⁶ Other rules are perceived as coordinating, that is, they are rules that arise out of the interaction of individuals and result from an agreement on or shared belief about what and how behavior should be structured. How an individual responds to and interprets rules depends on whether the rules are imposed on us or emerge out of our interaction with other people. For the very young child, all rules are perceived as heteronomous, including rules about the physical world such as the law of gravity, the rules that govern language, and the myriad of (sometimes contradictory) rules that the authority of parents prescribe.

To be clear, rules in this context are defined as consequences of actions: do x and y occurs. We can distinguish between "laws," in which x always causes y to occur, like the law of gravity, and "rules" where there is a probabilistic chance the consequence will occur. Children are constrained by the "pressure of things," the laws and rules of the physical world, as well as the effect of their actions on the behavior of other people, the "constraint of the social environment." Piaget uses the concept of rules in its most general sense, encompassing what personal rules, norms, formal rules, and legal rules. Although, as we discuss shortly, even Piaget does not encompass the universe of rules as commonly defined.

⁶Heteronomy is subordination or subjection to the law of another; the opposite of autonomy.

Piaget's study of games of marbles among young Swiss children reveals several important regularities. The first is that young children, even when they do not completely understand the rules or play by them, interpret rules as sacred, as given by some higher authority. The charming interview with Fal aged 5, p. 55, illustrates this (interviewer in plain type, Fal in *italics*): "Did people always play marbles the way you showed me? – Yes. – Always that way? – Yes. – How did you get to know the rules? – When I was quite little my brother showed me. My Daddy showed my brother. – And how did your Daddy know? – My Daddy just knew, no one told him. - How did he know? - No one showed him!" "Tell me who was born first, your daddy or your granddad? – My Daddy was born before my granddad. – Who invented the game of marbles? - My Daddy did. - Who is the oldest person in Nuechatel? - I dunno. - Who do you think? - God. -... Where is God? - In the sky. - Is he older than your Daddy? - Not so old." Piaget interprets the interview to show that Fal "regards them [the rules] as endowed with divine right. Fal's curious ideas about his father's age are worth noting in this connection; his daddy was born before his grand-dad and is older than God! These remarks ... would seem to indicate that in attributing the rules to his father, Fal makes them more or less contemporaneous with what is for him the beginning of the world." (p. 56)

Heteronomous rules come from outside the individual and they are, fundamentally, coercive. Rules are rules because if you break them, you pay a cost. Young children tend to evaluate the importance of the rule by the punishment it carries, not the benefits it produces: "These children, in short, look upon lying as naughty because it is punished, and if it were not punished no guilt would attach to it... The child does not mean that it is enough to escape censure to be innocent. What these subjects think is simply that the punishment is criterion for the gravity of the lie. Lies are forbidden, through one does not quite know why. The proof is that you get punished for it." (pp. 168-9) It is remarkable how close the perspective of the young child comes to that of the economist, who values the seriousness of the crime by the punishment.

As children grow, however, their attitude towards the rules and the game change. By the age of 10, most children feel that the rules exist to increase the value of the game to the participants, to enable them to coordinate their play. Devising rules so one individual can win the game is less important (to most children) than devising rules that maximize the value of the game by ensuring its integrity and rewarding skill. Older children do not lose their respect for the rules, but transform their respect from a unilateral respect for the rule maker, to a mutual respect towards the group. Rules become more fluid, "nor do boys of 7 to 10 ever succeed in agreeing amongst themselves for longer than the duration of one and the same game;" (p. 46) but retain durability through time. Children come to appreciate the possibilities of different rules. Most important, they come to value playing by the rules because their ability to participate depends on following the rules. The threat of exclusion from the game becomes the incentive to abide by the rules. [Need a quote from Piaget here] Rules cease to be heteronomous and become autonomous, which is the opposite of heteronomous, or more intuitively, coordinating. Children come to feel invested in the rules as a result of their own autonomous choice. When considering, as above, why lying is wrong older children, "who have really grasped the anti-social character of lying no longer say that we musn't lie 'because we get punished,' but because to do so is contrary to reciprocity and mutual respect," (p. 171). Not lying is necessary to continue to play the game.

Any bright undergraduate after his first game theory class could see the parallels between Piaget's older children's approach to games and rules, the logic of folk theorem, and the power of repeated interaction. We needn't go farther than the folk theorem now, but want to note two aspects of Piaget's observations. First, young children innately accept the sacred authority of rules, it is an evolutionary design rather than a cultural artifact. There are strong evolutionary reasons why children should accept the authority of their parents rules when they are very young. Second, the changing interpretation coordinating rules as coordinating devices also seems to be innate.⁷ Piaget stresses that coordinating rules make greater demands on the intelligence, awareness, and rationality of older children, but coordinating rules arise at a certain stage of development that is as innate as the acceptance of authority in earlier children. Again, there are good evolutionary reasons why older children should become more flexible and rational about social rules. Just as innate genetic capacities for language ultimate adapt to the specific language surrounding the child, so the child's perception of rules adapts to the reality of social interaction. This is an aspect of evolutionary development. Genes are a blueprint for organisms, but how the blueprint develops depends on the conditions of construction at particular points of time in the history of the organism. Regard for the authority of rules does not disappear at age 12, but the individual's orientation towards the rules is shaped by their family, social networks, and culture as they grow. "But from henceforward a rule is considered as the free pronouncement of actual individual minds themselves. It is no longer external and coercive: it can be modified and adapted to the needs of the group. It constitutes no revealed truth whose sacred character derives from its divine origin and historical permanence; it is something that is built up progressively and autonomously." (p. 70).

Piaget's concern is with parenting, education, and how the perspective of the child

⁷It seems that one of the modifications of Piaget's hypothesis that emerged as others tried to duplicate his results are that children are capable of understanding rules as both heteronomous and cooperative from an early age. Killen???

towards rules affect the moral development of individuals. His categories of coercive (heteronomous) and coordinating (autonomous) rules does not translate readily into empirical divisions of actual rules. But they do serve us as conceptual categories that help to distinguish approaches to rules and institutions.

3B. Rules as constraints and rules as defaults

The notion of rules as statements of consequences, if you do x then y will happen, is a natural way to think about rules and parallels the economist's notion that rules are constraints. Forcing all rules into the consequential formulation has its costs, however, since many rules do not operate actively as constraints but passively as defaults. For example, marriage law does not specify how wives and husbands must treat each other within their marriage. Marriage law is largely a set of default rules that come into play only when the partners contemplate or have decided to terminate their relationship. Because people are forward looking, all marriages play out in the shadow of the marriage rules. Rather than constraining actual choices, default rules shape the parties perceptions of the value of outside options.

Advances in game theory show the power of outside options to shape and support human interaction. The value of outside options typically determines at least two of the payoffs in a two person game, because both individuals have the option of breaking off their relationship (often characterized as "defecting"). The deep theoretical insight is that the possibility of sustaining any relationships may depend on outside options, and moreover that the range of relationships that can be sustained may be increased if default rules are appropriately specified. Most social scientists appreciate this logic, but it often fades when considering specific forms of human interaction. Default rules, like marriage rules, do not specify anything about the actual conduct of the relationship, they specify what will happen if the relationship ends. Default rules, therefore, do not have a direct corollary in how people actually behave. The operation of the rule will not be observable in the conduct of a marriage, but in the conduct of a divorce. We may be able to see indirect evidence of the rule in a statistical sense, that marriages on average result in different outcomes under different default rules, but we will not see the default rule in action within a marriage.⁸ When our concern is specific behavior, be it exchanges, marriages, or other social interactions, we tend to focus on rules that constrain behavior rather than default rules. Piaget, for example, was clearly more concerned with rules as constraints than rules as defaults.

Many institutional rules are default rules. For example, the organizational chart of a business firm is essentially a set of default rules that specify who has the formal "right" to make particular decisions. As we discuss in the section on organizations that follow, the actual behavior in an organization often does not resemble to formal default rules. That does not make the default rules less binding, it simply means that actual decisions are made in the shadow of the default rules. For example, subordinate a manager has the responsibility for making a specific decision, but usually allows a subordinate to actually make the decision, say where to locate a new store. The fact that the manager allows the subordinate to make the decision neither reliefs the manager of the responsibility for the decision, nor does it imply that if push comes to shove and the manager and the subordinate disagree that upper management will side with the subordinate. The default is that the manager decides. The reality is that the decision can be made by either the manager or the subordinate, in the shadow of the default rule.

Two other aspects of default rules play a major role in understanding how governments

⁸See Freidberg (200?), Evans 1996, Wohlers and Stephenson (2008).

create and enforce rules. Many default rules appear to be heteronomous and coercive in principle, because they must stand outside the relationships within the game. Despite their appearance, however, default rules may actually be coordinating rules. The parties to the relationship have the option of invoking the default, they are not coerced into doing so. For example, when a married couple reaches a decision to get a divorce, they are usually able to work out their own arrangements for child custody, property distributions, and future payments. If they cannot reach an agreement the court will apply the default rules for child care, property distribution, and alimony. The fact that the default rules specify outcomes that the couple can avoid by reaching their own agreement, does not mean that parties to a divorce do not feel coerced by the marriage law. Nor does it mean that a court that has to carry out a decision by seizing the property of one party is not using coercion. But coercion is not the essence of the marriage rules, coordination is.

We also need to be aware that many default rules are themselves default rules for default rules. The economic approach to contract theory over the last several decades builds on "incomplete contracts:" the idea that not all contingencies can be anticipated or that the cost of writing an *ex ante* contract covering all contingencies is prohibitively costly. An incomplete contract freely entered into by two parties is itself a default rule, since the contract explicitly does not constrain or order the behavior of the contracting parties on all dimensions of their relationship. The contract may only come into play when the relationship is failing, the contract specifies what happens when the relationship is no longer sustainable. Legal rules about contracts, that is rules about what terms of contracts courts will enforce *ex post*, are really default rules for default rules. The uniform commercial code, for example, specifies the default rules that courts will use to interpret contractual arrangements by firms.

3C. Personal, Anonymous, and Impersonal Rules

A third distinction within the population of rules needs to be made. It has already been illustrated by Piaget that many rules are not formal, but work within relationships. All families have rules that govern the relationships within the family. These relationships are "personal" because they apply directly to specific individuals.

At the other end of the spectrum are "impersonal" rules, rules that apply more generally to people, not to specific individuals. The nature of impersonal rules is the subject of the entire paper, and will be developed in greater detail later. For now it is important to note that the categories of personal and impersonal rules do not exhaust or span the complete universe of rules. Rules within families are personal. Rules about families are clearly not personal, and in that limited sense are impersonal. But rules about families may not apply equally to all families. They may distinguish some types of families from other types, or more typically apply to families in particular ethnic, religious, or social groups rather than applying to all families in a society in the same way.

Many rules that are not personal, nonetheless do not apply to everyone in the same way. Since we have already defined impersonal rules as rules that apply equally to everyone (or to a class of people like citizens) we must identify the intermediate type of rule that applies to some groups and organizations and not others. The term we will use for these rules is "anonymous rules." The application of an anonymous rules apply to a specific individuals depends on the group or organization that individual belongs to. Anonymous rules recognize the social identity of individuals and treat them differently according to that identity. Anonymous rules apply differently to members of different organizations. Discussions of taxonomy and lexicography and are often only of interest to their authors. Just because things have been classified, named, and defined does not mean that they are understood. Our classification of rules has not yet talked at all about how rules are enforced except in the most general terms. Before we can operationalize the different types of rules and look more closely at the nature of rule enforcement, particularly of third party enforcement, we need to look more carefully at the nature of organizations.

4. The Nature of Organizations

Organizations coordinate human activity. Organizations are bundles of relationships that create incentives for coordinated and sustained interaction between individuals over time and space. Individuals have an incentive to participate in an organization because they are better off if they do so. In the language of classical economics, people belong to organizations because they get rents from doing so. Organizations create rents in two basic ways. The first is characteristic of all relationships that persist through time. When two individuals come to know each other and expect to interact in the future, they have a relationship. Relationships create rents when the alternative to which the relationship is compared is the prospect of dealing with strangers whom one expects never to meet again.⁹ These rents come both from our increased knowledge of the other person and from our expectation that our interaction will continue. These elements enable us credibly to coordinate our behavior through the logic of the folk theorem.

⁹When we get to know a person we may learn that we do not want to interact with him or her, but even that negative information produces a rent in comparison to dealing with a person whom we do not know.

Coordination is the second source of the rents that organizations create. For many activities, people who work in teams are more productive than people who work individually. If the organization is a firm that produces goods, the gains can be measured in terms of physical output. But the gains from coordination are not limited to standard economic activities. Churches are organizations that coordinate behavior in ways that enhance the value of the community and the religious experience. Individual church goers receive rents from their participation in the church's activities, and it is those rents and the personal knowledge that results from participation that enable church goers to coordinate.¹⁰

Organizations, then, provide a framework for relationships that are more valuable to individuals than one-shot interactions with strangers. The value of relationships makes it possible for people to coordinate their actions, and that coordination in turn generates rents in the form of higher output or benefits than could be obtained by a comparable group of uncoordinated (unorganized) individuals.

Understanding how organizations work has been a mainstay of the new institutional economics, beginning with Ronald Coase's (1937) insights about the firm and continuing on through Oliver Williamson (1975 and 1985), Sanford Grossman and Oliver Hart (1985), and a host of others. Robert Gibbons has argued that organizations should be thought of as interlaced bundles of relationships and contracts (1998, 1999, 2003). Relationships between individuals are sustained by repeated interaction and the existence of rents to both parties. Contracts are agreements between individuals that are enforced by third parties, that is, a person outside of the

¹⁰Organizations are not the only way that people can coordinate. The gains from specialization and division of labor can be obtained in markets, in which the price mechanism coordinates individual decisions.

relationship. While some organizations can be described as self-enforcing sets of relationships, most organizations rely on some form of contractual enforcement using third-parties. A robust theory of organizations should encompass both relationships and contracts, rather than relying on one or other as the "organizing" principle.

One starting point for a theory of organizations is the folk theorem intuition that two individuals can maintain a relationship over time if both individuals receive a rent from the relationship. The players in the folk theorem receive rents from their specific relationship, so their individual identity and the identity of their partnership matters. The existence of rents makes their relationship incentive compatible. The folk theorem partnership is what we call an *adherent* organization, an organization where both or all members have an interest in cooperating at every point in time. Adherent organizations are inherently self-sustaining or self-enforcing; they do not require the intervention of anyone outside of the organization. Mancur Olson's famous "Logic of Collective Action" (1965) relies on the existence of rents enjoyed by members of the organized group, which he calls selective incentives, to explain voluntary associations. Members only cooperate if the rents are positive and, critically, if the rents are only attainable within the organization.

Rents are also a critical element of making individual behavior more predictable. The higher the rents an individual receives from an activity, the more predictably will she engage in that activity. Partners in an organization can sustain a higher degree of cooperation when members of the relationship expect to receive higher rents on an ongoing basis. Members who are pushed to the margin are not reliable partners: if a member receives total benefits that are just equal to the total costs of membership, then rents are zero and that member is indifferent to cooperating. The behavior of indifferent partners is unpredictable. Any small change in

circumstances may lead them to defect. Organizations want to ensure that all members earn some positive rents so that their behavior is predictable.

If the members of an adherent organization look forward and anticipate that rents may not be sufficient to ensure the cooperation of every member at every point in time in the future, then defection is anticipated and cooperation may unravel. There are, however, ways for the members to protect against defection, like giving hostages, which provide insurance against the possibility that rents will become zero or negative at some point. The threat of killing the hostage imposes large penalties on defection, making possible incentive compatible and time consistent arrangements for the organization. The various folk theorems lay out how such punishments for deviators (non-cooperators) might be credibly imposed (Benoit and Krishna 1985, Fudenberg and Maskin1986).

The folk-theorem logic is enough to explain the existence of adherent organizations. But organizations that depend only on the coordinated interests of their members without recourse to external enforcement of arrangements are likely to remain small. Ensuring cooperation is expensive, particularly when cooperation is attained through the continual *ex ante* transfer of real economic assets or costly threats to destroy economic assets *ex post*. Third-parties are one way to reduce the costs of enforcing rules when it is necessary to do so. Rather than tying up valuable resources in the form of hostages or other insurance arrangements within the organization, rules and contracts enforced by third-parties offer a more efficient possible way of ensuring that rents stay positive. An organization's members accept terms and penalties for defections that the third-party enforces. The resources of the third-party need only be engaged when necessary, offering gains from resource use and specialization and division of labor. The incentives facing third-parties are an endogenous part of this relationship.

Organizations that rely on some form of external enforcement of agreements are *contractual* organizations. Anything that an adherent organization can do a contractual organization can do, but many things that contractual organizations can do are impossible to accomplish with purely adherent organizations. A dimension on which enforcement costs can be minimized is the enforcement of default rules by external third parties. For example, Aghion and Tirole (1997) distinguish between formal and real authority in a firm. We have already discussed the example of the manager and subordinate who need to make a decision regarding the location of a new store. As Aghion and Tirole show, "Real authority is determined by the structure of information, which in turn depends on the allocation of formal authority." (p. 1) The default rule is that the manager makes the decision, but whether the manager decides to make the decision depends on the value of the information he and the subordinate possess. The nature of the default shapes who makes the decision, and in that sense the decision is made in the shadow of the rule, but the actual decision is not described by the formal rule.

As Granovetter noted, "The distinction between the 'formal' and 'informal' organization of the firm is one of the oldest in the literature, and it hardly needs repeating that observers who assume firms to be structured in fact by the organizational chart are sociological babes in the woods." (1985, p. 502)¹¹ What is important to appreciate in our context is that many of the formal rules that shape organizations and are capable of being enforced by an external authority are, in fact, default rules. As we noted in the previous section, the key to the operation of default rules is not coercion but coordination. As we will see in later sections, default rules are often

¹¹"It is impossible to understand the nature of a formal organization without investigating the networks of informal relations and the unofficial norms as the formal hierarchy of authority and the official body of rules, since the formally instituted and the informal emerging patterns are inextricably intertwined." Blau and Scott (1962, p. 6).

enforced by coordinated action. What the default rule does is provide the common information necessary to implement the coordination.

In modern large organizations, what is external and what is internal to the organization is a complicated problem. Large business corporations often embody external third party enforcement of organizational rules, internally within the organization. For example, the home office serves as the third-party enforcer for individual plants.

It is difficult to overstate the importance of contractual organizations. Those of us who live in societies with open access to organizational tools may have trouble appreciating just how many of the organizations we consider "voluntary" are contractual, not adherent, organizations. The fact that we do not feel constrained by many of the contractual rules that we can access to structure are organizations is, in large part, because the rules we operate in the shadow of are defaults, not constraints. The default rules often only come into play when relationships erode or break down and individuals opt for the default. One default is always to end the relationship, but others, like killing the hostage, can be much more complex.

As Granovetter observes, the actual behavior of an organization is not described by its rules, but by the nature of relationships within the organization. This is an aspect of rules that goes all the way down to social norms and personal rules. Behavior often doesn't conform to the rule, but that is usually not a problem. Rules are often default arrangements, and when rules are credible, relationships operate in the shadow of the rules.

We swim in a sea of organizational tools so pervasive that we often do not even notice their existence. Which brings us to the central problem of where third-parties come from and how people can believe that credible third-parties will be credible?

5. The Logic of the Natural State, the Organization of Violence, and the Origins of Third-

Party Enforcement

In her study of *Primitive Governments* in East Africa, Lucy Mair wrote that: "It has been a principle of this book that a man who wants to secure a following must be able to offer his followers some material advantage." (1962, p. 136) Mair's logic raises the question we posed in the introduction: violence cannot be organized through coercion, it must be organized through the creation of some material advantage or interest.

This is a deep chicken and egg problem. If violence requires non-coercive incentives to be organized, and the creation of those incentives depends on agreements or rules that can somehow be enforced, and enforcement of agreements requires an organized third-party that can enforce rules through coercion, then where do we break into this circle of reasoning? Weber sidestepped the problem by endowing the leader with the ability to coerce and to dominate within his organization (and within the limits of legitimacy.) Many theories of organizations assume that the institutional capacity to enforce rules and agreements already exist in the larger society.¹² Such an assumption will not work if our interest is in the emergence of organizations capable of enforcing rules. The institutional capacity to enforce rules and contracts in the larger society has to be created in a manner that is logically consistent with the potential for individuals to be violent. Ultimately, this brings us to the difficult questions of where third parties come from, how people can believe that third-party enforcement will be credible, and the government's potential role as a credible third-party.

¹²For example, Bolton and Dewatripont begin their *Contract Theory* with the explicit assumption that "the benchmark contracting situation ... is one between two parties who operate in market economy with a well functioning legal system. Under such a system, any contract the parties decide to write will be perfectly enforced by a court, provided, of course, that it does not contravene any existing laws" (2005, p. 3).

Mair's quote begins with the desire of one man for a following. Social scientists have a predilection to think about governments in a similar way: by beginning with a single actor, a powerful individual who has a comparative advantage in violence. They proceed by identifying the interests of this single individual (actor) and then theorize about the conditions under which the enforcer/guardian will honor his or her commitments to provide third-party enforcement to his clients (including protection). Starting with a single actor with a comparative advantage in violence, however, avoids important questions we must ask about the organization of violence. The puzzle within the puzzle is that violence cannot be organized simply by violence or coercion. A violence specialist cannot organize other violence specialists simply by threatening to beat them up or kill them, because a coalition of any two or more violence specialists can always defeat a single violence specialist, no matter how strong the individual specialist is. Since most male humans are more or less endowed with similar physical capacities for violence, an adherent organization cannot evolve in which one person uses the threat of violence to organize the rest of the group. Organizations that use violence must be organized by something other than coercion.

In NWW, we developed an insight about the organization of institutions to explain how societies come to organize and limit violence. Think of two individuals, each members of a different group. Each of the groups, to begin with, are egalitarian in the sense that no individual is capable of coercing the group and economic outcomes are relatively equal.¹³ Suppose that if

¹³The evidence that small foraging bands are quite often aggressively egalitarian seems well established. Whether the small bands that make up the basic unit of most foraging societies are inherently egalitarian or whether they are egalitarian only because of their organizational response to environmental and social conditions, however, is a fascinating question. See Boehm (2001, pp and Kelly (1995, pp.) for two different views.

the two individuals can cooperate and form a coalition, they can overawe either of the groups they belong to.¹⁴ They agree to come to each other's aid in the case of a conflict and by doing so agree to recognize each other's rights to the land, labor, and capital in their respective groups.¹⁵ Because of their coalition, the members are able to coerce their own group and gain control over resources. The land, labor, and capital they control is more productive under conditions of peace than conditions of violence. If violence breaks out, the rents each coalition member gets from his own group go down. Both coalition members can see that there is a range of circumstances in which each member can credibly believe the other will not fight. As a result, the rents from their group serve as a mechanism for limiting violence be coordinating the two coalition members. This is what NWW call the "logic of the natural state."

We do not assume that the coalition members possessed any special physical characteristics. We assume that if coalition members can cooperate, then they can overawe the members of their respective group: their strength comes from their organization. The ability of the coalition members to form a credible coalition is what makes the members of the coalition "violence specialists." They are violence specialists in the sense that only coalition members are capable of calling on the organized presence and violence potential of other members of the

¹⁴The idea that a coalition of just two members will be able to overawe either of the two groups is unrealistic. But beginning with a coalition of just two members is easier to describe and visualize. An actual coalition would need to include enough members to coerce each of the member's groups.

¹⁵The example is unrealistic, in the sense that only two individuals cannot possess enough coercion to overawe either of the respective groups. Two is also too small a number to solve the problem of guarding each other while the other sleeps, a major force for egalitarian outcomes in small groups (Boehm, 2001). So the number of people who reach the agreement to enforce each others claims to property is certainly larger, but two is a much easier number to visualize and represent in the figure that follows.

coalition.¹⁶ The coalition is an adherent organization, the relationship between the coalition members creates rents from non-violence that provide incentives for the specialists to continue to cooperate. NWW called this organization the "dominant coalition." We continue to do so here, in order to draw more clearly the distinction between governments and states.

The nub of the agreement within the dominant coalition is about violence and rents. The ability of each coalition member to see that the other members will lose rents if they are violent enables each of them to credibly believe that there is a range of circumstances in which violence will not be used. The organization of each coalition member is more productive if there is no violence. The difference between the productivity of the member organizations under violence and under non-violence are the rents to non-violence. The rents from non-violence make the organization of the coalition members credible and sustainable. Note that the coalition members do not "share" anything except the responsibility of coming to each other's mutual aid: they each keep the gains from their own organization and there is no sharing rule or *ex post* bargaining.

Figure 2 represents a simple version of these types of arrangements graphically. A and B are members of different groups, represented by the vertical ellipses. The horizontal ellipse represents the arrangement between A and B that creates their adherent organization: the dominant coalition. The vertical ellipses represent the arrangements the coalition have with the labor, land, capital, and resources they control: their "clients," the a's and b's. The horizontal arrangement between the specialists is made credible by the vertical arrangements. The rents the members receive from controlling their client organizations enable them to credibly commit to

¹⁶The comparative advantage in violence that the coalition enjoys vis a via the unorganized general population is a function of the organization of the coalition, not of the violence capacities of the coalition members.

one another, since those rents are reduced if cooperation fails and the members fight. There is a reciprocal effect. The existence of the agreement between the specialists enables each of them to better structure their client organizations, because they can call on each other for external support.

In Figure 2, the horizontal relationship between the coalition members create an adherent organization. A and B become violence specialists because of their ability to call on each other, and their ability to coordinate with each other is made credible by the rents each receives from their respective organization. If the relationship between the coalition members is credible, then vertical relationships between the coalition members and their clients can become contractual organizations because the vertical organizations rely on the external third-party presence of the other dominant coalition members. The vertical client organizations might be organized as kin groups, ethnic groups, patron-client networks, organized crime families, guilds, or firms. The combination of multiple organizations, the "organization of organizations," mitigates the problem of violence between the really dangerous people, the violence specialists in the dominant coalition, creates credible commitments between the coalition members by structuring their interests, and creates a modicum of belief that the coalition members and their clients share a common interests because the coalition members have a claim on the output of their clients.

The society depicted in the figure has a very simple institutional structure. The two rules that can be credibly enforced are both defaults. When there is a disagreement between A and any of the little a's, B uses the default rule that A is right. Likewise, A enforces the default rule that B is always right. The rule has the same structure as the formal vs real rule in Aghion and Tirole. There is nothing in the figure that prevents A from reaching more complicated agreements with the little a's, indeed we expect that A's ability to credibly threaten (coerce) the

little a's will enable them to reach agreements that they could no reach if their social arrangements had to be essentially egalitarian. How the gains from coordination are shared between A and the little a's is problematic. Coordination between A and B depends on their perception that the other receives rents from limiting violence and coordination, so there will be significant incentives for A and B to keep most of the rents.¹⁷ That is, societies in which elites do not emerge will not be able to use rents to limit violence. If unequal distribution of rents within groups strengthens the ability of the dominant coalition to both limit violence and provide credible third-party enforcement, there will be strong evolutionary incentives (in Alchian's terms) for institutional arrangements with unequal rents to persist.

The figure is a very simple representation. In a functioning society there are many more groups. Members of the dominant coalition include economic, political, religious, and educational specialists (elites) whose privileged positions create rents that ensure their cooperation with the dominant coalition and create the organizations through which the goods and services produced by the population can be mobilized and redistributed.¹ But the simple pciture provides enough to see how credible third-parties can emerge out of the social arrangements that limit violence. In the adherent horizontal organization of the dominant coalition, no member or organization has a monopoly on violence. What deters the use of violence is the potential rents that coalition members might lose if they choose to fight. Those

¹⁷Historically, or at least anthropologically, there are many possible arrangements for sharing the rents. It does appear, however, that the emergence of larger societies is always association with the creation of hierarchical elites. That is consistent with A and B realizing most of the rents from organizing violence and coordination. Johnson and Earle (2000).

¹North, Wallis, and Weingast, 2009, chapter 2. Earle, 1997 and 2003, and Johnson and Earle 2000, provide a series of anthropological examples of how chiefs come to power and the scale of society increases by the systematic manipulation of economic interests.

rents do not come from within the dominant coalition, but from the vertical contractual client organizations. The members of the dominant coalition are able to call on each other to serve as third-parties. Initially, those services probably include the simple default rule of recognizing each other's boundaries and clients, a working agreement to live and let live, and a willingness to intervene in dispute on each other's behalf. But the roots of more sophisticated arrangements lie in the credible commitments that coalition members can make to one another.

The society depicted in Figure 2 has a state but no government. The dominant coalition is the configuration of power in the society – the state. There is a structure of power, based in organizations that are mutually supporting through an interlocking set of interests. But there is no public organization, just the members of the coalition and the organizations they head.

The dominant coalition in Figure 2 is an adherent organization. It does not rely on thirdparty enforcement to ensure that its internal arrangements are credible. But the dominant coalition is not a Weberian state. Neither A nor B is "the" leader, neither of them is able to give orders to the other, their relationship is based on coordination, not domination. A and B may not like each other, but they coordinate because it is in their best interest to so. The dominant coalition in figure 2 is not a template for a Weberian state, but it has several very attractive features.

Among them is the way that the adherent relationships within the coalition enable the creation of contractual organizations. The ability of coalition members to call on each other as third-parties for their organizations enables coalition members to convert their adherent organizations to contractual organizations. Undoubtedly, when larger societies began to emerge 10,000 years ago, the nature of third-party enforcement was very limited. But the possibility that the coalition could help enforce agreements within the organization of coalition members, and

perhaps more importantly, that the coalition members together could help enforce agreements between their organizations, created new rents from coordination. Following NWW's logic of the natural state, these coordination rents also served to strengthen relationships within the dominant coalition. The rents from coordination worked for social stability in the same way that rents associated with non-violence work for social stability. To the extent that the dominant coalition serves as a third-party enforcer for members' organizations, those organizations are more productive. The rents produced by coordination within the coalition and from the higher productivity of members' organizations strengthen the incentives holding the coalition together.

Note that the coalition's ability to provide third-party enforcement does not depend on interests that members of the coalition share, but on the distinct interests that each coalition member has in their own organizations. The dominant coalition does not act cooperatively to produce a joint product and then figure out how to divide up the gains (the standard contracting problem). Instead, the coalition decides on a series of strategies that make each member of the coalition better off and are thus sustainable, the idea of "rationalizable coalition."² These individually rational interests provide the organizational incentives that make up the relationship among organizations in the "organizations of organizations." It is the multiplicity of organizations that makes third-party enforcement possible. If there is only one organization, there is no possibility of credible third-party enforcement. There must be at least two organizations. The dominant coalition is an organization of organizations.

²Coalition members are not producing a joint product which they must then divide between each other. They are producing individual products, which are more valuable if they coordinate in their use of violence and willingness to enforce each other's rights. Each coalition member can see the incentives for rational behavior facing other members of the coalition. Thus a coalition emerges between non-cooperative actors, in which coordination is achieved, see Ambrus (2005).

Weber understands that political organizations always live in a complicated environment. At several places in *Economy and Society* he talks about the "power constellation" (p. 1022) or "political constellations" or "political power relations" (p. 986). These constellations of power lay outside the organization of the government, but influence it nonetheless. Our concept of the dominant coalition is the configuration of powerful organizations in a society. That is the state. Governments are something different, but before we turn to them we must consider the deeper problem of personal, anonymous, and impersonal relationships.

6. Anonymous and Impersonal: Relationships, Exchange, and Rules

Impersonality is a key to understanding not only the modern developed world, its absence it is the key to understanding the social dynamics of all historical and most modern developing societies. The progression from personal to impersonal can be illustrated in terms of Figure 2. For most of human history, almost all relationships between people were "personal." That is, relationships occurred between people who knew each other and had expectations of repeated interaction in the future within small groups represented as the vertical ellipses. In this world, all organizations were adherent organizations. At the limit conceptually, all organizations were vertical ellipses unconnected by any horizontal ellipse.³

About 10,000 years ago the first societies capable of achieving substantially larger size appeared. Interactions between individuals could no longer be based solely on personal relationships. Relationships between individuals who did not know each other and had no expectation of repeated interaction in the future needed to be mediated by some form of social

³This is too strong, since all societies organized in bands of 25 to 30 people, nonetheless still must maintain relationships with other bands, if only to provide opportunities for marriage.

institution. Figure 2 shows how a larger society could support a larger scale by coordinating social interaction through contractual organizations supported by the adherent organization of the dominant coalition. In this society everyone A, B, and the little a's and b's could be identified with a specific organization. Little a's and b's might be able to interact with each other, within the framework provided by A and B, even if "a" and "b" did not know each other personally. What "a" and "b" needed to know about each other is what organization they belonged to.

Both economic history and institutional economics have stressed the importance of impersonal relationships as a foundation for modern economic development and growth. We have, however, been vague about how impersonal relationships are defined. In one definition, impersonal relationships occur when two individuals interact in a way that does not depend on their personal or social identity. The essence of this form of impersonality is "treating everyone the same." While the definition is not controversial, it is not the one most often used in the social science of institutions. As just described, the problem of impersonal relationships is usually motivated by considering how two individuals who do not know each other personally and have no expectation of a continuing relationship in the future can come to agree on a social relationship. This definition of impersonal is simply "not personal." Defining an impersonal relationship as dealings between individuals who do not know each other personally, however, differs considerably from the impersonality defined as treating everyone the same.⁴

⁴Impersonality is not a key concept for Weber, but when he uses the term it tends to reflect the "not personal' definition of impersonality. "Among the prebureaucratic types of domination the most important by far is patriarchal domination. Essentially it is based not on the official's commitment to an impersonal purpose and not on the obedience to abstract norms, but on a strictly personal loyalty... Such personal authority has in common with *impersonal* oriented bureaucratic domination stability and an "everyday character." (Weber, 1978, p. 1006) Or in

We need to separate the two types of relationships. For clarity, we define *anonymous* relationships as situations where people who are not personally known to each, but nonetheless know the social identity of the other in the relationship, interact on some dimension. Social identity -- the organization that an individual is identified with, be it a group, tribe, city, or office – is a key element of anonymous relationships. In contrast, *impersonal* relationships refer to situations where people are treated in the same manner (according to the same rules), whether they are personally known to each other or not. Social identity is not a part of impersonal relationships since, in the limit, all people are treated identically.⁵ The society depicted in Figure 2 can support personal or anonymous relationships, but not impersonal relationships. It matters which of the three organizations in the figure a person belongs to when interacting with any other individual in the society.

Institutional economics has come a long way towards understanding how organizations can be used to support anonymous exchange. Here is how Avner Grief defines "impersonal" exchange:

What were the institutions, if any, that supported interjurisdictional exchange characterized by separation between the *quid* and the *quo* over space and time? Specifically, were there institutions that enabled such exchange that was also impersonal,

⁵The distinction between impersonal and anonymous relationships is considered in more detail in Wallis (2011). Most impersonal rules apply to categories of people, like citizens, so very few impersonal rules are truly universally impersonal.

terms of the bureaucratic administrative mechanism: "The objective indispensability of the once-existing apparatus, in connection with its peculiarly "impersonal" character, means that the mechanism – in contrast to the feudal order based upon personal loyalty – is easily made to work for anybody who knows how to gain control over it." Weber associates impersonality with rationality, as the quotation continues: "A rationally ordered officialdom continues to function smoothly after the enemy has occupied the territory; he merely needs to change the top officials." (1978, pp. 988-9) Weber equates impersonality with the identification of a person, like a bureaucrat or official, with an organization. Weber's impersonality is anonymity.

in the sense that transacting did not depend on expectations of future gains from interactions among the current exchange partners, or on knowledge of past conduct, or on the ability to report misconduct to future trading partners?

The theoretical and historical analysis presented here substantiates that in premodern Europe impersonal exchange characterized by separation between the *quid* and the *quo* across jurisdictional boundaries was facilitated by a self-enforcing institution: the community responsibility system.(Greif, 2006, p. 309)

Greif motivates impersonal exchange as a relationship between two individuals who did not know each other, but could nonetheless reach agreements that spread across space and time. What Greif describes as impersonal is what we define as anonymous exchange: exchange embedded in larger social organizations that enable individuals to credibly deal with one another because expectations about the other's behavior are grounded in the social constraints on the other person.

Grief is not wrong to define impersonal exchange in this way, North defined it similarly in 1990 (pp. 34-35). But neither Grief's nor North's definitions of impersonality differentiate between treating everyone the same – impersonality – and dealing with people you do not know personally because you know what organization they belong to – anonymity.

For our purposes it is important to understand that organizations form the social background for anonymous relationships to flourish. As Greif shows, the ability of organizations to create and sustain rents within the organization enables organizations to credibly interact in ways that enhance those rents. Organizational rents are the fundamental engine that make Grief's examples of the Maghribi traders or the community responsible systems work. A trader from Genoa could trade confidently in Hamburg, because he was identified as a merchant from Genoa. If he was cheated in Hamburg, the merchant guild in Genoa would expropriate all of the Hamburg merchants currently in Genoa. Because both Hamburg and Genoese merchants earned rents from trading, and those rents were at risk if the two communities were willing to carry out punishments, as long as merchants could be easily identified as members of the Hamburg or Genoese merchant guilds the community responsibility system could sustain anonymous relationships. Rents generated within organizations enable individuals to deal with one another credibly across organizations. These anonymous relationships are embedded in organizations rather than personal relationships.⁶

The community responsibility system brings us back to the logic of the natural state. It is possible to have private ordered contractual relationships (without government), because there are two or more organizations with interlocking interests. Identity matters, and it is the identity of the organization an individual belongs to that enables coordination on a larger social scale. The community responsibility system can both formulate and enforce laws, indeed it can be thought of as capable of "rule of law" in the sense that the rules are understandable, predictable, and enforced in an unbiased way. But it is a set of anonymous rules that apply differently to different people.⁷

The rules that the community responsibility system is capable of enforcing may have the form of modern commercial law, but their enforcement depends on social dynamics embedded in organizations in a way that makes them anonymous rather than impersonal rules. This is a tricky distinction, because the visible form of an explicit rule (a formal rule) may not correspond to its enforcement. Simply saying that the rules apply equally to everyone does not make them

⁶ Granovetter's (1985) notion of the embeddedness of economic actions in social structure is precisely what we are identifying in the notion of anonymous relationships. As Greif explains, the community responsibility system began breaking down when it became difficult to identify specific merchants with city guilds.

⁷Whether "rule of law" requires that all people be treated the same is a definitional matter, and there are many definitions of rule of law. Perhaps we shouldn't get into rule of law here.

do so. This leads us into questions about social dynamics that we address in the second part of the paper.

Societies based on anonymous relationships have trouble enforcing impersonal rules because the very logic of what holds the organizations together is that everyone is not treated the same, that every organization possess unique and valuable privileges.⁸ Before we consider the social dynamics that sustain anonymous rules, we need to fit governments and states into the organizational picture.

7. Governments and States

The logic of natural states enables us to see how the presence of two or more organizations can create an environment in which third-party enforcement of anonymous rules is possible. Are those rules enforced by coercion? If B enforces rules that apply in A's organization, the little a's are likely to view both A and B as coercive, and legitimately feel that some of the rules that govern their relationship with A are coercive. The relationship between A and B makes the third-party rules credible. While both A and B possess coercive ability, their threats to use violence against each other are default options that are only part of what makes their relationship credible. The source of the coercive third-party rules is, in fact, the benefits that arise when A and B are able to coordinate. The benefits of coordination within the organization of the dominant coalition sustain third-party rules, not coercive authority.

This raises a deep paradox in how we both think about and obtain evidence on how societies are organized. Coercion is the threat of violence. In a natural state, everyone feels

⁸The conflict between organizations and rules is explored in more detail in Wallis (2011).

coerced because everyone is threatened by violence, even A and B are coerced by each other. The threat of violence is an inherent part of the credible commitments that make social arrangements sustainable and, yet, what limits violence is not the threat of massive retaliation, but the perceived loss of the benefits of coordination that follow if violence is used. This is a manifestation at a more aggregate level of the point we raised earlier: violence cannot be organized by violence. In a society in which everyone, even the powerful, feel threatened by violence, it is the benefits from coordination that limit violence, not the threat (or promise) of more coercion that limits violence. Very often the result of violence is the end of the relationship, and it is the lost gains from the relationship that create incentives to limit violence.

Fear of violence is not a collective illusion. People believe they are threatened by violence because they really are. The natural inference follows that the source of social order derives from the threat that violence will be used when rules are violated, this is the source of support for rules ala Hobbes. Such an inference has enormous intellectual appeal. The notion of a balance of power produced by the countervailing threats of violence provides an intuitive conceptual framework for social order.⁹ Powerful individuals and organizations are constrained from using violence by the threat of violent retribution from other powerful individuals and organizations. We do not deny the logic of such arguments, or the likelihood that violence is often been deterred by the threat of violence in many societies.

Yet we seriously doubt societies have gotten better at coordinating diverse individuals

⁹Explicit examples of the use of a balance of threats as the source of social order can be found in the early English anthropologists who studied Africa in the early 20th century. In particular, the introductory essays in Fortes and Evan-Pritchard (1940, pp. 1-24) and Middleton and Tait (1960, pp. 1 -32). For specific examples, see Gluckman (1940 and 1956, pp. 1-26), Evans-Pritchard (1940 and 1940). For a reaction against the idea that societies are in an equilibrium balance see Leach (195?, p. ?).

through impersonal rules by inventing more intricately balanced arrangements for threatening violence. Social coordination generates a more satisfactory framework for understanding how societies move to more complicated and sustainable social arrangements. The tricky part is understanding how better coordinated social arrangements develop while simultaneously providing the right incentives not to use violence.

One mistake we made in the framework of our book with Barry Weingast was the implication that governments emerged when foraging orders made the transition to natural states. Although we were careful not to use the word government or state when we talked about the formation of dominant coalitions, we nonetheless left the distinct impression that the dominant coalition in a natural state was something like a government.¹⁰ We now realize that governments emerge, historically and in the conceptual framework, from within dominant coalitions. The role of governments is to facilitate coordination within the dominant coalition. As organizations within the dominant coalition, government organizations may do many other things, but the essence of their role as a government is to enhance coordination within the coalition. Because no single organization is capable of coercing the entire dominant coalition, a key implication is that governments provide coordination through coordinating rules, rather than coercive rules. Until modern societies appear with their government monopolies on violence, government organizations rarely possesses the ability to enforce rules through coercive power alone.

It is necessary, therefore, to delineate the difference between governments and states. Explicitly, we need to distinguish between a formal public organization, the government, and the

¹⁰We muddled the waters even further when we introduced the notions of fragile, basic, and mature natural states and defined them by how organizations related to the "state" without being clear about whether the state was a formal government or the dominant coalition.

network of organizations that represent the configuration of power in a society, the dominant coalition (what we have called the state). Weber defined the modern state as the organization with a monopoly on the legitimate use of violence, an accurate description of how modern developed societies deal with violence. The Hobbesian state, in contrast, did not require a monopoly on violence. We must guard against the tendency to assume that a monopoly on violence is an essential characteristic of "stateness." There is no historical teleology that moves toward an ideal form of state with a monopoly on legitimate violence. We definitely do not want a conceptual framework that embeds such a teleology.

For most of human history in most societies, many groups and organizations possessed the means of violence and used violence regularly. The evidence that hunting and gathering societies were more violent than the agrarian based societies that followed them historically is growing, and the evidence that the overall rate of violence in human societies has fallen appears indisputable.¹¹ Falling levels of violence imply higher levels in the past. In societies with high levels of violence we expect that private provision of protection will be prevalent, and that those societies will develop social institutions to minimize the adverse effects of endemic violence if possible. Among the most interesting arrangements that arise to protect against violence is the institution of the feud. Feuds are a systematic way for individuals to organize retribution for harms in a world where limited third-parties exist to enforce rules. Feuds are often called selfhelp institutions. Feuds usually originate in personal interactions, but grow into disputes between families, kin groups, and larger social organizations. Feuds are based in a social agreement about what legitimate actions a person, their families, and their friends can take to

¹¹For evidence on the falling level of violence see Pinker (2011). Steckel and Wallis (2007) provide evidence on the level of violence in hunter-gatherer societies.

redress an injury, including murder. Social arrangements about the legitimate causes for and conduct of feuds come into being in societies where the use of violence is widespread and, by definition, is not monopolized by one group. Feuds are always about the invocation of anonymous rules that define individuals and their relationships by their social identity as members of particular groups.

Using the feud as an example to think about governments and states has several advantages. First, the feud ties directly into a dominant stream in the theories about violence and states that have been proposed by scholars like Robert Bates (2001, 2008, and Bates, Grief, and Singh 2002). Bates uses the feud as an example of the private provision of protection, and then builds a theoretical explanation for how the systematic provision of protection, and ultimately the state, evolves out of private protection. Bates is Hobbesian, in the sense that it is the ability to wield violence that enables the protector to provide protection and, eventually, justice.¹² The feud is also intimately related to the anthropological and historical evidence we have on the organization of governments in relatively simple societies. Bates's idea are grounded in the anthropology of African states, for example, Mair, Gluckman, and Evans-Pritchard to which we now turn.¹³

The feud is a central institution in the society of the Neur tribe. The Nuer tribe was composed of about 80,000 people who shared a common language and folk ways, lived in small groups or bands of 30 to 50 people, and were connected by a set of kin and marriage networks,

¹²This aspect of Bates's argument parallels Barzel's (2001) notion that individuals with a comparative advantage in violence also have a comparative advantage in the provision of justice, provided that the protectors can be adequately incentivized.

¹³See Bates (1983) and Mair (1962). Gluckman starts off his 1953 lectures with a discussion of "Peace within the Feud."

what anthropologists call segmented lineage societies. Because women (men) leave their band to marry, but maintain contact with their families, all individuals have two interrelated sets of relatives. One set is the set that the individual married into, the other the set that the individual is descended from. There are no central administrative officers or functions in the Neur, who are fiercely independent.

Violence is deterred in Neur society through the institution of the feud. Individuals who are harmed, or feel they are harmed, by the action of another, undertake to obtain justice or redress through a set of actions that can include violence. Violence can expand to include other members of a group, or larger lineage units. Opportunities for confusion abound, since individuals are linked through multiple lines, some of which may come into direct conflict in a feud. Since feuds involve more than violence, for example individuals from feuding groups do not share food, knowing when and what feuds are ongoing is important for the Neur. Likewise, knowing when feuds have ended is important.

The position of the "leopard skin chief" is Mair's example of the first form of government in the Neur society. A leopard skin chief has the ability to confirm that a feud has ended by performing a public ritual. The ceremony signals to the relevant groups that relationships can go back to normal. The chief, however, has no power to coerce either party to the feud. If the feud reignites after the ceremony, the chief does not discipline either group. The function of the chief is to provide public knowledge that the feud has ended. The chief is a thirdparty participant, but not a third-party enforcer. The chief's role is critical in enabling coordination within Neur society, because of his ability to create common knowledge through ritual, including common knowledge about specific individuals and groups.¹⁴ The leopard skin chief performs a vital public government function, yet a function that does not involve coercion.

The leopard skin chief is a very simple form of government and the Nuer are a unique and specific society, yet the example demonstrates the important ability of governments as public organizations to leverage up the coordination capacity of private actors. In the leopard skin chief case, it is the publicness of the government that serves to convey information to everyone. The aspect of publicness is critical for identifying which organizations are actually governments and therefore is an essential element of all governments. Publicness is a complicated attribute. Most government organizations do many things, and many of the things that governments do have little to do with their being governments.¹⁵ Publicness is not a zero/one condition, it is a continuum along which government and private actions are apparent to people within the society.¹⁶ A key aspect of government enforced default rules is their potential for being very public rules that are widely known.

The feud again provides us with a historical example. Berman's sweeping history of law in Western Europe in the second millennia begins with a review of the earliest surviving western law codes, first the *Lex Salica* issued by the Morvingian King Clovis in 496:

¹⁴On the role of ritual as a means of creating public, common knowledge see Chwe (2003).

¹⁵As Weber said (1948, pp. 77-78): "But what is a 'political association' from the sociological point of view? What is a state? Sociologically the state cannot be defined in terms of its ends. There is scarcely any task that some political association has not taken in hand, and there is no task that one could say has always been exclusive and peculiar to those associations which are designated as political ones:"

¹⁶Acemoglu and Jackson (2011), develop a model in which the only attribute of leadership that matters in a game of social coordination is that the leader's action is publicly known to all decision makers who follow in the game (which is a sequential game of agents who live for two periods), while the actions of non-leaders is not public.

"It starts by listing monetary sanctions to be paid by a defendant to a plantiff for failure to respond to appear in the local court. It also lists monetary sanctions to be paid by wrongdoers to injured parties for various kinds of offenses, including homicides, assaults, thefts. These are typical of primitive law; one of their principle purposes was to induce parties to a dispute to submit to a decision of the local assembly (the hundred court) instead of resolving their dispute by vendetta, or else to provide the basis of negotiation between the household of the victim and that of the offender. Sometimes, however, they did not even have that effect. The injured party, in the words of one of the Anglo-Saxon laws, might either "buy off the spear or bear it." The prevalence of private warfare was connected with the great difficulty of bringing a person accused of wrongdoing to trial or getting witnesses to testify or enforcing a judgement." (1983, pp. 53-4)

Although the end of the quotation stresses the prevalence of private warfare (feuds) was due to the lack of an effective judicial system, Berman's central point is that these legal codes form the basis for the development of a substantive legal system. The codes have detailed penalties for different damages, and importantly the penalties not only reflect the damages but the status of the person who was damaged.¹⁷ Murder carries larger penalties than maiming, but killing a noble carries a much higher penalty that killing a slave.

Two features of these legal codes are important for our purposes. First, they were default

rules that listed detailed default penalties for specific injuries to specific individuals. They were

¹⁷"Ethelbert's laws are remarkable for the extraordinary detailed schedules of tariffs established for various injuries: so much for the loss of a leg, so much for an eye, so much if the victim was a slave, so much if he was a freeman, so much if he was a priest. The four front teeth were worth six shillings each, the teeth next to them four, the other teeth one; thumbs, thumbnails, forefingers, middle fingers, ring fingers, little fingers, and their respective fingernails were all distinguished, and a separate price, called a *bot*, was set for each one. Similar distinctions were made among ears whose hearing was destroyed, ears cut off, ears pierced, and ears lacerated; among bones laid bare, bones damaged, bones broken, skulls broken, shoulder disabled, chins broken, collar bones broken, arms broken, thighs broken, and ribs broken; and among bruises outside the clothing, bruises under the clothing, and bruises which did not show black.

If the act of the defendant caused death, the price to be paid to the kin of the deceased was called *wer* (or *wergeld*). Much of written Germanic (including Frankish and Anglo-Saxon) law was concerned with setting different measures of wergeld for different classes of people." (1983, p. 54)

not only anonymous rules (they did not apply equally to everyone, yet they did not apply differently to everyone either, they applied to well specified groups of people), they were clearly defaults. Individuals could decide to resort to violence to redress their grievances, or they could go to court. If they went to court, the potential damages were publicly known before they went to court.

Second, although Berman notes the important role that these heavy penalties could have played as deterrents and the role that they played in allowing a peaceful settlement of the feud, he concludes that "In functional terms, the institution of monetary sanctions for crime, payable by the kindred of the wrongdoer to the kindred of the victim, is to be judged, not primarily be the extent to which it served to deter of to punish or to compensate for a crime, but primarily by the extent to which it served to forestall family vendettas and, more particularly, by the extent to which it facilitated negotiation and mediation between hostile families." The key to these default rules is their ability to facilitate coordination between members of the dominant coalition. The penalties served as a very public signal that compensation for the damages had been paid and normal relationships between the parties could resume.

Indeed, the courts had no powers of enforcement themselves. The enforcement mechanism was very Piagetian, powerful individuals who wished to continue to enjoy the benefits of inclusion within the dominant coalition abided by the decisions of the court, or they were excluded from the game. There was no coercive power of government to enforce these decisions, only the self-interest and self-enforcing arrangements within the dominant coalition. But they were government decisions, provided by a public organization without the means of coercion but endowed with the means of publicly creating common knowledge.¹⁸

Even legal systems that eventually grew to include coercive powers often began in courts whose effectiveness was based completely on public coordination. The process of initiating a case in Roman or English law was also highly ritualized. Plaintiffs and defendants had to perform exactly the right actions and speak the right words in order for their cases to move through the process. Courts made decisions, often according to default rules, and then left enforcement up to the aggrieved party. The social sanction that ensured enforcement of decisions was not the aggrieved party but the benefits of social coordination that the defendant would lose if he did not abide by the decision.¹⁹ Over time in Rome, in Europe, and in England the government came to play a more active role in enforcing the decisions of the courts, but the origins of the courts is in coordination, not in coercion. The courts utilize the coordinating dynamics within the dominant coalition for enforcement.

As before, the courts are only a part of what governments do and we have only given examples, not a thorough historical or theoretical treatment. But the examples give enough indication to support the idea that at least some functions of government work primarily through sustaining and augmenting coordination within the dominant coalition, and perhaps the larger

¹⁸Kuran and Lustig (2011) examine the administration of justice in Ottoman Courts in the 17th century. The note that most cases the courts simply issued decisions which were enforced by the community, rather than by the government. A difference between the Ottoman courts and the Christian and Jewish courts of the time, however, was the possibility that the Sultan could be called on to enforce a decision. Again, coercion was important, but the key element in enforcing decisions was coordination.

¹⁹"There was no direct state enforcement of the appearance of the parties or of the execution of the judgement, and there were no professional judges." This was changed after the Edict of Julian in the fourth century AD (I think), Nicolas, pp. 27, see also page 22. For the forms in English law see Maitland (1909). In English law there was a growing use of coercive power to enforce court decisions.

society, rather than through coercion. Figures 3 and 4 extend Figure 2 to illustrate the basic principle.

In Figure 3, A and B allow a third organization, G, to form. The government is an organization within the dominant coalition, although members of the government organization may be outside the coalition, little "g," just as are members of A and B's organizations. What matters within the coalition dynamics is the extent to which A and B are willing to use the government as a coordinator (possibly a third party enforcer) for their relationship. This is indicated by the double arrows connecting A with G and B with G in Figure 4. A and B do not forego dealing directly with one another, the single double headed arrow that connects A and B, so they maintain the ability to make agreements between each other that can enforce agreements within their organizations. The government cannot have a monopoly on the enforcement of anonymous rules. Third party enforcement can be sustained without government participation, because of the interests of the coalition member's organizations.

This really complicates how we think about government capacity. Is it the capacity to coordinate or the capacity to coerce? The situation depicted in Figure 4 deliberately parallels Figure 1, but with a difference. Just as in Figure 2, the logic of the natural state suggests that the ability of the government to function as contractual organization depends on the third party enforcement of A and B. If the other powerful organizations in the dominant coalition do not coordinate with the government, the government loses it own ability to function as an organization. We could call the willingness of the private members of dominant coalition to coordinate with the government organization "legitimacy," although it is not clear how much would be gained by that.

The capacity of the government, G, cannot be determined without considering the

capacity of A and B. Moreover, relative capacities are not just a function of the coercive power the various organizations can mobilize at any point in time. Relative capacities are based on coordination as well as, indeed the capacity of elite organizations as organizations is dependent on the mutual support. Because of the gains from specialization and division of labor that coordination within the coalition makes possible, we would not expect to see, at every point in time, that all coalition organizations actively possessed coercive capacity. But we must not discount the ability of all organizations to mobilize resources that can be organized to provide the capacity for violence. The organization of violence requires incentives coordinated by nonviolent interactions. Any organization can eventually organize violence if it is able to coordinate its members on non-violent dimensions. The fact that organizations within the dominant coalition can reorganize to produce coercive power over time, puts us in a dynamic rather than a static world. The logic of the natural state provides the underpinnings for credible relationships between organizations that enables third-party enforcement of anonymous rules. This includes rules whose coordinating value may be enhanced if they are publicly articulated and enforced, even if they are not coercively enforced.

It was not until we took seriously that the dynamic relationship between A, B, and G could be grounded in coordination rather than coercion that we began to make sense of their relationship. This point cannot be over emphasized: the dynamics of the government capacity to enforce rules of any type are based on the coordinating relationships between the government and powerful private organizations. In short, government capacity is based on coordination, not coercion. In order to elucidate the implication for social behavior, we need to examine the dynamics of natural states and anonymous rules more carefully.

Part II: Dynamics

The remainder of the paper is incomplete. The two following sections stand on their feet, but in the next version these sections will deal more explicitly with social dynamics.

8. The Flaw in the concept of Weak and Strong Governments

Figure 4 depicts three members of the dominant coalition, G, A, and B. Don't get attached to the idea that G is an fundamentally different organization than A and B. Arrangements within the dominant coalition are not sustained by the threat of violence alone. Instead, individual organizations have incentives to coordinate within the coalition because the benefits of coordination exceed the gains from violence. If conditions shift so that one or more of the organizations finds that violence is preferred to coordination, violence will occur. It is no more or less likely that the government organization will be peaceful or violent that the "private" organizations.

Let us put this another way. Internal relationships within the government organization depend on the third party enforcement of A and B. How credible those arrangements are depends partly on the violence capacity of the three organizations, but more fundamentally on the costs of losing coordination. If the capacity of any organization to enforce third-party rules depended only on the relative coercive power of the enforcing organization, then increasing the coercive ability of the government organization (its legal capacity, so to speak) would make rules easier to enforce. But working through the logic of the natural state that underlies Figure 4 immediately shows the flaw in that logic. If G gets more coercive capacity, A and B are less likely, ceteris paribus, to believe that the government will choose to coordinate (e.g. honor is agreements) rather than using violence (i.e. ceasing to coordinate). A and B are likely to respond

to an increase in their own violence capacity, just in case G decides to use violence. Whether that leads to an increase or decrease in coordination within the dominant coalition is problematic, there is no way to figure that out in general terms without imposing a lot more structure on the conceptual framework.

This was an insight we failed to appreciate in *Violence and Social Orders*. We did not capitalize on the insight that the government's ability to enforce its own internal arrangements, for example its capacity to administer justice, depended on the third-party support of the private organizations in the dominant coalition. We failed to appreciate the difference between states/dominant coalitions and governments and our confused terminology confused our thinking. When we consciously started thinking about the difference between the government and the coalition, we thought in terms of coercion, not coordination. That, of course, is the way that the government's ability to provide key public goods like justice is usually framed: the state is the organization with a comparative advantage in violence, etc. It was not until we began thinking about the coordinating role of government that we began to see the social dynamics of coordination at work in limiting as well as enhancing government. We were a bit slow on the uptake, since this is the fundamental insight of the logic of the natural state to begin with.

We had been thinking about the difference between weak and strong states, and the problem of state capacity more generally, in terms of coercion. In most societies governments are 'weak' in the sense that the government organization(s) is incapable of disciplining or coercing all of the powerful non-government organizations in society: "Political scientists have long emphasized the problems created in many less developed nations by 'weak states [governments],' which lack the power to tax and regulate the economy and to withstand the

political and social challenges from non-state [government] actors."20

The problem with thinking about the dynamics of the dominant coalition as coercive is that the organizations in the dominant coalition are either formulating coordination rules ala Piaget, or they are not playing. This is the point of the "adherent" organization terminology: organizations in the dominant coalition only coordinate within the coalition because they find it in their interest to do so. More accurately, organizations in the dominant coalition continue to coordinate because they want to stay in the game. The rules, norms, and other arrangements that hold the coalition together are not heternonomous, they are autonomous. Note, as we discussed earlier, this does not mean that the members of the coalition do not feel coerced, they do because they constantly live in the shadow of violence. But the rules they follow are not imposed on them from an external authority, but emerge from the dynamics of their interaction (no matter how they feel about it). This is where we depart from Hobbes, essentially from page 1 of *Leviathan*.

We also found that the weak state, strong state framework created more problems than it solved. There are two fundamental ways in which governments are weak or strong. One is simply the relative violence capacity of the government relative to private organizations. The other is the relative strength of the arrows in Figure 4: governments are relatively stronger when the organizations within dominant coalition utilize more services of the government to provide a larger share of the coordination within the coalition (again, this is a relative not absolute measure of strength). This second kind of government strength is not a matter of capacity, but a matter of outcomes. Private organizations may be perfectly capable of providing third-party enforcement

²⁰Acemoglu, "Politics and Economics in Weak and Strong States," 2005, abstract.

to each other, but may find it less costly to coordinate through a public organization. Their willingness to use the government increases the apparent capacity of the government without changing the capacity of the private organizations, and it is not a capacity that the government possesses independent of the private organizations willingness to coordinate through the agency of the government.

Having a conceptual notion of government capacity that mixes up the two types of capacity it is likely to produce muddled, if not completely disastrous, policy recommendations. The two aspects of government capacity are intertwined, nonetheless they are not manifestations of the some underlying capacity. Both capacities depend not just on what the government organization is capable of, but what the private organizations in the society are willing to do with the government and what they are not willing to do with the government.

This helps explicate one of the paradoxes in the development process that so thoroughly vexes the study of growth determinants. Having a physically strong government with relatively high amounts of violence capacity is sometimes good for development and sometimes bad for development. Absolute dictatorships, built on the formation of a government organization with a preponderant control of violence can increase the rate of economic growth, or bring it crashing down to negative rates. Societies with physically strong governments can move to higher levels of development, like South Korea and Chile in the 1980s, or societies with physically strong governments can move to lower levels of development, like Brazil and Argentina in the 1980s.

After a great deal of thought and discussion it seems to us that attempts to embody the concepts of state capacity or strength and weakness in a consistent terminology are doomed to end up with tautologies rather than insights. The reason is the dynamics of relationships within the dominant coalition. The capacity of a government depends in part on its internal abilities and

in part on the external situation it finds itself in. Unfortunately, the external situation is endogenous. A government that becomes physically stronger is a greater threat to private organizations in the coalition. Private organizations will respond over time either by withdrawing or weakening their willingness to acts as third-party enforcers for the government organizations and/or the private organizations will build up their own capacity for violence. All of these changes take time, perhaps longer than decades. Contemporaneous measures of government capacity and outcomes will be completely arbitrary in the absence of a coherent theory of social dynamics. As a result, basing a theory of government capacity on the government as a leviathan, grounding social order in the enforcement of rules by coercions, and attempting to explain social dynamics only through the coercive power of the government are, we believe, doomed to fail.

The reason is quite simple. As long as societies are only capable of creating and sustaining anonymous rules, then it is always possible for private organizations to create and enforce their own rules. Governments, in this sense, are always potentially weak no matter what their apparent capacity, because private agents have the option of foregoing the services of the government. Interlocking organizations, whether the organizations are public or private, are capable of creating and enforcing anonymous rules. That is the theoretical and historical implication of Grief's work. What we expect to observe is that the willingness of private organizations to abide by government rules changes over time in ways that are not predictable with any simple model. Powerful coalition organizations will sometimes find it in their interest to create and enforce their own personal rules, and the government will be powerless to prevent them from doing so.

What changes the dynamics of the relationship between governments and dominant

54

coalitions is the creation and enforcement of impersonal rules. Unless we understand those dynamics, we cannot possibly understand how some societies come to adopt impersonal rules. Even without understanding the dynamics, however, we can see how this way of thinking about governments and states but the state building and state capacity approach to development in a fundamental quandary. Take, for example, Besley and Persson's approach to building state capacity, which they formulate in terms of revenue and legal capacity. Both of these capacities are motivated by the need for military capacity, making the government organization physically stronger. The ability to enforce laws rests on coercive power, particularly when the laws are applied to the powerful. It is the exchange of more secure laws for revenues that lays at the base of the deal between the government and the commercial elites (Tilly) and therefore of revenue capacity. If more secure laws are to be credibly applied to the powerful, then the government must have the ability to coerce the powerful. But as we have just examined, the dynamics of natural states will typically lead dominant coalitions that include a government that is becoming physically more powerful to either weaken the government by withdrawing support for the government organization (that is, powerful organizations withdraw their third-party support for the government's internal arrangement, they cease to treat the government organization as legitimate), or powerful coalition organizations began to build up their own violence capacity. Either of these dynamic reactions within the dominant coalition eventually undo, or at the least make problematic, an attempt by the government to build up its capacity. Such dynamics find no place in Besley and Persson, or for that matter in Tilly or Bates.

9. Changing the dynamics of the dominant coalition: impersonal rules

The problem with increasing government capacity in a society where all rules are

anonymous, is that private organizations always have the ability to create and enforce anonymous rules. There may be efficiency advantages to enforcing the rules through a public organization, but the lower costs and benefits of coordination will, of necessity by marginal. Private organizations will always be able to substitute away from the government, at some positive cost.

Rather than trying to model these costs and benefits, we take a different approach. Under what conditions will powerful organizations in the dominant coalition not have the option of turning away from the process of creating and enforcing government rules? The simple answer is when the rules apply impersonally to everyone in the dominant coalition. Impersonal rules create coordination in much the same way as anonymous rules. Impersonal rules cannot be created without a public organization, however, because the enforcement of the rules must be publicly credible. In order for people to coordinate using impersonal rules (or an impersonal rule) they need to believe that the rule applies to everyone and will be enforced in an impersonal manner. Since impersonal rules apply equally to everyone, coalition members cannot afford to ignore the process by which impersonal rules are created and enforced, because they cannot opt out of the impersonal rules. Coalition members can no longer afford to opt out of the government's rule making and enforcing process.

The answer is too simple because it does not tell us how credible impersonal rules come into being. But it does illuminate what we need to do to find an answer. The logic of the natural state will only produce conditions under which an impersonal rule for elites – a rule that treats all members of the dominant coalition equally – in unique circumstances. Dynamics within the dominant coalition typically are capable of supporting only anonymous rules that create interlocking and reinforcing sets of rents through unique privileges.

10. Lurching end and conclusion:

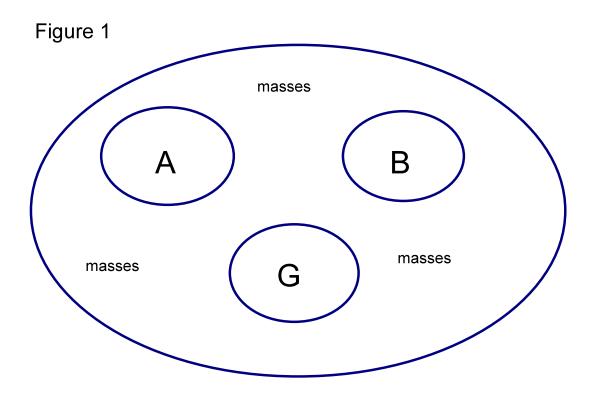
This version ends here. The completed paper will finish three pieces.

1) Under the right conditions, that NWW call the doorstep conditions, it is possible for the organizations within the dominant coalitions to create some impersonal rules for members of the coalition, particularly rules that govern the formation of organizations. Chapters 5 and 6 of NWW talk about how this happened, both conceptually and historically in Britain, France, and the United States.

2) While the move towards a few impersonal rules for coalition organizations is completely consistent with the logic of the natural state, the presence of impersonal rules changes the dynamics within the dominant coalition. The early impersonal rules are defaults rather than coercive rules, and they largely operate by taking discretion away from the government rather than granting more power to the government. The government must "treat everyone the same." The presence of impersonal rules, however, means that coalition organizations must now pay closer attention to what the government is doing with regard to impersonal rules. "Politics" becomes a more important activity. Governments acquire more capacity because of the change in the dynamic relationship. When coalition organizations are paying closer attention to the government, the governments ability to coordinate increases and the benefits that coalition organizations lose if they are excluded increase. The government acquires a greater ability to exclude powerful organizations from social coordination. A critical part of this process is articulating exactly when the government can and cannot exclude individuals and groups from access to the impersonal rules. The result is a constitution.

3) The government must be able to enforce open access to the rules, particularly the rules enabling the formation of organizations. Again, this is more a default than a coercive rule, any citizen must be able to form an organization, which means that the govern has to discipline any individuals or organizations who attempt to prevent new organizations from forming. While this clearly may involve coercion, it is a rule that is also enforced through coordination. The rule is sustainable only if existing organizations see the benefit of potential reorganization as sufficiently large to forego the right to deny entry to new organizations (see Wallis, 2011 for the argument).

The result is that the government obtains a monopoly on violence because it can its ability to sustain coordination through impersonal rules creates value, not because the government acquires a monopoly on violence and is therefore able to enforce impersonal rules.



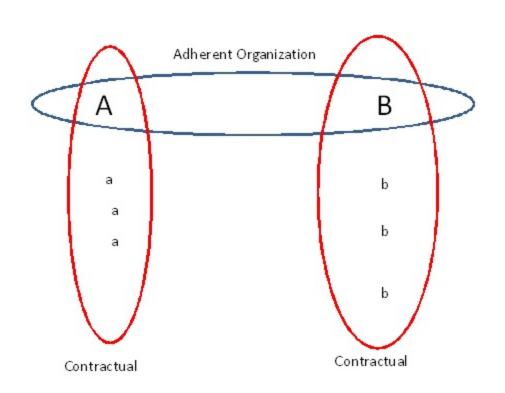
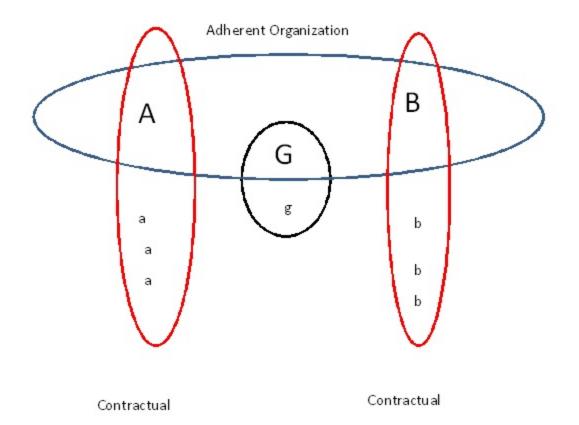
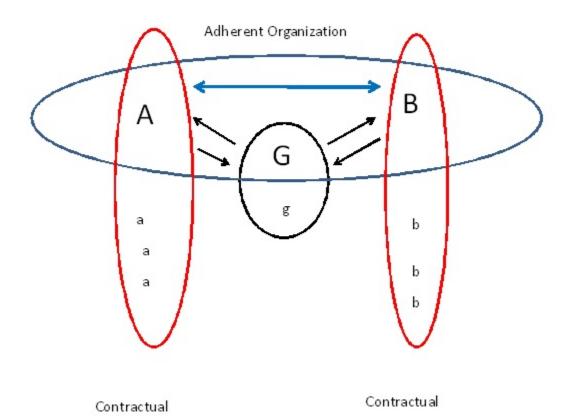


Figure 2









References

- Acemoglu, Daron. 2010. "Institutions, Factor Prices, and Taxation: Virtues of Strong States?" NBER Working Paper 15693, January.
- -----. 2005. "Politics And Economics In Weak And Strong States," Journal of Monetary Economics, 2005, v52(7,Oct), 1199-1226.
- Acemoglu, Daron and Matthew Jackson. 2011. "History, Expectation, and Leadership in the Evolution of Social Norms." Working paper presented at the NBER Culture Conference, November, 2011.
- Acemoglu, Daron, Georgy Egorov, and Konstantin Sonin. 2008. Dynamics and Stability of Constitutions, Coalitions, and Clubs." NBER Working Paper 14239, August.
- -----. 2006. "Coalition Formaion in Political Games." NBER Working Paper 12749, December.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson, 2002. "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution," *Quarterly Journal of Economics*, November 2002, 117, pp. 1231-1294.
- -----. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review*, December 2001 (91), 1369-1401.
- -----. 2005. "Institutions as the Fundamental Cause of Long-Run Growth." In *Handbook of Economic Growth*, ed. Aghion and Durlauf, New York: North Holland, 2005.
- Acemoglu, Daron, and James A. Robinson. 2000. "Why did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective." *Quarterly J. of Economics*. (Nov): 1167-99. 2000.
- -----. 2006. *Economic Origins of Dictatorship and Democracy*. Cambridge University Press. 2006.
- -----. 2006B. "ersistence of Power, Elites, and Institutions." NBER Working Paper, 12108, March.
- Acemoglu, Daron, James A. Robinson, and Rafael Santos. 2009. 'The Monopoly of Violence: Evidence from Columbia." NBER Working Paper, 15578, December.
- Aghion, Phillipe and Jean Tirole. 1997. "Formal and Real Authority in Organizations. *Journal of Political Economy*, 105 (1), pp. 1-29.
- Ambrus, Attila. 2006. "Coalitional Rationalizability." *Quarterly Journal of Economics*, 121(3), 903-930.

- Bates, Robert H. 2008. *When Things Fell Apart: State Failure in Late Century Africa*. Cambridge: Cambridge University Press.
- -----. 2001. *Prosperity and Violence: The Political Economy of Development*. New York: Norton.
- -----. 1989. Beyond the Miracle of the Market. Cambridge: Cambridge University Press.
- -----. 1983. Essays on the Political Economy of Rural Africa. Cambridge: Cambridge University Press.
- Bates, Robert H., Avner Greif, and Smita Singh. "Organizing Violence." *Journal of Conflict Resolution* 46 (5): 599-628, 2002.
- Barzel, Yoram. A Theory of the State. New York: Cambridge University Press, 2001.
- Berman, Harold J. 1983. *Law and Revolution: The Formation of the Western Legal Tradition*. Cambridge, MA: Harvard University Press.
- Besley, Timothy and Torsten Persson. 2011. *Pillars of Prosperity*. Princeton: Princeton University Press.
- Blau, Peter M. and W. Richard Scott. 1962. *Formal Organizations: A Comparative Approach*. San Francisco: Chandler.
- Boehm, Christopher. 2001. *Hierarchy in the Forest: The Evolution of Egalitarian Behavior*. Cambridge: Harvard University Press.
- Broz, Lawrence and Richard Grossman. 2004, "Paying for Privilege: The Political Economy of Bank of England Charters, 1694-1843" *Explorations in Economic History* 41(1), January 2004, pp. 48-72.
- Chwe, Michael Suk-Young. 2003. *Rational Ritual: Culture, Coordination, and Common Knowledge*. Princeton: Princeton University Press.
- Doyle, William. Venality: The Sale of Offices in Eighteenth-Century France. New York: Oxford University Press, 1996.
- Drew, Katherine Fisher. *The Laws of the Salian Franks*. Philadephia: University of Pennsylvania Press, 1991.
- -----. The Lombard Laws. Philadephia: University of Pennsylvania Press, 1973.
- Ertman, Thomas. 1997. Birth of the Leviathan: Building States and Regimes in Medieval and Early Modern Europe. New York: Cambridge University Press.

- Evans-Pritchard. 1940. "The Nuer of the Southern Sudan." In Fortes, M, and Evans-Pritchard, E. E., Ed. 1940. *African Political Systems*. Oxford: Oxford University Press.
- Fearon, James D. And Laitin, David D. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review*, 97 (1) February, pp. 75-90.
- Fortes, M, and Pritchard, E. E. Evans, Eds. 1940. *African Political Systems*. Oxford: Oxford University Press.
- Geertz, Clifford. 1980. Negara: The Theatre State in Nineteenth Century Bali. Princeton: Princeton University Press.
- Gluckman, Max. 1965. Politics, Law, and Ritual in Tribal Societies. New Brusnswick: Aldine.
- -----. 1956. Custom and Conflict in Africa. Oxford: Basil Blackwell.
- -----. 1940. "The Kingdom of the Zulu in South Africa." In Fortes, M, and Evans-Pritchard, E. E., Eds. 1940. *African Political Systems*. Oxford: Oxford University Press.
- Granovetter, Mark. 1985. Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91, 3, 481-510.
- Greif, Avner. 2006. *Institutions and the Path to the Modern Economy*. New York: Cambridge University Press.
- Guinnane, Timothy W., Ron Harris, Naomi R. Lamoreaux, and Jean-Laurent Rosenthal,
 "Pouvoir et propriété dans l'entreprise: pour une histoire internationale des sociétiés á responsabilité limitée," *Annales: Histoires, Sciences Sociales* 63 (janvier-février 2008):
 73-110. (An English version available as "Ownership and Control in the Entrepreneurial Firm: An International History of Private Limited Companies," Yale University Economic Growth Center Discussion Paper #959 [December 2007], http://www.econ.yale.edu/growth pdf/cdp959.pdf.)
- Guinnane, Timothy W., Ron Harris, Naomi R. Lamoreaux, and Jean-Laurent Rosenthal, "Putting the Corporation in its Place," *Enterprise and Society* 8 (Sept. 2007): 687-729.
- Harris, Ron. Industrializing English Law. New York: Cambridge University Press, 2000.
- -----. "Political Economy, Interest Groups, Legal Institutions, and the Repeal of the Bubble Act in 1825." *Economic History Review* 50, no. 4, pp. 675-96, Nov. 1997.
- -----. "The Bubble Act: Its Passage and Effect on Business Organization." *Journal of Economic History* 54, no 3, pp. 610-27, Sept. 1994.

- Henrich, Natalie and Joseph Henrich. 2007. *Why Humans Cooperate*. Oxford: Oxford University Press.
- Hirschleifer, Jack. 2001. *The Dark Side of the Force: Economic Foundation of Conflict Theory*. New York: Cambridge University Press.
- Johnson, Allen W. and Timothy Earle. 2000. *The Evolution of Human Societies*, 2nd edition. Stanford: Stanford University Press.
- Jones, Eric The European Miracle. New York: Cambridge University Press, 1981.
- Kelly, Robert L. 1995. *The Foraging Spectrum*" *Diversity in Hunting-Gathering Lifeways*. Washington: Smithsonian Institution Press.
- Kiser, Edgar and Erin Powers. "Rational Choice Approaches to State-Making." mimeo, 2010.
- Kuran, Timur and Scott Lustig. 2011. "Structural Inefficiencies in Islamic Courts: Ottoman Justice and Its Implications For Modern Economic Life." ERID Duke Working Papers, no. 52.
- Naomi R. Lamoreaux and Jean-Laurent Rosenthal, "Entity Shielding and the Development of Business Forms: A Comparative Perspective," *Harvard Law Review Forum* 119 (March 2006): 238-245,
- Lamoreaux, Naomi, and Jean-Laurent Rosenthal, "Legal Regime and Business's Organizational Choice." NBER Working paper 10288, February, 2004.
- Lamoreaux, Naomi R., and Jean-Laurent Rosenthal, "Legal Regime and Contractual Flexibility: A Comparison of Business's Organizational Choices in France and the United States during the Era of Industrialization," *American Law and Economics Review*, 7 (Spring 2005), pp. 28-61.
- Leach, Edmund Ronald. 1954 (2008). *The Political Systems of Highland Burma: A Study of Kachin Social Structure*. London: Bell & Sons, reprinted by Athlone Press, 1970 and reprinted by photolithograph by the American Council of Learned Societies, 2008.
- Llewellan, Ted C. 2003. *Political Anthropology: An Introduction 3rd edition*. Westport, CT: Praeger.
- Mair, Lucy. 1962. Primitive Government. Bloomington: Indiana University Press.
- Maitland, F.W. 2003. *State, Trust, and Corporation*, edited by David Runciman and Magnus Ryan. New York: Cambridge University Press, 2003.
- -----. The Forms of Action at Common Law. 1909. Ed. A.J. Chaytor and W.J. Whittaker,

Cambridge: Cambridge University Press, 1968 (original edition 1909).

- Mann, Michael. 1986. The Sources of Social Power: Volume 1: A History of Power from the Beginning to A.D. 1760. New York: Cambridge University Press.
- -----. 1993. The Sources of Social Power: Volume I1: The rise of classes and nation-states, 1760-1914. New York: Cambridge University Press.
- McGowan, Patrick S. 2005 & 2006. Coups and Conflict in West Africa, 1955-2004. Armed Forces and Society, 32 (1&2), October 2005, pp. 5-23 and January 2006, pp. 234-253.
- Middleton, John and David Tait, ed. 1958. *Tribes without Rulers: Studies in African Segmentary Systems*. London: Routledge & Kegan Paul.

Migdal,

Morgan, Lewis Henry. 1877. Ancient Societies.

Nicolas, Barry. 1962. An Introduction to Roman Law. Oxford: Clarendon Press.

North, Douglass C. 1981. Structure and Change in Economic History. New York: Norton.

- -----. 1990. *Institutions, Institutional Change, and Economic Performance*. New York: Cambridge University Press.
- -----. 2005. Understanding the Process of Economic Change. Princeton: Princeton University Press.
- North, Douglass C., and Barry R. Weingast. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in 17th Century England." *Journal of Economic History*. (December 1989) 49: 803-32.
- North, Douglass C., John Joseph Wallis, and Barry R. Weingast. 2009. *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*. New York: Cambridge University Press.

Olson, Mancur. 1965. Logic of Collective Action. Cambridge, MA: Harvard University Press.

- -----. 1982. The Rise and Decline of Nations. New Haven: Yale University Press.
- -----. 1993. "Democracy, Dictatorship, and Development." *American Political Science Review*, 87(3): 567–75.
- Piaget, Jean. 1997. *The Moral Judgement of the Child*. Translated by Marjorie Gahain. New York: Free Press Paperbacks. Originally published ??

- Pinker, Steven. 2011. The Better Angels of Our Nature: Why Violence has Declined. New York: Viking.
- Poggi, Gianfranco. 1978. *The Development of the Modern State: A Sociological Introduction*. Palo Alto: Stanford University Press.
- Richerson, Peter J. and Robert Boyd. 2005. Not by Genes Alone: How Culture Transformed Human Evolution. Chicago: University of Chicago Press.
- Rivers, Theodore John. *The Laws of the Salic and Ripuarian Franks*. New York: AMS Press, 1986.
- Seavoy, Ronald E. *The Origins of the American Business Corporation, 1784-1855.* Westport: Greenwood Press, 1982.
- Skaperdas, Stergios.
- Spruyt, Hendrik. *The Sovereign State and Its Competitors*. Princeton: Princeton University Press, 1994.
- Sugden, Robert. 1995. "A Theory of Focal Points." *The Economic Journal*, 104 (430) May, pp. 533-550.
- Suk-Young Chwe, Michael. 2001. *Rational Ritual: Culture, Coordination, and Social Knowledge*. Princeton: Princeton University Press.
- Tierney, Brian. *Foundations of the Conciliar Theory*. New York: Cambridge University Press, 1955 (reprinted 1968).
- Tilly, Charles. Coercion, Capital, and European States: 990-1992. Blackwell Publishing, 1993.
- Vincent, Andrew. 1987. Theories of the State. New York: Basil Blackwell.
- Wallis, John Joseph. 2011. "Institutions, Organizations, Impersonality, and Interests: The Dynamics of Institutions." *Journal of Economic Behavior and Organizations*.
- Weingast, Barry R. 1995. "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development." *Journal of Law, Economics, and Organization.* 11 (1, April), pp. 1-31.
- Weber, Max. 1948. *From Max Weber: Essays in Sociology*. Translated and Edited by H. H. Gerth and C. Wright Mills. London: Routledge & Kegan Paul, Ltd.
- -----. The Theory of Social and Economic Organization. New York: Free Press, 1947.

-----. The Protestant Ethic and the Spirit of Capitalism. London: Routledge, 2001.

World Bank Website. April 9, 2011. "Roads and Transport/ Overview." http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTTRANSPORT/EXTROA DSHIGHWAYS/0,,contentMDK:20468505~menuPK:338669~pagePK:148956~piPK:21 6618~theSitePK:338661,00.html.