

What Institutions Are:
The difference between Social Facts, Norms, and Institutions
and their associated rules and enforcement

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The paper is still too long, and there is too much repetition of ideas. My apologies.

“Institutions are the rules of the game of a society or more formally are the humanly devised constraints that structure human interaction. They are composed of formal rules (statute law, common law, regulations), informal constraints (conventions, norms of behavior, and self imposed rules of behavior); and the enforcement characteristics of both.” (North 1992, p. 4).

Part I:

Section 1: Institutions, Norms, and Social Facts

For over a century, institutions have played a central role in how the social sciences, philosophy, and history think about how societies work. Although they had been studied for millennia, institutions became a social phenomena of particular interest in the late 19th century as social scientists began to articulate the logic of neo-classical economics. One strand of institutional theory defined institutions as deliberate attempts by groups of people (ranging from families to nations) to form agreements about how they relate to one another. This approach built on existing ideas about law and the state. The agreed upon rules are North’s “humanly devised” constraints that attempt to structure human interaction and intuitively are the rules of the game.

A second, broader approach to institutions also developed where any repeated pattern of human behavior could become “institutionalized.” Faced with repeated patterns, individuals come to expect certain behavior to occur and develop expectations, beliefs, and even values about how the world should and does behave. Patterns exist at all levels of society, from families, to firms, to communities, and to nations. These expectations, beliefs, and values affect the choices individuals make, and thus the patterns that we live among. Institutions, therefore, are patterns of behavior among families, groups, tribes, states, or nations that persist. The broad approach has a long tradition in sociology associated with Talcott Parsons and his students.

Recently these ideas have been sharpened analytically in philosophy and economics by the “institutions-as-equilibria” approach of Lewis, Sugden, Grief, and others.

The tension between the two approaches has persisted over a century or more. Social scientists face two questions: why do individuals make the choices they make, and why do individuals face the choices they face? The neoclassical economic theory developed in the second half of the 19th century solved both problems simultaneously by making a simplifying set of assumption. Tastes, preferences, technology, resources, and “other things” were assumed to be constant. The choices individuals make to produce or consume result in interactions in the larger society that generate relative prices. Relative prices are beyond the control of individuals, they frame the choices people face, but nonetheless they are the aggregate result of individual choices. Relative prices are a “social fact:” a result of individual choices that constrain the choice that all individuals face. Neoclassical economics provided a neat, powerful, but limited solution to understanding how the choices individuals make individually shape the choices that all individuals face collectively.

The late 19th century focus on the limits of the neoclassical model gave a particular flavor to institutional social science. Institutions could be broadly defined as the tastes, preferences, and “other things” that the neoclassical model left out by assuming they were constant for the purpose of analysis. This flavor lent itself to a broad approach and a big tent community of scholars working on institutions using very different concepts and methods. Yet the urge to develop a unifying theory of institutions and institutional change has proven irresistible. North’s definition deliberately bridged the broad and narrow approaches to institutions. North and Avner Greif were two leading economists pushing towards a unifying theory of institutions that united

the choices individuals make with the choices that individuals face. But the field of institutional studies, including economics, political science, sociology, and philosophy continued to include a grab bag of conflicting definitions and approaches.

Recent theoretical advances have pushed question of what institutions are back to the forefront of the debate in institutional social science. Not surprisingly, the theoretical development links choices that individuals make to the choices individuals face. The philosopher David Lewis's beautiful book on *Convention* lays out one logic. People drive cars and can be seriously injured when cars collide. Which side of the road should people drive on? If enough people start driving on the right, and enough people believe that most people will drive on the right, then the convention of driving on the right can become self-enforcing. The choices people make to drive on one side of the road or the other, can produce patterns of behavior such that the choices individuals face, literally oncoming traffic on the right or the left, come with such distinctly different costs and benefits that almost everyone makes the same choice, thus reinforcing the pattern of behavior and the behavioral rule individuals infer from the behavior.

Lewis's ideas were based in game theoretical concepts being widely applied in the 1980s and 1990s to a wide range of problems in the social sciences. These ideas coalesced into the "institutions as equilibria" approach that examines and explains why patterns of behavior can be self-enforcing. In contrast, "institutions as rules" takes the institutions defined as the rules of the game ala North does not explain why specific institutional rules are self-enforcing. In fact, the institutions as rules approach must cope with the fact that many agreed upon rules are created and then apparently not enforced. This paper is not concerned with whether the institutions as equilibria or institutions as rules approach is correct, since they both right and important.

What comprises the universe of things we call institutions and what, if anything, do they share as social processes that makes them institutions? This is an older and deeper problem than the equilibria vs. rules debate. Until we answer it we cannot know whether it is possible to devise a comprehensive theory of institutions and a theory of institutional change. If norms, as patterns of behavior, and institutions as agreed upon rules are fundamentally different social processes, inherently different in their nature, then attempts to integrate a theory of institutions that includes norms and institutional rules under the same logic is bound to fail. What they have in common is not essential to what they are. It is as if a pair of fraternal twins, not quite identical but assumed to share different mixes of the same genetic material, find out later in life with the advent of genetic testing, that they are children of the same mother but different fathers. Related, but fundamentally different.

The first part of the paper lays out the fundamentally different nature of institutions and norms, and explains their essential logics. In light of their fundamental differences, the second part of the paper investigates aspects of institutions that have been obscured by equation of norms with institutions, and the places them in relationship to each other.

Institutions are comprised of “agreed upon rules,” what North called humanly devised constraints and Commons (1931) called “collective action in control, liberation and expansion of individual action.” Agreed upon rules require at least two people and are inherently external to the individuals involved in the agreement.

Norms are patterns of behavior that give rise to “behavioral rules.” Behavioral rules are the inferences that individuals make about the consequences of their choices in light of how they believe other people will respond. In Lewis example of conventions, people drive on the right

side of the road because they believe others will and if they drive on the left side the consequences will be serious. Behavioral rules are internal to individuals. Behavioral equilibria arise when the actions of individuals reinforce the pattern of behavior around them, and so behavioral norms are always patterns of behavior. If people do not individually and internally evaluate the behavior and then decide to act in a way that conforms to the pattern, there will be no pattern.

In contrast, individuals and organizations often devote substantial time and resources to agreed upon rules that are then not followed in practice. What does enforcement mean if agreed upon rules are clearly stated and then people's behavior does not conform to the rule? And then not only does no third party enforce consequences on people not following the rule, but most people seem to think that ignoring the rule is normal behavior? This is not to say that some rules are not actively enforced, that individuals and organizations do not devote substantial resources to enforcing agreed upon rules, and that organizations arise that adjudicate conflicts over the application of agreed upon rules: courts. All of those things are true and important, but if we live in a world where many rules are not actively enforced, then how do we think about what the agreed upon rules are accomplishing?

The second part of the paper draws out the implications of thinking of institutions as agreed upon rules. The central implication is that all institutions exist within the framework of organizations. Groups exist everywhere in human societies. Groups that agree upon rules become organizations. Organizations come in all shapes and sizes, and many organizations are

organizations of organizations.¹ Organizations are not institutions, they are the form of human agency that devises agreed upon rules through a collective choice process. Rooting institutions in their organizational matrix allows us to see clearly why some agreed upon rules are meant to be prescriptively enforced, while other agreed upon rules are meant to provide a framework for relationships in which the rule may never be invoked. The apparent conundrum of institutional rules that are never enforced resolves into a deeper understanding of both rules and enforcement. Enforcement of agreed upon rules still matters critically, but it is a completely different kind of enforcement than the enforcement of norms.

II: Defining Terms: The Problem of Rules and Enforcement

Understanding the differences between and relationships among norms, institutions, and social facts is complicated by ambiguities in the concept of rules and the concept of enforcement. Explicitly, and therefore “formally:”

Institutions are the agreed upon rules of human interaction within a group or an organization and the means and method of their enforcement. An organization can be an organization of organizations, and rules can apply across organizations as well as within.

Norms of behavior are repeated patterns of human behavior within a group, no matter its size, that occur regularly enough that individuals form expectations about the behavior of others. The patterns are followed often enough that small or individual deviations do not change expectations. All norms are subject to change if behavior changes.

Social facts are features of the world around us that derive from the actions of individuals and groups. Institutions and norms are both social facts, but they do not exhaust the social facts in any group or society. In general, social facts are not within the control of individuals, but this feature of social facts varies with scale (e.g., families vs.

¹The centrality of organizations to institutional social science is explicit in the renaming of the International Society for the New Institutional Economics (ISNIE) to the Society for Institutional & Organizational Economics (SIOE).

nations) and the type of social fact (more on this below).²

Language matters, and unfortunately in English the common use of the word “rule” has many different meanings that apply to norms, institutions, and social facts. We need to articulate some different notions of rules.

In any social situation individuals devote considerable attention to figuring out the “rules of the game” that they are embedded in. We observe patterns of behavior around us and make inferences about what rules apply in which situations. In the simplest terms, a rule is a consequential statement: if X happens then Y will happen. You watch people driving while you drive. If most people drive on the right, you infer that if you drive on the left the likelihood of an accident increases dramatically. The convention of driving on either the right or left can emerge in a population without any central coordination. Any time we infer a rule from the behavior of people around us we create a “behavioral rule” for ourselves. If a pattern of behavior in a group generates individual responses to the group behavior that reinforce the behavior, then the behavior pattern can become self-enforcing. The idea that coordinated social behavior can arise out of the independent beliefs of individuals without explicit external coordination is truly brilliant.

Behavioral rules exist in people’s heads, not in the external world. For a norm to emerge only requires that enough people’s behavior conform to the norm, not that people’s thinking conform to the norm. This is in no way intended to slight the importance of behavioral rules. Human beings evolved as a species with the cognitive capacity to closely observe each other and

²The extent to which social facts are exogenous to individuals is a central question in understanding the relationships between norms and institutions.

draw inferences about each other's behavior that enable a much higher degree of social coordination. Unlike the eusocial insects, like bees and ants, whose ability to coordinate is similarly developed, in human beings what we coordinate about is not hard wired into our genetics. It is this plastic ability to coordinate that underlies the secret of our success (to borrow the title of Joe Henrich's excellent book on the co-evolution of genes and culture.)

There is little doubt that the evolved capacity to infer behavioral rules about the groups and societies we live in plays a major role in the nature of human development. It also implies that most of the "rules" that govern our individual lives are behavioral rules: what we find in our best interests depends on what we think the consequences, for good or ill, of our actions and words will be. Critically, behavioral rules are not agreed upon rules.

In contrast, agreed upon rules must by their very nature be external to individuals. They are the result of an agreement between two or more people. Agreements are deliberate, humanly devised, results of collective action. An agreement may result in a pattern of behavior and therefore create a norm. Agreed upon rules exist at every level of human interaction: families, firms, communities, and nations. Institutions exist at every level as a result.

In a very real sense, norms of behavior must always exist as a pattern of actual behavior. If no one behaves in a way that follows the norm, there can be no norm. Norms can exist among people who have no relationship with one another (think about norms of fashion), there is nothing inherent in norms that require agreements. Although, in small groups we often think about norms as stemming from face to face relationships.

Agreed upon rules, in contrast, are always about relationships. Most agreed upon rules are not enforced by actively enforced by policemen. Many rules are only enforced when two

parties who are using the rule disagree about their respective behaviors. Businesses write contracts that can be enforced by courts, but what matters to the businesses is the value of the relationship that the contract supports and enables, not whether the agreed upon rules are followed or not. With the exception of some types of criminal activity (defined in a multitude of ways across times and societies), the enforcement of most agreed upon rules depends upon the people and their relationship to which the rule may apply. As a result, observed behavior often does not conform to the agreed upon rule.

Enforcement of norms is probabilistic, but also automatic. If you speak, dress, or act the wrong way, you bear the consequences. Driving on the left in a society where the norm is driving on the right can get you killed. Behavioral norms only matter if there are consequences, if there are not consequences to how we dress, we dress however we want. Enforcement of agreed upon rules is very often optional, it depends on the relationships supported by the rule. You and I write a contract containing a clause that you must deliver goods at a specific time and place or incur a penalty, a clause enforceable by a court. The time passes and you have not delivered the goods, do I take you to court? It depends on the value of our relationship.

All of this is by way of saying that the essential nature of institutions as agreed upon rules and norms as patterns of behavior are different. Metaphysics is the study of the essential nature of things, and ontology is the categories that a metaphysical scheme contains. Norms and institutions have different metaphysics as social phenomena, and while they both include rules and enforcement in their ontologies, the rules and norms are not the same for norms as they are for institutions.

Behavioral rules are inferred from external patterns of behavior. While the consequences

of violating the norm are external, the enforcement of those norms is internal. Norms emerge only if the choices of individuals lead enough people to exhibit similar behavior.

In contrast, agreed upon rules are the result of an external agreement between two or more people. The enforcement of an agreed upon rule is both external and optional. The people to whom the rule applies can decide whether to invoke the agreed upon enforcement consequences, or they can agree to continue the relationship even though the prescriptive content of the rule has been violated by one or both of the parties.

Institutions and norms are necessarily different social phenomena, both their internal logic and their elements are fundamentally different.³ For many reasons there is a presumption that good rules are meant to be enforced. Good institutions include “rule of law:” unbiased rules enforced in an impersonal manner. Nonetheless, to appreciate how agreed upon rules actually work we must get over the presumption that the purpose of agreed upon rules is to enforce the letter of the rule. Many agreed upon rules are not enforced, or at least not enforced in a simple way where behavior that does not correspond to the rule is punished or disciplined. More detailed examples will be considered later, but a specific and a general example indicates the magnitude of the problem.

The United Shoe Machinery Company (USMC) made machines used in the manufacturing of shoes. The technology of shoe making was changing rapidly in the early 20th century and USMC leased equipment to shoe makers. The US government brought an anti-trust case against USMC charging that their leasing practices caused a restraint of trade. The lease contracts are agreed upon rules for the use and operation of the machines. In all their contracts

³*Naming and Necessity*, Kripke.

USMC stipulated that responsibility to maintaining and repairing machines lay with the lessee, but in every case USMC always undertook the repair and maintenance of the machinery.⁴

USMC wrote an explicit agreed upon rule into all of their contracts, which they then proceeded to ignore. Masten and Snyder explain why this provision made it easier and less costly for both USMC and the lessee to contract for the machines. USMC was qualified to do repair and maintenance, but had USMC been responsible for repairs the lessee would have incentives to abuse the machines. The agreed upon rule made the relationship between USMC and the lessee more valuable, despite the fact that the rule was never enforced, indeed was never intended to be enforced.

More generally, an entire field of study, the sociology of organizations, takes as its basic starting point that agreed upon rules are not often, perhaps not even usually, followed: “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.”⁵ Why do organizations

⁴“Contrary to our prediction (and the representations of many commentators), the responsibility and expense of maintaining and repairing machines under the lease rested with the lessee and not with United. Specifically, United required the lessee "at all times and at his own expense [to] keep the leased machinery in good and efficient working order and condition.' Should the lessee fail to maintain machinery in a satisfactory manner, United reserved the right to make any necessary repairs itself and to bill the lessee accordingly. In practice, however, United consistently assumed the burden of repairing its leased machines and charged only for the cost of replacement parts. (Matson and Snyder, 1993, pp. 62-3)

⁵Grannovetter, (1985, p. 502). “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). Selznick opens his classic book with exactly this discussion.

devote so many resources to forming agreed upon rules that people do not follow? That is a real puzzle, but only if you insist on the presumption that agreed upon rules only serve a purpose if they are followed. You can see how the attaching the adjectives formal and informal to rules obscures rather than clarifying the processes we want to understand.

Norms and institutions are not the same thing. People watch the social world around them, they form expectations about how the social world works (behavioral rules), and those expectations constrain their individual choices. If enough people's behavior follows a similar pattern, then the "metaphysics" of social interaction produce a self-sustaining pattern of behavior.⁶ The ontology (elements) of that logic are behavior, behavioral rules, and internal enforcement.

Institutions as agreed upon rules have a different logic. The elements are agreements, agreed upon rules, and external enforcement. Enforcement of agreed upon rules is contingent to the nature of the rules, circumstances, and the parties in a relationship. It can be difficult to know what the agreed upon rules actually are and very difficult to infer what the agreed upon rules are from the behavior you can observe. Watch USMC and its customers and you would presume that responsibility for repair and maintenance lay with USMC, not the lessee. Read the contracts and you would assume the responsibility for repair and maintenance lay with the lessee. The

⁶"The core idea in the institutions-as-equilibria approach is that it is ultimately the behavior and the expected behavior of others rather than prescriptive rules of behavior that induce people to behave (or not to behave) in a particular way. The aggregated expected behavior of all the individuals in society, which is beyond any one individual's control, constitutes and creates a structure that influences each individual's behavior. A social situation is 'institutionalized' when this structure motivates each individual to follow a regularity of behavior in that social situation and to act in a manner contributing to the perpetuation of that structure." (Greif and Kingston, 2011, p. 25).

logical relationships between agreements, rules, and enforcement that sustain institutions are not the same as the logical relationships between behavior, rules, and enforcement that sustain norms of behavior. By their very nature, norms and institutions are necessarily different things.

III. The Varieties of Social Facts

For over a century the concept of an institution has simultaneously included both the broad and narrow senses. This causes a good bit of confusion if “institutions” are both the general category of things the neoclassical model leaves out and a specific element of that category that does not share common features with other elements. What are the common elements of institutions and norms? When a behavior pattern persists it can become “institutionalized.” When individuals and organizations deliberately agree upon rules they create institutional rules. The USMC contract provision is never enforced, how can it be an institution in the norm sense if no one observes it in practice? If persistent behavior is the key, then the USMC contract provision cannot be an institutions.

The institutions as equilibria approach questions whether rules that don’t change behavior can be institutions. “Many rules, however, are never followed... Rules cannot be institutions, the thought would be, because by themselves they lack the power to influence behaviour.” (Hindriks and Guala (2014), p. 462). And “many alternative technologically feasible rules ... fail to motivate a pattern behavior consistent with the rule: that is, such patterns of behavior are not equilibria, and even if they were formally specified as a “rule” we would not expect them to emerge as institutions, because the “rule” would not be self-enforcing.” (Greif and Kingston, p. 14)

This approach seems to throw out altogether the intuitive notion that institutions are

humanly devised constraints on behavior reached by collective action. Institutions are the result of deliberate choices made by families, groups, communities, and countries. Often the agreed upon rules do not result in observable behavior. Does that mean that the agreed upon rules do not influence behavior? If we want to understand how and why institutions change, must we limit our investigations to agreed upon rules and laws that only result in observable behavior that conforms to the letter of the rule?

This is not a debate over which term is better. The basic reality is that norms and institutions are different social processes, their essential natures are different as already argued. The question then is what common feature do norms and institutions share that enable us to put them in a category of social processes, and what do we call that category?

I propose to go back to Emile Durkheim's notion of "social facts" as the way to denote phenomenon beyond clearly the result of individual choices and actions but which are largely beyond the control of individuals.⁷ The concept of social facts fits with the institutions as equilibria approach: "The core idea in the institutions-as-equilibria approach is that it is

⁷Social facts are "ways of acting, thinking, and feeling which possess the remarkable property of existing outside the consciousness of the individual." (Durkheim, 1982, p. 51) Social facts are features of the world around us that derive from the actions of individuals and groups, but which are themselves not within the control of individuals. "Here, then, is a category of facts which present very special characteristics: they consist of manners of acting, thinking and feeling external to an individual, which are invested with a coercive power by virtue of which they exert control over him." (p. 52) Social facts are things because they are independent of individual human volition "A thing is principally recognizable by virtue of not being capable of modification through a mere act of will."(p. 70) "This is what is most essential in the notion of a social constraint. For all this it implies is that collective ways of acting and thinking possess a reality existing outside individuals, who, at every moment, conform to them. They are things which have their own existence, The individual encounters them when they are already completely fashioned and he cannot cause them to cease to exist or be different from what they are." (pp. 44-45)

ultimately the behavior and the expected behavior of others rather than prescriptive rules of behavior that induce people to behave (or not to behave) in a particular way. The aggregated expected behavior of all the individuals in society, which is beyond any one individual's control, constitutes and creates a structure that influences each individual's behavior. A social situation is 'institutionalized' when this structure motivates each individual to follow a regularity of behavior in that social situation and to act in a manner contributing to the perpetuation of that structure." (Greif and Kingston, 2011, p. 25). It also fits with the institutions as rule approach, where rules are deliberately conceived constraints that are the result of collective action and therefore require an agreement, but are beyond the control of most individuals.

Unfortunately, Durkheim defined all social facts as institutions.⁸ The concept of social facts is capable of including both norms as behavioral patterns and behavioral rules, and institutions as agreed upon rules, without distorting the definition of norms, institutions, or social facts. Moreover, rehabilitating the category of social facts has the added benefit of repairing a serious conceptual error made in the late 19th century that has remained in the institutional literature ever since. Market prices are clearly social facts: they are the result of individual choices that result in collective outcomes that individuals cannot change and that structure the choices they face. Separating market prices from institutions had nothing to do with persistence initially, but as the logic of institutionalization developed, it seemed clear that market prices which fluctuated frequently could not serve as the basis for expectations capable of generating

⁸ "As has been remarked, there is one word which, provided one extends a little its normal meaning, expresses moderately well this very special kind of existence [of social facts]; it is that of *institution*. In fact, without doing violence to the meaning of the word, one may term an *institution* all of the beliefs and modes of behavior instituted by the collectivity; sociology can then be defined as the science of institutions, their genesis, and their functioning." (p. 45)

norms. Market prices have never been considered institutions, yet they are clearly social facts.

Social facts are aspects of the social world around us that, as in North's definition, constrain the choices that individuals face. Some social facts are humanely devised, but many are not. Some social facts are the result of human choices, but not deliberate or devised choices. Some social facts are the result of choices that humans made long in the past. And some social facts are the result of the way human choices interact with laws of nature and mathematics. For example, no matter how much everyone wants to belong to a group where they are above the mean of the group, it is not possible for all individuals to do that (Schelling, 1978/2006).

Social facts are not central to the argument of this paper, but they are important to understand as the next step in how we think about norms, institutions, and how societies work. Accordingly, a few short examples of social facts follow. The examples draw on well developed both formal analytical models as well as intuitive verbal models of social facts. In a very neat example, Nettekstad and Axelson (1999) study schooling behavior in herring using a model of herd behavior developed by Hamilton (1971). They tracked herring, enclosed in a Norwegian fjord. Killer whales prey on the herring, and the herring move in complicated patterns to evade the whale. Their actions appears to be coordinated group behavior. Hamilton suggested that this behavior might be explained by a simple rule: each herring tries to get behind another herring and so be farther from the whale. Nettekstad and Axelson found that Hamilton's model explained the complicated behavior of schools of herring with a very simple logic. The patterns of herring schools are social facts, both for herring and for killer whales.

IIIA. Tom Schelling provides a book full of compelling examples of how patterns of behavior can arise from nothing more than the distribution of preferences in a population and the fact that

one person's decision affects other people.⁹ He gives dozens of examples of how the logic of social facts produces outcomes that do not implement individual preferences. Often this results from simple arithmetic: despite everyone's desire to be above the mean or median, everyone cannot be. In one example, he assumes that there are 120 men and 100 women in a dormitory with two dining halls. Everyone prefers to eat in a dining hall with equal numbers of men and women, but because of the logic of Schelling's social facts, the equilibrium will be one dining hall with all 120 men and 50 women and the other with 50 women (pp. 36-38). In a more famous example, Schelling shows how a very mild preference for living with similar people can lead to completely segregated outcomes that no one "prefers." The social processes that generates the behavioral patterns in Schelling's examples are based on pure logic, features of arithmetic in some cases or the interaction of decisions in others. No one may want to live in a segregated community, yet the interaction of decisions produces segregation (pp. 137-166). Schelling's conclusion could be stated this way: a model of intentions is not a model of causality. Like the herring, knowing what people want, prefer, or intend to do does not tell us the social outcome that the interaction of those individuals will produce. Schelling's social logics produce social facts, features of the world that no one can change, but they are neither norms nor institutions.

IIIB. The co-evolution of culture and genes appears to be particularly important for human beings. Compared to primates, including chimps who are our closest genetic match, humans

⁹Schelling goes out of his way to demonstrate just how sensitive behavioral norms are to the number and distribution of preferences within groups, how small changes in relative numbers or preferences (micromotives) can produce dramatic changes in social outcomes (macrobehavior), and as a result how difficult it is to predict what norms will form in response to a given change in society.

have small mouths, weak jaws, short digestive tracks, and weak digestive systems. We also have big brains, which are costly to run biologically. How did humans develop large expensive brains at the same time that their ability to process nutrients from their environment decline over the last 5 million years? The evolutionary history of cooking shows how by embedding cultural knowledge about cooking in human societies, human beings were able to pre-process food through cooking, cutting, and pounding. Nutrients became accessible at much lower physical costs, by substituting food preparation for a more robust digestive system. Reducing the size of the digestive system made more nutrients available to support larger brains. Cooking is a culturally intensive activity, requiring an enormous amount of culturally embedded knowledge as well as. The co-evolution of cooking (a social process) and the digestive system (a genetic fact) makes it an imperative social fact that people have to cook, it is something beyond human volition.

III.C. Cassava is a plant indigenous to the New World that grows well in poor soils, and produces abundant calories in the form of starches. Many strains of cassava contain cyanide, however (Henrich, 2016, pp. 97-100). Without proper preparation, eating cassava can cause acute or chronic cyanide poisoning. Chronic poisoning occurs over long periods of time, and therefore it is difficult for a single individual to see the connection between consuming cassava and the conditions that result. The Tukanoans of the Columbian Amazon have a multi-step multi-day process for leaching cyanide from cassava. Knowledge about cassava is built into the culture of the Tukanoans and implemented through norms of behavior (that is how Mom makes cassava). This knowledge is difficult, if not impossible, for an individual to obtain on his or her

own based solely on direct experience.¹⁰ The kind of knowledge possessed by the Tukonoans is a social fact.

IIID. David Lewis shows how the ability to produce patterns of behavior in groups depends on and is enhanced by the individual's awareness of the effect of their actions on others. These patterns, shorn of emotional or value laden content, are "conventions" (Lewis, 1969/2002, Sugden, 1989; Schelling, 1978/2006). Lewis was explicit that norms of behavior like language were not the result of agreements and he provided the logic to show why agreements were not necessary. As Quine wrote in his introduction to *Convention*: "an original founding of language by overt convention is not merely unhistorical but unthinkable. What is convention when there can be no thought of convening?" (Lewis, p. xi, and Lewis himself on page 2)

IIIE. Everything about market prices fits the concept of social facts. They are the result of the actions of many individuals, no one controls the formation of prices (with well known exceptions), they constrain and mold our choices, they are the result of human actions. Yet no one that I am aware of has ever treats market prices as an institution or as a norm.

¹⁰A natural experiment illustrating the difficulty of creating social information about cassava occurred when the Portuguese imported cassava into Africa and "Even after hundreds of years, chronic cyanide poisoning remains a serious health problem in Africa." (Henrich, p. 99). Henrich concludes: "The point here is that cultural evolution is often much smarter than we are. Operating over generations as individuals attend to and learn from more successful, prestigious, and healthier members of their communities, this evolutionary process generates *cultural adaptations*. Though these complex repertoires appear well designed to meet local challenges, they are not *primarily* the products of individuals applying causal models, rational thinking, or cost benefit analysis. Often, most or all of the people skilled in deploying such adaptive practices do not understand how or why they work, or even that they "do" anything at all. Such complex adaptations can emerge precisely because natural selection has favored individuals who often place their *faith* in cultural inheritance – the accumulated wisdom implicit in the practices and beliefs derived from their forbearers – over their own intuitions and personal experiences." (Henrich, p. 99-100)

III.E. The last examples of a social facts are written constitutions. They are the result of the actions of many individuals, they constrain and mold our choices, they create expectations, and they are the result of human actions. Unlike market prices and norms, however, written constitutions are clearly intentional, they are deliberate collective actions, even if they are ineffective at bringing about the behavior the seek to coordinate. Written constitutions are the epitome of agreed upon rules, of institutions. That written constitutions are so often ineffectively enforced should not strike us as an anomaly, that has been modal outcome over the last several hundred years of human history. Written constitutions are not like norms of behavior, they are not self-enforcing. They are not like Schelling arithmetic realities, which are inescapable. They are not like language, which while completely the endogenous outcome of human interaction largely work because people follow the rules. Institutions, agreed upon rules, are a different kind of social fact. They are deliberate, humanly devised, attempt at collective action made to change the way the world around us works.

Part II: Institutions as agreed upon rules

The remainder of the paper explores the implications of defining institutions as agreed upon rules. The first implication is that institutional rules always arise in the context of organizations. Second, there must always be a two level structure to agreed upon rules: secondary rules are an agreement about how rules are made and changed. Third, within organizations we can see why a rule agreed upon rules are not always enforced prescriptively, they are not always enforced to the letter of the rule. Finally, within organizations behavioral norms and agreed upon rules always exist in a balance.

IV. Rules, Organizations, and Institutions

If institutions are agreed upon rules, then all institutions exist in the context of groups of people. Groups that adopt rules become organizations. They adopt rules to order their relationships in the hope of altering the behavior of individuals and of the group. Individuals within an organization very often have to take agreed upon rules as given, beyond their ability to change them. Agreement does not require consent or unanimity. Nonetheless some people or group of people within the organization have the ability to alter some rules. There must be an implicit or explicit agreement about how rules can be formed and changed. These rules are what H.L.A. Hart called secondary rules: the agreed upon rules that determine how new rules can be made and existing rules altered. These rules for making rules, or “rules of recognition,” enable a group of people to realize that an agreed upon rule has been created. Secondary rules are critical to understanding institutions.

How organizations interact with each other forms the basis for societies. Just as organizations are bundles of individuals and their relationships, societies are bundles of organizations, individuals, and their relationships. Institutional rules that apply to entire societies must be embedded in organizations that create, signify, and enforce the rules. We call those kind of organizations “governments” and their rules “laws.” I want to put off consideration of governments and laws for a time and focus first in this section on rules, then in the next section on agreements.

Institutional rules require an agreement. It is not what is going on in people’s head that distinguishes a norm from a rule, it is what is going on around them. Families are a common type of organization across all societies. They are structured in very different ways in different societies, but in virtually all families there is some internal division of labor. My family is no

different. My wife and I have agreements about how we divide up tasks. One of our agreements is that I take out the garbage, another is that my wife pays the bills and I balance the checkbook (we call it “doing the bank.”) These agreements produce rules that help order our relationship, but they produce different patterns of behavior in relation to the agreement. A half full garbage can bothers my wife much more than it bother me, so my wife often takes out the garbage. If you stood outside our house and counted the times that each of us took out the garbage, you would infer that our rule allocated responsibility for taking out the garbage to my wife sometimes, me other times, and probably would deduce that we have no rule for taking out the garbage. On the other hand, my wife always pays the bills and I always balance the checkbook.

In either case when my wife asks me to take out the garbage or do the bank I try to do it, quickly if possible. The behavioral norm in our family is that my wife always pays the bills, we share taking out the garbage, and I always balance the checkbook. The behavioral norms do not correspond perfectly to the agreed upon rules. The garbage rule is what we can call a “default” rule. My wife has the option of asking me to take out the garbage, but does not have to. If we cannot agree on who should take out the garbage, I take it out, that is the default. The bank rule is what we can call a “prescriptive” rule. The rule prescribes our behavior in practice. But the fact that the bank rule is a prescriptive rule and the garbage rule is a default rule is not intentional, it is a result of the way the rules work out in practice in our family.

The bank and garbage rule illustrate a subtle point about institutions. Because the bank rule is always followed, it could appear to be a norm of behavior supported by the expectations my wife and I have about each other. The garbage rule could not appear to be a norm because there is no pattern to who takes out the garbage. The reality, however, is the reverse. We need

an agreement about the bank rule, because there is no self-enforcing way for us to take care of our finances if each of us writes checks or balances the checkbook only when it appears to be in our individual interest to do so. What makes the division of labor under the bank rule an equilibria is our agreement, but is not an equilibria in the institutions-as-equilibria sense, because it is not self-enforcing in the absence of an agreement. The garbage rule is an institutional rule based on our agreement, but the lack of a pattern in the outcome results from our inability to reach an agreement *ex ante* about when my wife will be so bugged about the garbage that she will take it out. The garbage rule is a sustainable institutional rule that does not generate a repeated pattern of behavior, the bank rule is a sustainable institutional rule that does generate a repeated pattern of behavior. This is the substantive response to Hindriks and Guala's question how can a rule be an institution if it does not observable affect behavior? It matters because institutions are not just rules, they are agreed upon rules. Institutions are the rules that frame choices that individuals face.

Beware the confusion in the current definitions of institutions between formal and informal institutions. The bank and garbage rules are part of the institutional structure of our family because they are agreed to. By North's definition our agreed upon rules are informal "conventions, norms of behavior, and self imposed rules of behavior." Formal and informal often refer to scale. Agreements between two individuals are informal, between millions formal. This is a mistake. Conceptually, institutions as agreed upon rules are scale free. Institutions exist in families, schools, firms, religions, states, and nations. Likewise, norms of behavior are conceptually scale free. What matters is whether some people are conditioning their behavior on the behavior of others in a way that produces self-reinforcing behavior. Our bank rule is an

institution, not a norm. This agreed upon rule generates a repeated pattern of behavior, and in that sense may be called an equilibria, but it only generates the repeated pattern in the presence of the agreement.

Both institutions and norms exist all along the scale of human relationships. A contract between two or more people constitutes an agreement about a rule and therefore is an institution. It is an institutional rule that spans only the parties to the contract. Parties to a contractual agreement may be embedded in a larger society in which they can access certain types of agreements can be enforced by third parties. In that case, the range of contractual arrangements may be broader. Each contract then contains more than one element: the agreed upon rules in the larger society and the agreed upon rules within the specific idiosyncratic contract. That contracts at the level of individuals are institutions should come as no surprise, since Coase's insights about the problem of social costs and the nature of the firm are largely about the ability of individuals to form institutional agreements amongst themselves that solve coordination problems. Some of those solutions are self-enforcing some are not, but all of them require agreements. Some of Coase or Williamson's solutions to coordination problems within firms and organizations involve the presence of external third parties, but many do not.

Whether an agreed upon rule is enforced as a default or prescriptive rule always matters, but it usually matters less than the fact that an organization has reached an agreement about a rule. The agreement assigns responsibilities for decisions and actions between people, even if the assignment is not followed in practice. The presence of an agreement changes the nature of our relationships, because it changes the choices we face, no matter how the agreed upon rule is enforced. Relationships between wives and husbands, between contracting parties, between

citizens and their governments are complicated amalgams of agreed upon rules, norms of behavior, expectations fulfilled and unfulfilled, and the constant interaction of the interests of the partners and the larger world they are embedded in.

The scale of institutional rules also involves specialization and division of labor. In many societies, higher population aggregations involve the existence of organizations whose primary role is create and/or enforcement agreed upon rules. Sometimes those rules are enforced prescriptively, but often they are enforced as defaults. For examples, the courts may offer two contracting parties the option of registering a contract with the court, but the court will only enforce the terms of the contract if one of the parties requests it. In this case the court's enforcement of a rule may be clear and therefore "prescriptive," but whether the rule is enforced or not depends on the parties, not the court. A default rule does not prescribe behavior, it frames a range of behaviors. The default rule creates an outside option (game theory), a reversion rule (the status quo in a legislative context, Romer and Rosenthal, 1978, p. 30), a default option or threat point (Grether, Issac, and Plott, 1981, p. 167), or default conditions as in "lack of agreement rules" (Ostrom, 2005, pp. 210-11). The logic of how default rules work is deeply involved in the reasons that equilibria are equilibria. People face choices and the costs and benefits of their choices often depend on the costs and benefits of choices they do not make, and which we do not see. Default rules create options which may often not be chosen, but that does not mean the outside options do not matter to making the choices that are made in equilibrium. Default rules may or may not be intended by the rule makers to be enforced prescriptively, but in practice a default rule works by framing relationships within which the behavior of the individuals to whom the rule applies is shaped. Default rules cannot be norms, because often

people's behavior does not conform to the rule.

Aghion and Tirole (1997) analyze the role of formal and real authority in organizations. They contrast formal (institutional, agreed upon) authority and real (outcome based, behavioral rules) authority within organizations. The formal, agreed upon rules allocate who performs what functions within the organization, specifically who makes what decisions about the use and disposition of certain resources within the organization.¹¹ Real authority rests with the people who actually make the decisions. The formal rules constitute an organizational chart, signifying who has the formal right to make particular decisions. Actual decision making within the firm, however, often does not resemble the formal rules.

Aghion and Tirole use the example of a manager who has the formal responsibility for making a specific decision about where to locate a new store. In practice, the manager usually consults with his subordinates and often allows one of them to actually make the real decision. The fact that the manager allows the subordinate to make the decision neither relieves 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. If there is a conflict between the manager and his team, the default rule enforced by the firm is that the manager decides. When the subordinate makes the decision it does not mean that the default rule has been evaded, it simply means that real decisions are made in the shadow of the

¹¹So, for example, the charter of a corporation typically specifies a decision structure in which the right to make certain decisions are ultimately lodged with different groups, shareholders, managers, etc.

default rules.¹² The rules frame the relationship between the manager and his subordinates.

In their analytical model Aghion and Tirole show that “Real authority is determined by the structure of information, which in turn depends on the allocation of formal authority.” (p. 1) Whether the prescriptive form of the rule is followed in practice depends on the incentives the rule creates within the firm for individuals, both managers and subordinates, to gather information about potential sites. The real decisions made depend on the formal frame for relationships within the firm: the structure of the formal rules that create incentives and govern the relationships between individuals within the firm. The formal rules are “good” if they increase the value of the relationship (the information) between the manager and his subordinates, even if the actual decision maker is not the formal decision maker. The formal rules are not good because they are obeyed, the formal rules are good if they increase the value of relationships within the firm.

The formal rule makers have the option of writing a default rule, in which the manager has the option of letting the subordinate decide. That is fine. But the rule makers are trying to solve a complicated problem and it may be better for the firm for the manager to be strictly responsible (liable) for making the decision. In that case, the form of the rule may be prescriptive: the manager always decides because he is responsible. It may be better for the rule to assign strict responsibility for the decision to the manager, because that solves a coordination

¹²Although my definition of a default rule is substantively similar to the logic of default rules in the law and economic literature, for example Ayers and Gertner 1989 and 1992, the actual definitions are quite different. Default rules in the law and economics literature are a narrow technical category of rules, where default rules in my framework are a very broad category, that include many rules that would not be considered default rules by Ayers and Gertner.

problem for the firm, even though the rule will not be enforced. The logic is the same as the USMC example given earlier. In that case, whether in practice letting subordinates decide will be a matter of the norms of behavior that emerge in the firm as the result of the rule. Whether letting subordinates decide is tacitly acknowledged by upper management or not will also be a norm of behavior within the firm.

Agreed upon rules, therefore, create incentives that lead to norms of behavior that may conform to the rules or deviate from the rules. “Good” agreed upon rules encourage and facilitate the emergence of norms that may or may not conform to the rule. In the Aghion and Tirole case, good means increasing the value of information within the organization. There are many standards for good.

V. Implications of Agreed upon rules

As already stressed, agreements do not mean the consent of all the people to whom the rule applies. The creation or alteration of a rule is a social process with two elements. First, the process by which a group agrees to come to an agreement about a rule. Second, the effect and enforcement of the rule itself. Individuals within a group are rarely permitted to announce whatever rule they please, not even kings, emperors, or dictators. Whether other members of the group recognize the announcement as setting a rule depends on the agreement among them about how rules can legitimately be formed. H.L.A. Hart (1961/2012) constructed a model legal system requiring two types of rules. Primary rules are the rules that directly affect individuals and organizations. Secondary rules are the rules for making rules that govern the process by which groups come to agreements about what the primary rules are. They are “rules of recognition” that determine when the members of a group recognize that a rule has been agreed to.

Secondary rules are more than rules of recognition, however. The idea of a legal “system” plays a central role in Hart’s logic. We cannot consider rules individually because rules/laws are embedded in a larger set of agreements about what rules/laws can be. For good analytical reasons the study of institutions tends to focus on individual rules in isolation, but that imposes a severe handicap when we broaden our scope to include the institutional system of an organization or a society. Primary rules and secondary rules interact in ways that are not obvious from the simple notion of secondary rules as rules of recognition. Secondary rules are often more complicated. Moreover, when organizations are interconnected, what is a primary rule for one organization may be a secondary rule for other organizations, and vice versa.

In *Why Nations Fail*, Acemoglu and Robinson draw a sharp distinction between political and economic institutions, page XX. They articulate two key dimensions of institutions. One is between inclusive and exclusive institutions, which refer primarily to political arrangements. The other is between extractive and not extractive (?) institutions, which refer primarily to economic arrangements. One could draw a parallel between secondary and primary rules, and economic and political institutions. But the parallel fails when we think of institutional systems.

For example, in Aghion and Tirole’s model it does not matter whether the firm is organized as a corporation or a partnership. One could easily imagine circumstances, however, where the ownership structure of the firm impacts the ability to structure agreed upon rules within the organization. Whether a specific organization can become a corporation depends on the agreed upon rules enforced by the government. In practically all societies prior to 1840, obtaining a corporate charter and corporate status required deliberate recognition by the cognizant political actor, whether that was the King, Parliament, Conseil d’Etat, legislature or

governor. Although a charter is a primary rule, they exist in association with secondary rules that determine by whom and how charters could be created. In the 1840s states in Western Europe and the United States began passing “general incorporation laws” that enabled groups to obtain a corporate charter at will, subject to some conditions. In the United States new state constitutions mandated that legislatures pass general laws for corporations, that was part of the secondary rules. The charters were required to follow certain forms. The constitutional mandate was a secondary rule at the level of the government, the general incorporation law was a primary rule at the level of governments, but it was a secondary rule at the level of individual firms or corporations. The general incorporation act specified certain agreed upon relationships within the firm (shareholders and managers), as well as between the firm and outside interests (debt holders and other creditors) that could be embodied in a charter.

Secondary rules, therefore, are often much more than rules of recognition. The United States constitution contains restrictions on the kinds of rules that can be agreed upon as well as the functions of the rules that can be agreed upon by the national and state governments. These are just as important secondary rules as the rules that determine “how a bill becomes a law,” or how various officials of the government are selected, by election or appointment. Equally important, secondary rules are not simply rules that apply to governments. When a group decides to call itself a corporation, and performs the necessary public actions, then they can access a set of secondary rules that apply to corporations in their society. When two individuals decide to declare themselves married and perform the necessary public actions to become married, they can access a set of secondary rules that apply to marriages in their society.

One more simple example. Suppose two people form a partnership to produce widgets

and each puts in capital and labor. One of the tasks that needs to be performed involves effort that is impossible to measure, and therefore it is impossible for the two partners agree to a credible rule that the partner performing the unmeasurable task will exert sufficient effort. Instead, suppose that the larger society has a primary rule specifying what a promissory note is and how disputes over promissory notes will be adjudicated. If partner A performs the unmeasurable task he arranges to give partner B a promissory note for \$50,000. Partner B can execute the note at any time according to the agreed upon rules, but neither partner expects that the note will be executed. As long as the cost of providing the unmeasurable effort is less than \$50,000 to partner A, and the value of the relationship to partner B is more than \$50,000, the existence of the promissory note will make their institutional arrangement credible. Note, however, that the rules about promissory notes are not part of their agreement, they are secondary rules to the partners. They must sign a document that the external court recognizes as a “promissory note,” that is the secondary rule (which they cannot alter) that makes their agreement credible. Promissory notes may never be executed, but that does not mean that they are not important.

The examples illuminate several important aspects of rules as agreements and the importance of primary and secondary rules. The first is that the arrangements in the example can only occur in a society with well developed institutional rules. For any individual to sign a piece of paper, pay a small fee, and declare themselves a corporation, who then can access a range of rules in contractual circumstances with other individuals or corporations requires a great deal of institutional sophistication. The primary rules governing what corporations are conditioned by a set of secondary rules that limit and determine how legislatures can create corporations. Much

of the debate about the importance of institutions in long term development are about primary and secondary rules, not about norms. Acemoglu and Robinson's "inclusive institutions" are agreed upon secondary rules, not norms. Greif's investigations into the source of "legitimacy" is about often about secondary rules, as well as about norms. Norms come into the picture when we ask why do people follow rules, but not what the rules actually are.

Second, it is difficult if not impossible, to imagine how a set of behavioral norms could implement such a set of institutional arrangements. This is particularly true when aspects of the rules are rarely, perhaps never, invoked. Many institutional rules exist as frames for relationships. I may know about promissory notes and be able to use them to make an agreement with my partner credible, but may have no idea what the specific rules governing promissory notes are. That does not mean that the specific features of the promissory note rules do not matter, just that they are not invoked often enough to be widely know.

Finally, this puts a very different spin on the notion that institutions are the rules of the game and the means of enforcement. In his book *Institutions, Institutional Change, and Economic Performance* North described the process of institutional change using what he called the sports analogy. Teams play a game. The teams form a league to create and enforce rules, and the league pays the referees. Teams have three options: play by the rules, devote resources to changing the rules, or cheat. The dynamic process of institutional change derives from the incentives teams have to attempt to change the rules through collective action, through agreed upon processes, exactly what I have termed institutional rules here. Unfortunately, the exclusive three options gives the impression that teams that are not following the rules are cheating. The entire cast of the argument developed here suggests that organizations and individuals often

ignore the agreed upon rules, but that does not mean they are cheating. If institutional rules include norms of behavior, which for North they explicitly do, then teams that are doing “not normal” behavior are cheating on the behavioral rules.¹³ But many people who are not following the rules are not cheating, because many institutional rules are default rules, which do not exist in the sports analogy.

VI. Ambiguity and Introspection

By now you may be wondering whether agreed upon rules are ever actually enforced. I apologize for the lack of balance. Certainly the promissory note example depends on the courts actually enforcing promissory notes when parties actually take each other to court. Aghion and Tirole’s upper management need to enforce the formal rule that the manager makes the decision in order to get the good outcome. I agree with all that has been said in the economics, economic history and development literature about the importance of impersonal rules enforced in an unbiased manner as a cause of economic and political development. Impersonal rules and unbiased enforcement is a major contributing factor in building societies with secure civil and political liberties. But that is not what this paper is about. It is about what institutions are, not about what makes institutions good. We can’t figure out what institutions are good until we figure out what institutions are and how they work.

It is currently not possible to construct an equilibrium theory about why people choose to agree upon certain rules that generates a dynamic explanation of what choices people face. Such a theory may be possible in the future with new conceptual tools, but one implication of the

¹³The opening quote in the paper is taken from North’s address when receiving the John R. Commons prize. The quote there is more compact, but identical to the definition of institutions in *Institutions, Institutional Change, and Economic Performance*.

argument here is that it will not look or work like the market equilibrium in the simple neoclassical model, nor will it look or work like the self-enforcing norms of behavior of the institutions as equilibria models. An equilibrium theory of institutions as agreed upon rules must describe and explain a different kind of social fact.

The reasons are not immediately obvious, but they matter. Take as given that some agreed upon rules exist that are not always enforced, but still help coordinate relationships. Those agreed upon rules will support patterns of behavior that are not sustainable in the absence of the rules but nonetheless that does not mean that individuals will be aware of the rules. In fact, many individuals may not even know what the agreed upon rules are until it is necessary to invoke enforcement of the rule. In that case individuals may hold inaccurate beliefs about what the agreed upon rules actually are. By investigating what people think the rules are we can place norms and institutions in their proper alignment.

I live a short distance away from the University where I work, and each day I drive about a quarter mile on a wide four lane surface street where the posted speed limit is 30 miles per hour. There are two schools along the street and a few years ago the city put up speed cameras in front of the schools. The street is wide enough that people generally drive 40 to 45 miles an hour, that is the norm of behavior when traffic is light, which netted me several citations for speeding when the speed camera was first installed. I changed my driving habits, driving at 40 miles an hour up to the speed camera and then slowing to 30, a perfectly rational individual choice. Other drivers began slowing as well, but there were plenty of people sailing through the speed zone. At some point, enough drivers who knew the camera was there, slowed down as they approached the camera that the drivers going 45 began to interpret the behavior of the drivers

around them and slowed too. A few people still speed through, but the ability to read the behavior of people around us was working.

The 30 mile an hour speed limit is not well posted on the road, so people driving the road for the first time or infrequently typically would not know what the speed limit was. The effect of the speed camera was not to create a norm of behavior among those infrequent drivers, but the individual response to the speed camera of those who drove the street everyday was sufficient to create a pattern of behavior that other people responded to, even if they did not know the rule. Agreed upon rules can produce behavior that even those who do not know the rules respond to.

Recall the promissory note example from the previous section. Two people contemplate a new venture, but can't figure out how to solve the monitoring effort problem. Over beers with friends, someone suggests that they write a promissory note. Everyone kind of knows what a promissory note is in principle if not in detail, so one of the two partners writes a promissory note and the monitoring problem is solved. The legal requirements for a promissory note require certain language and a notarization. If the promissory note the partners wrote is not legal it will not be enforced by a court, yet the note they write can still solves the monitoring problem as long as the two partners believe the note can be enforced by the court. North might say that it is the belief that the promissory note will be enforced that enables it to work.

I agree completely. The note could also work if the parties were taking it to a tribal elder, or a local parish priest for adjudication. What is required in each case is a pre-existing agreement about what constitutes a promissory note. The agreement becomes the secondary rule for the partners to construct their institutional arrangement, their agreed upon rule for structuring their partnership. This is true even if they do not know exactly what that agreed upon rule is and

do not follow it when they write their note. An inaccurate belief about what a promissory note is can still support their contract, But they can't have an inaccurate belief unless an agreement about promissory notes actually exists.

The promissory note works to solve the contracting problem because it changes the choice set that the partners face. One partner now has the option of terminating the relationship and taking the \$50,000. By changing the choices facing the partners, a better outcome can be realized in their relationship.

The interaction of norms and institutions is intimately related to how individuals perceive patterns of behavior and agreed upon rules. The speed camera in my life made immediate the presence of an agreed upon rule and its enforcement. As a university professor I work in an environment in which agreed upon rules are continuously being debated and enacted, and yet many of those rules are simply not followed. A friend and colleague was Associate Dean for details and rules in our college, and when I mentioned that we had many rules which were not enforced he immediately interjected, "if they were all enforced nothing would get done." Why would an organization devote substantial resources to reaching agreements about rules that are not enforced? Because the agreed upon rules frame the choices that people face, even if they choose behaviors that do not conform to the rule. Most faculty, staff and students in my college have only the vaguest notion what all the actual agreed upon rules are, but they know what the patterns of behavior, the norms of behavior, that are supported by the rules are. If you ask people what the rules are you will get a description of the norms, not of the agreed upon rules.

One of my favorite quotes is attributed to Oscar Benavides, former President of Peru:

“For my friends, anything. For my enemies, the law.”¹⁴ What happens if we enforce all the agreed upon rules as they are conceived? The outcome is often bad. Ayers and Gertler suggest, in their discussion of legal default rules, that default rules laws that provide the partners with worse options might actually induce partners to come to more agreements, in the shadow of the rule. We should, at least, be wrestling with the idea that some rules may be good for the value of relationships in organizations and society if they are not enforced, and not so good if they are enforced. Thinking about this question has powerful implications for how we think about rule of law and institutions in the development context.¹⁵

Many agreed upon rules exert influence over behavior through what appear to be norms. Agreed upon rules can frame outside options. Outside options may, in game theory terms, be “off the equilibrium path” options. If the outside option is rarely exercised then it cannot serve as the basis for a behavioral norm. The behavior that the rule supports will not correspond to the form of the rule, but under the right conditions may result in formation of a behavioral norm. People observe the norm, and if they do not know or do not understand what the agreed upon rule is or how it works, they assume or infer either that the behavior is completely norm based, or if they believe that the behavior is rule based that the behavioral rule is the agreed upon rule. Neither conclusion would be correct.

In a society like the United States, there are literally thousands of agreed upon rules, which you can easily verify by consulting a state statutory code. No one knows all of the agreed

¹⁴ The ubiquity of this type of rule enforcement in the developing world is well documented See, for example, the World Justice Project, *Rule of Law Report, 2016*.

¹⁵For a neat consideration of the difference between the agreed upon rules and there enforcement see Hallward-Driemeier and Pritchett, 2011.

upon rules that affect their lives, and most of us find out about rules only after an experience that reveals some aspects of the rules, like buying a house or getting a divorce. We often make decisions assuming we know what the rules are, only to discover that when we come up against the actual enforcement of the letter of the rule that we are mistaken. As a result, introspection about institutional rules is inherently suspect. Personal experience is often not a reliable guide to the content or operation of an institution.

American states began changing family law in the 1960s and 1970s, particularly the laws regarding divorce. Family law is a case of an institutional rule that most people think they know, but they really do not understand. Who reads the agreed upon rules governing marriage and divorce when they get married? In this critical area of life, governed by agreed upon institutional rules, most of us do not know what the rules actually are, yet we carry out our lives as if we do.

While the changes in 1960s and 1970s were unique to each state, in general they can be described as a move to “no fault” divorce.¹⁶ The new institutional rules enabled a spouse to unilaterally dissolve a marriage, or for both spouses to bilaterally dissolve their marriage without having to prove that one spouse violated a rule that allowed divorce (like abuse or alcoholism). The new laws created a set of default rules that govern issues like child support, alimony, and property division. When a married couple comes to the court for a divorce, the court only applies these default rules only if the divorcing spouses cannot reach an agreement about these issues on their own. As Mnookin and Kornhauser (1979) document, less than ten percent of

¹⁶A brief introduction to the history of the changes can be found in Freed and Foster (1973) and the changes are tracked over time in a series of papers in the *Family Law Quarterly* by Freed and Foster and by Freed and Walker.

divorces actually involve a decision by a judge which settles disputes between the divorcing spouses and applies the default rule. While “hard” cases sometimes press the boundaries of the divorce laws, in most cases the judges apply well understood pre-existing rules for child support payments, alimony, division of property, etc.

Divorcing spouses must decide whether the default terms the judge will apply are better than the terms they can reach through arbitration and negotiation. Since the default rules the judge will apply are clear, most divorce agreements are reached by the spouses (and their lawyers) and then rubber stamped by the court to be made official. Mnookin and Kornhauser emphasize how the existence of marriage default rules enhances the ability of divorcing spouses to use “private ordering” to determine how their marriage will terminate.¹⁷ It is only when private ordering breaks down, that the court applies the default rules. The divorce agreements are reached in the shadow of the law, but the divorce agreements are not bound by the law.¹⁸ These laws are truly default rules, not prescriptive rules. These institutional rules are not constraints.

Few people know what the laws governing divorce actually are when they get married, and many never find out unless they get divorced. Nonetheless, changes in marriage laws have a measurable and significant effect on behavior. Friedberg (1998) shows how the move to unilateral divorce raised divorce rates, at least in the short term. Stevenson and Wolfers (2006)

¹⁷As Mnookin and Kornhauser explain, and we should note, that divorce law in the United States before the no fault revolution was not structured as default rules in this way. In most societies, marriage law is not structured this way either.

¹⁸Even in the United States, certain divorce arrangements with respect to children, are not allowed, they are prescribed. But on many important dimensions like property and income allocation, spouses have a very wide freedom to chose.

demonstrate how the move to no fault divorce reduced the suicide rate among women within marriage. When one party could unilaterally end a marriage, finding that they were in a bad match, and ending the marriage earlier, reducing the amount of abuse and suicide caused by violence within marriage. Dee (2003), on the other hand, shows the violence by male spouses against female spouses did not change, but violence by females against male spouses increased by 21% when it became easier for either spouse to unilaterally exit the marriage.

It is implausible that many people knew the details of the divorce law and its changes, particularly teenagers whose behavior appears to have been affected by the changes. But it is quite easy to see how the effects of the changes in the agreed upon rules could have resulted in changing norms about marriage. Initially, people looking to end marriages don't find getting a divorce is easier than they expected, because they probably didn't know how hard it was before and so their expectations could not have changed. But a larger share of people contemplating or seeking divorce obtain one. Behavior patterns reflect that it is easier to get a divorce. Part of the response produces more marriages between people who are potentially at risk for bad outcomes. The number of marriages increases, including bad or abusive marriages, but so too does the divorce rate ending those marriages. The socio-economic outcomes associated with abusive marriages decline, particularly for women. Norms about marriage continue to evolve, even after the rules have stopped changing.

It is implausible that these changes in behavior resulted because the millions of people who marry every year actually read the family laws in their state. The only plausible channel through which these agreed upon rules affect behavior is through norms of behavior. Thus the fundamental ambiguity between norms and institutions when viewed introspectively by

individuals, we need to think about both as social facts.

VII. Conclusions

I have tried throughout the paper to acknowledge the insight and contributions of the broad and narrow approaches to institutions, as well as the institutions-as-equilibria and institutions-as-rules approaches. This paper is not a criticism of these approaches, instead it proposes alternative definitions that clarify the relationship between institutions and norms, and brings them into alignment as social facts.

Defining institutions as agreed upon rules and methods of enforcement is more than a marginal change to North's definition. It requires that we acknowledge categories of collective social phenomenon that are not institutions, that are not agreed upon rules. Social facts are the results of aggregated behavior "of all the individuals in society, which is [are] beyond any one individual's control, constitutes and creates a structure that influences each individual's behavior." (Greif and Kingston, 2011, p. 25). When social facts are explicitly recognized, it becomes clear that many patterns of social behavior may have nothing to do with the kind of equilibria that the institutions as equilibria approach wants to study. Market prices are social facts, even though market prices do not persist. Any pattern of repeated social behavior, no matter what its origins or logic, can become institutionalized. We want to understand those logics and those patterns, and I am in no way suggesting that we abandon the study of social facts. But as Schelling says repeatedly, the logic of these different processes are not the same.

My concern is that we fail to distinguish between social agreements about rules and social equilibria by calling them both institutions. Doing so has hampered our understanding of what institutions really are and how they really work. Institutions are agreed upon rules that may

or may not be followed. They may or may not result in equilibria. Human societies devote enormous resources trying to agree upon rules, and when they cannot agree have expended enormous resources in wars to determine who should get to make the rules. These out of equilibria phenomena are not trivial, they are central to how societies work and how we understand them.

Defining norms as institutions hampers our understanding of how agreed upon rules relate to norms of behavior and other social facts. As the equilibria theorists demonstrate, norms supply their own enforcement internally through the inferences and expectations that individuals make. Institutions necessarily require external agreements, rules, and enforcement. The inclusion of agreements substantively changes the relationship between rules and enforcement.

Operationally, the most powerful tools we have to *deliberately* shape our societies are institutions defined as agreed upon rules. Social facts really matter, they are critical, but many social facts like the logic of segregation identified and explained by Schelling, are beyond the reach of agreed upon rules. The most direct tools we have to change social outcomes are to consciously and deliberately adopt agreed upon rules. This does not mean in any way that norms of behavior do not matter, and that individuals and organizations do not devote substantial resources to trying to change norms and beliefs directly.

A theory of institutional change cannot be a theory of everything about human behavior. From the beginning of modern institutional social science, the core focus has been deliberate attempts by organizations to formulate agreed upon rules. The fact that the agreed upon rules do not always change behavior does not mean that there was not institutional change. The fact that explicit changes in the agreed upon rules often do not result directly in changes in behavior in

the desired direction does not mean that the agreed upon rules do not matter. It may well be that agreed upon rules work through changing norms of behavior, it is difficult to see how it could be otherwise. If we define institutions as norms, then it become too easy for some people to compare norms and outcomes and completely ignore agreed upon rules. If we abandon attempts to understand how changing agreed upon rules actually affect our norms of behavior, then we will never understand how deliberately to reach collective goals for our societies.

The implications of the modified definition are profound. Organizations like families and tribal bands have existed for millions of years, but it is only in the last few thousand years that societies whose observable scale is larger than hunter gatherer bands have emerged. One implication of the argument presented here is that larger organizations could only emerge historically in the presence of the social ability to create institutions, to agree upon rules. The absence of larger organizations before 10,000 years ago strongly suggests that the social ability to create institutions as agreed upon rules did not exist before then, or existed in a very rudimentary form.

With the appearance of larger social organizations between 5,000 and 10,000 years ago came the emergence of governments (Flannery and Marcus, 2012; Mann, 1986). Governments are organizations that signify public agreements (Wallis, 2017). Governments may or may not be organizations with a monopoly on violence, but governments are always organizations that embody secondary rules about the formation of agreed upon rules. They then promulgate agreed upon primary rules following the secondary rules. Sometime those rules are enforced prescriptively, sometimes not. The primary rules created by governments often become secondary rules that individuals and organizations can use to structure their own relationships.

Over the last two and a half centuries, some societies have managed to reach sets of agreed upon rules, to construct institutional arrangements, that are clearly associated with “development:” with better economic and political outcomes despite all of development’s imperfections. We study institutions both to understand our history and to understand how the societies around us work so that we can, with luck, improve them. Agreed upon rules are the most powerful tools societies possess to effect such improvements. In order to use that tool effectively, we need to understand what institutions are.

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