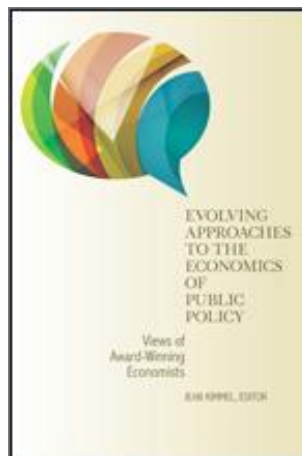

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Society and State in Determining Economic Outcomes

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Editor

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4

Society and State in Determining Economic Outcomes

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A core question in the social sciences is whether culture, political power, or networks explain economic outcomes. Two important lines of research have provided distinct answers to this question. Economic sociology has argued that the main determinants of economic outcomes are interactions among economic actors and the culture and networks that coordinate and enable them. In contrast, comparative political economics has asserted that the state's power is the main determinant of economic outcomes. Many empirical analyses have substantiated the merit of both these forces—society and state—in shaping economic outcomes.

What is the relative importance of the society and the state in determining economic outcomes? Do culture and social networks on the one hand, or the state's power on the other, shape behavior and outcomes? Do rules regulating economic behavior reflect interactions among economic or political actors? Addressing these questions promises to enhance our understanding of the determinants of economic outcomes.

In micro terms, these questions ask, “What causes people to take the actions they do? Is behavior *culturally driven* or *formal-rule-driven*? What are the relationships between behavior that reflects cultural beliefs, norms, and networks, and behavior that reflects formal rules, laws, and procedures?” To advance toward addressing these questions, we need to have a theory of action, which this chapter presents, that accommodates both formal-rule and culturally driven behavior.

First the chapter asks why economic institutionalists—who in the past considered only formal-rule-driven behavior—have developed a theory of institutionalized behavior that also accommodates culturally driven behavior. The chapter then, in the following two sections, pres-

ents this theory and the associated theory of institutional dynamic.¹ This presentation highlights the variety of interrelationships between formal-rule and culturally driven behavior. In the section following that, the chapter then provides some empirical examples of the importance of these interrelationships. These examples particularly suggest that culture influences the sources and details of formal rules, while the resulting rules further reinforce the cultural aspects that they embody and reflect. The conclusion is a discussion of some of the implied research questions.

INSTITUTIONS AS RULES AND CONTRACTS

According to institutional economists, behavior reflects institutions. Until the early 1990s, these economists' main approach to positive institutional analysis defined institutions as either rules or contractual relationships. This approach, dating back to Adam Smith, posits that the operation of markets is the key to growth (Smith [1776] 1991), and that their operation depends on a clear specification of property rights (Coase 1960). The most important rules, therefore, are those that allocate property rights (North 1981). Given an allocation of property rights, economic agents use contracts and establish organizations to minimize the transaction costs of exchange (Coase 1937; Williamson 1985). Contractual relationships among individuals and within and across organizations are established based on the attributes of the relevant transactions in an optimal manner. Distinct property rights allocations, however, can have distinct efficiency implications because of the transaction costs of transferring rights to those who can use them most efficiently. Rules influencing the cost of transferring rights, and more generally exchange, are thus important in determining outcomes.

Following Hobbes's assertion that without a state, life would be "solitary, poor, nasty, brutish and short," the emphasis in this chapter has been on rules specified and enforced by the state. The state has been conceptualized as an entity—a decision maker—with a monopoly over coercive power. The rules that the state advances, in turn, reflect a political economy process centered on rules governing collective decision

making in organizations, such as Congress, and the political influence of organizations, such as interest groups and labor unions.²

The perspective that defines institutions as rules that minimize transaction costs (henceforth, institutions-as-rules) has contributed a great deal to institutional analysis. It is a departure from a long research tradition that considered institutions as exogenous and historically determined. In contrast, conceptualizing institutions as politically determined rules and contractual relationships led to studying them as endogenous by examining the political process of rule making and the relationship between the attributes of transactions and individuals' choices of contracts. In short, the institutions-as-rules perspective advanced institutional analysis by integrating two additional variables into the analysis—1) political rules and 2) transactions and their attributes—and by providing analytical frameworks (particularly those of political economy and transaction-cost economics) for their analyses.

While the contributions of the institutions-as-rules approach are beyond doubt, the approach has serious limitations. For one thing, treating rules as analogous to behavior limits the scope of the issues the approach could address. Why, for example, are some state-mandated rules followed but not others? As a first approximation, one can assert that individuals follow rules because there are other rules specifying punishment if they fail to do so. However, this amounts to pushing the question of institutional effectiveness backwards one level. It assumes that those who are supposed to enforce the rules are able and motivated to do so. But then who monitors the monitor? A comprehensive understanding of the influence of state-mandated rules requires examining how the motivation and ability to follow and enforce them are endogenously created. More generally, focusing on rules can only go so far toward understanding the relationship between the environment and behavior. Why are some behavioral rules followed while others are not? Rules are behavioral instructions that can be ignored, implying that for any prescriptive rules of behavior to have an impact, individuals must be motivated to follow them.

More generally, examining endogenous motivation is necessary for studying a host of critical issues, because motivation mediates between the environment and behavior. In past and contemporary economies, social order characterized by exchange and property rights security has

often been achieved in situations in which the state was only partially effective, if at all.

Such situations prevail when there is no state, when the economic agents expect the state to expropriate rather than protect their property, and when the state is unwilling or unable to provide the enforcement required for exchange and securing property rights, because of such factors as asymmetric information, incomplete contracts, legal costs, or organizational limitations. Studying economic outcomes in these situations requires examining social norms where motivation is endogenously created through the interactions among the economic agents. To understand the institutional foundations of markets, we need to examine private-order institutions based on social norms and their interrelationships with public-order institutions provided by the state.

Similarly, studying the state itself—and, more generally, the polity—requires that we consider endogenous motivation. (Henceforth, I use the terms *state* and *polity* interchangeably.) The institution-as-rules approach adopted Max Weber's definition of the state as having a monopoly over coercive power. But in reality, political actors can, and sometimes do, resort to violence and invest in obtaining coercive power, the use of which leads to political disorder or overturning the state. The welfare implications of political order or disorder, and exactly how political order is achieved, are immense. Similarly, understanding the impact of the state on economic behavior necessitates examining the motivation of its agents. The effectiveness of state-mandated rules depends on two things: 1) the endogenous provision of motivation to agents in the bureaucracy and 2) the legal system responsible for enforcing them. An analysis of political order and the behavior of the state's agents must view the behavior of its political agents and the state's agents as endogenous outcomes rather than exogenous. Examining the institutional foundations of the state is therefore necessary.

In short, the institutions-as-rules approach has not provided an appropriate framework for studying the endogenous provision of motivation to follow a particular rule of behavior. Yet studying endogenous motivation is central to understanding social order, political order, and the effectiveness of the state in influencing the behavior of its subjects and agents.

Similarly, neither the view of institutions as rules nor reliance on the political economy and on analytical frameworks that looked at the

efficiency of contracting proved satisfactory in studying institutional dynamics. Political economy concentrates on the formation of rules within the political system. It postulates that rules governing economic life change when the lawmakers consider the benefits of changing them to be larger than the costs. Transaction-cost economics argues that contractual and organizational forms are altered in response to technologically determined changes in the attributes of transactions designed to optimize transaction costs. The merits of these insights notwithstanding, they nevertheless fall short of accounting for why societies often fail to adopt the institutions of more economically successful societies, and why they evolve along distinct trajectories of institutional development. Arguably, this is the case because the institutions-as-rules framework does not consider how and why institutions enable, guide, and affect behavior in addition to constraining it.

Studying endogenous motivation and how institutions enable and guide behavior, however, promises to further the examination of the questions regarding institutional dynamics that are at the heart of social science and history. Is institutional dynamics a historical process in which past institutions influenced the rate and direction of institutional change? If so, why and how do we study this historical process? These questions have bedeviled institutional analysis in economics, political science, and sociology for a long time, because addressing them requires simultaneously accounting for stability, change, and the influence of the past on subsequent outcomes (DiMaggio and Powell 1991; North 1990; Scott 1995; Thelen 1999).

INSTITUTIONS: A DEFINITION

In response to these concerns, it has become apparent that we need to study institutions from a broader, socioeconomic perspective that captures the role of institutions not only as motivating but also as enabling and guiding behavior.³ The resulting approach goes beyond the economic and political variables emphasized in the institutions-as-rules approach. Instead, it focuses more generally on the behavioral implications of factors that are *social* by virtue of being man-made,

nonphysical factors that are exogenous to *each* individual whose behavior they influence.⁴

An institution is a system of social factors that conjointly generate a regularity of behavior (in a social situation).⁵ Together, these factors motivate, enable, and guide individuals in various social positions to follow one behavior among the many that are technologically feasible in social situations.⁶ (It is convenient to refer to such social factors as *institutional elements*.) Analysis of institutions from this perspective emphasizes the importance of rules, beliefs, and norms as well as their manifestation as organizations. Thus, we can slightly adapt the wording of our definition at the beginning of this paragraph to say that an institution is a system of rules, beliefs, norms, and organizations that conjointly generates a regularity of (social) behavior. Each of these elements satisfies the conditions stated above.

Considering an institution as a system departs from the common practice of considering it a monolithic entity such as a rule.⁷ Yet to understand regularities of behavior in the most general case, we need to study a system of interrelated elements, because in an institution, different elements have distinct roles. Each has a distinct contribution to generating regularities of behavior. Rules specify norms and provide a shared cognitive system, coordination, and information, whereas beliefs and norms provide the motivation to follow these rules, whether this behavior is rational, imitative, or habitual. Organizations, whether formal, such as parliaments and firms, or informal, such as communities and business networks, have three interrelated roles: they 1) produce and disseminate rules, 2) perpetuate beliefs and norms, and 3) influence the set of feasible behavioral beliefs. In situations where institutions generate behavior, rules correspond to the beliefs and norms that motivated the behavior, while organizations contribute to this outcome in the manner mentioned above.

How, for example, do regularities of behavior prevail among drivers? The rules of the road create a shared cognitive understanding of the symbols drivers encounter (red lights, yield signs) and definitions of various concepts and situations (passing, yielding, having the right-of-way). Rules also include prescriptive instructions on expected behavior in various situations by individuals with different social positions, such as law enforcement officials, pedestrians, and other drivers. The belief that others will follow these rules of behavior motivates most drivers

most of the time to follow them also, and thus regularities of behavior are generated. Motor vehicle departments and law enforcement agencies are organizations that generate and disseminate these rules and facilitate the creation of the corresponding beliefs. To comprehend drivers' behavior requires studying the three institutional elements that constitute the interrelated components of an integrated system in which rules correspond to beliefs about behavior and the behavior itself.

In this conceptualization of institutions, socially articulated and disseminated rules are central in providing individuals with the cognitive, coordinative, and informational microfoundations of behavior. These social rules provide an individual with the information and the cognitive model (mental models or internalized belief system) required to choose or mimic behavior. Similarly, social rules coordinate behavior by providing a public signal regarding the behavior that is expected of individuals in various circumstances. In short, social rules constitute the heuristics that enable and guide behavior by helping individuals form beliefs about the world around them and what to expect from it.

Commonly known social rules enable and guide behavior, and retrospective individuals with limited rationality and cognition respond to them. On the one hand, each individual takes the cognitive, coordinative, and informational content of institutionalized rules as a given; he responds to, or plays against, the rules, accepting them as they are. On the other hand, because each individual responds to these rules based on his private information, knowledge, and preferences, these rules aggregate information and knowledge and distribute it in a compressed form.

The only social rules that can be institutionalized—that can be considered to be common knowledge, expected to be followed, and that correspond to behavior—are those that each individual, by and large, finds optimal to follow given his private information, knowledge, and preference. In situations in which institutions generate behavior, institutionalized rules and the associated beliefs and norms correspond to self-enforcing behavior. Finally, because behavior corresponds to the institutionalized rules and associated beliefs, these rules and beliefs are reproduced—not refuted—by behavior.

In situations in which institutions generate behavior, institutionalized rules, the corresponding beliefs regarding causal relationships and others' behavior, and the behavior that these beliefs motivate, constitute an equilibrium. A structure made up of institutionalized rules and

beliefs enables, guides, and motivates the self-enforcing behavior that reproduces it. Most individuals, most of the time, follow the behavior that is expected of them.

The discussion so far has ignored the social and normative foundations of behavior. But humans are social, moral creatures whose behavior is also shaped by the impact of institutions on the social and moral underpinnings of behavior. Everything else being equal, people seek to act in a manner that generates positive social responses from the people they know, elevates their social status and esteem in the broader society, provides them with an identity, and is consistent with their (internalized) norms.⁸ In modern sociology, the argument over the behavioral importance of social exchange, belief in others' social responses, or the loss of esteem following a particular action is associated with Granovetter (1985), Homans (1961), and Wrong 1999. Another line of research, associated with Parsons (1951), emphasizes the importance of norms in motivating behavior by influencing intrinsic utility.⁹ Internalization of norms, or the incorporation of behavioral standards into one's superego, essentially means to develop an internal system of sanctions that supports the same behavior as the external system.¹⁰ In this theory, "values and norms were regarded as the basis of a stable social order" (Scott 1995, p. 40).¹¹

The extension of the above discussion to incorporate these important considerations is straightforward. Extending the analysis to incorporate social considerations, for example, recognizes that individuals care about others' perceptions of them and hence are motivated by beliefs regarding these perceptions. In institutionalized situations, such beliefs constitute an equilibrium in these social relationships, given the social and materialistic implications of various technologically possible actions.

For a long time, the difficulty of analytically and empirically studying institutions from this equilibrium perspective was due to the dual nature of social factors as endogenous to society yet exogenous to each of the individuals whose behavior they influence. Their analysis therefore has had to combine two seemingly contradictory views of institutions. The first is the "agency" view, common in economics and political economy, which emphasizes that institutions are produced by individuals to constrain behavior. These are "the humanly devised constraints that structure political, economic, and social interactions"

(North 1990, p. 97). In contrast, the second, called the “structural” view of institutions, is common in sociology and emphasizes that institutions transcend individual actors. Institutions enable and motivate behavior while constituting the properties of societies that “impose themselves upon” individuals (Durkheim [1895] 1950, p. 2), and they “consist of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behavior” (Scott 1995, p. 33).

The difficulty of developing an analytical framework that could bridge the agency and structural views proved daunting to those who advocated integrating factors such as beliefs and norms into institutional analysis. Durkheim ([1895] 1950, p. 45), for example, defined institutions as “all the beliefs and modes of behavior instituted by the collectivity,” while Parsons (1951, pp. 38–40) has taken the position that full institutionalization of a behavioral standard requires its internalization—namely, its transformation into a norm. Yet, since they have not combined the agency and structural views, they have not proposed a way to analytically restrict the set of admissible beliefs and norms. Hence, because beliefs and norms are not directly observable, any behavior can be justified based on ad hoc assertions regarding the beliefs and norms that motivated it.

In recent years, however, analytical frameworks and empirical methods suitable for studying institutions from an equilibrium perspective have been developed. They rely extensively on microlevel models that enable researchers, particularly by using classical, experimental, and evolutionary game theory, to restrict the set of admissible institutionalized outcomes in social situations.¹² The related empirical frameworks mostly use context-specific case studies that utilize models to capture the particularities of the transactions under consideration and recognize the importance of the broader institutional context and history.¹³

INSTITUTIONAL DYNAMICS AS A HISTORICAL PROCESS

The study of the dynamics of institutions has gone through three phases in economics. Traditionally, economic institutions were considered immutable cultural features. In the 1970s, the “new institutional economics” challenged this view. It considered them as rules, organiza-

tions, contractual forms, or patterns of behavior and employed the tools of microeconomic theory to argue that institutions change in response to environmental changes. Property rights, contracts, and behavior, for example, would adjust to changes in relative prices in an optimal manner or in a way that best served those who dictated rules or chose contracts. More recently, attention has been given to factors causing institutions to exhibit path-dependence. This view emphasizes that once a particular institution prevails, it will tend to perpetuate itself in a changing environment because of such factors as sunken costs in specifying rules, learning effects, or activities of the interest groups to which the existing rules give rise.

Endogenous Institutional Change

Recognizing the distinction between an institution and institutional elements and studying institutions from an equilibrium perspective highlight why and how institutional dynamics is a historical process in which past institutions influence the rate and direction of institutional change. Analytically examining institutions as self-enforcing captures how particular beliefs, norms, and behavior can *reproduce* each other and hence the institution. Beliefs and norms motivate behavior, and observed behavior confirms the relevance of beliefs and the appropriateness of the norms that led to this behavior. Taken together, self-enforcing beliefs, norms, and behavior are in a steady-state equilibrium. The analysis thereby exposes which exogenous changes in the environment or knowledge bring this reproduction process to an end.

Studying institutions as self-enforcing and reproducing does not seem to be a promising starting point for studying endogenous institutional dynamics. After all, if all beliefs and behavior are self-enforcing and confirmed by their observable implications, one would imagine that all changes must have an exogenous origin. However, this is not the case. A theory of institutional stability facilitates studying how institutions can endogenously change.

An institution is *reinforcing* (undermining) when its implications, beyond behavior in the governed transaction, (weakly) increase (decrease) the range of situations (parameters) in which the behavior associated with the institution is self-enforcing. Reinforcing processes can reflect, for example, individuals' intentional responses to the incen-

tives the institution entails, or the unintentional feedback from behavior to factors that influence behavior in the situation under consideration, such as preference and habit formation, knowledge, information, demography, ideology, wealth distribution, political power, or social networks.

To illustrate this idea, consider the following example. Suppose that belief regarding collective punishment within a community leads to a particular regularity of behavior (e.g., as in Greif [1993]). To study the institution, we must examine this community, its beliefs, and its behavioral rules as a self-enforcing system of institutional elements that generated this behavior. We must examine why each member of the community is endogenously motivated to retain his membership in it, why he holds these beliefs, follows the behavioral rules, and participates in collective punishment. But even when this is the case at a particular point in time, the institution can still undermine itself. For example, the economic success of the community implied by collective punishment may lead to its growth over time. This can undermine the self-enforceability of beliefs in collective punishment, because information transmission within a larger group may be too slow to deter deviation. Similarly, each member of the community can become, over time, sufficiently wealthy so that the threat of communal punishment will no longer be enough to make past patterns of behavior self-enforcing.

The argument can be seen more clearly by resorting to a game-theoretic framework. The game-theoretic analysis of institutions focuses on studying the relationships between the rules of the game and how regularities of behavior—cooperation, wars, political mobilization, social unrest—affect the particular transaction under consideration. When we say that an institution is self-enforcing, we mean that the behavior and expected behavior in the transaction under consideration corresponds to an equilibrium. Yet, an institution usually has other ramifications that go beyond the behavior it implies in the transaction under consideration. Institutions influence factors such as wealth, identity, ability, knowledge, beliefs, residential distribution, and occupational specialization that are usually assumed as parametric in the rules of the game.

Although it is not possible to prove that institutions generally have such ramifications, it is difficult to think of any institution that in the long run does not have implications beyond the behavior in the trans-

action it governs. In the game-theoretical framework, this influence implies a dynamic adjustment of *variables* that, had this influence been ignored, would have been considered as *parameters* in the stage game.

Game theorists have long recognized that game theory does not *predict* a behavioral change following a parametric change. If a strategy combination is an equilibrium, it will generically be an equilibrium in some parameter *set*. As long as the actual parameters are in this set, game theory does not predict that the associated beliefs and behavior will not prevail. Indeed, as Schelling's (1960) seminal work on focal points reminds us, there are good reasons for individuals to continue to follow past patterns of behavior even under conditions of marginal parametric change. This is the case for at least three interrelated reasons: 1) knowledge, 2) attention, and 3) coordination.

Recall that institutionalized rules constitute an equilibrium in individuals' responses to them. They not only assist individuals when choosing behavior, but they also aggregate, in equilibrium, each individual's dispersed information. In other words, these rules not only provide individuals with the information they need to make decisions regarding how to act, they also aggregate the information privately held by each decision maker. Institutional rules similarly reflect and embody knowledge. The information compressed in socially transmitted rules permits individuals without knowledge of all the relevant parameters and causal mechanisms, and with limited computational ability, to act in a manner that leads to equilibrium behavior. Because individuals do not observe the relevant parameters and lack full comprehension of causal relationships—because they *play against a social rule* rather than follow the rules of the game—the best they can do is perceive the world as stationary as long as observations (including those conveyed through others' behavior) do not contradict this perception.

Regarding the above implies that the persistence of past behavior despite marginal parametric changes occurs because institutionalized rules enable individuals with limited knowledge and information to choose behavior. Behavioral rules learned in the past are the best predictors of future behavior. As long as the behavior of others does not reflect a change in the parameters or causal relations that one does not observe, one will not change his own behavior, either. Similarly, acquiring additional knowledge is demanding. An observed marginal parametric shift is not likely to induce decision makers to devote the

necessary cognitive resources to consider whether to change their own behavior. People don't stop to consider the optimal response to every choice they make in their lives (DiMaggio and Powell 1991).

Past patterns persist as well because what one sees, knows, and understands in a given situation also reflects the amount of attention one devotes to the task. Attention is a scarce resource. Institutionalized rules come to the rescue. They enable one to choose behavior in complicated situations without paying much attention, so that one's limited attention resources can be devoted to decision making in noninstitutionalized situations. Because we pay little attention to institutionalized situations, parametric shifts that might have been noted, had more attention been devoted to observing them, may go unnoticed, further contributing to the lack of behavioral change in response to marginal parametric changes. Moreover, those who do observe parametric shifts and bring this to the attention of others may have little incentive for doing so. People will be induced to devote attention to a situation only if the behavior or observed outcomes of others differ sufficiently from the expected.

Coordination failure is the third reason a marginal parametric shift does not necessarily lead to behavioral change. When one observes that a situation marginally changes, the problem arises of how to behave in the new situation, given the multiplicity of self-enforcing behaviors. Because people do not share expectations that a new equilibrium behavior will be followed, they are likely to rely on past rules of behavior to guide them and continue to follow past patterns of self-enforcing behavior. With that expectation, one is likely to continue following the past patterns of self-enforcing behavior as well.

Coordination problems prevail even when there are individuals and organizations with the ability to coordinate on new behavior. There are many reasons for even beneficial coordination to fail to transpire. Sunken costs associated with coordinating change, free-rider problems, distributional issues, uncertainties, limited understanding of alternatives, and asymmetric information can all hinder coordination on new behavior.

Hence, the many features that are usually taken as parameters in the repeated game formulation share two properties: first, they can gradually be altered by the implications of the institution under study, and second, their marginal changes will not necessarily cause the behavior

associated with that institution to change. These two properties imply that we can consider them as parametric—exogenous and fixed—when studying the self-enforcing property of an institution in the short run, but we must consider them as endogenous and variable when studying the same institutions in the long run. These features can be referred to as “quasi-parameters.” We can ignore their long-run implications in studying self-enforceability when these long-run implications are not *ex ante* recognized or appropriately understood and in situations in which such recognition will not influence behavior in the short run for the reasons stated above.

Changes to an institution’s quasi-parameters can reinforce or undermine it. An institution reinforces itself when, over time, the changes in the quasi-parameters it entails imply that the associated behavior is self-enforcing in a larger set of situations (parameters) than would otherwise have been the case. A self-enforcing institution that reinforces itself is known as a “self-reinforcing institution.” But a self-enforcing institution can also undermine itself when the changes in the quasi-parameters it entails imply that the associated behavior will be self-enforcing in a smaller set of situations.

The dynamics of self-enforcing beliefs and behavior are therefore central to endogenous institutional changes. An institutional change is one of changing beliefs, and it occurs when the associated behavior is no longer self-enforcing and leads individuals to act in a manner that does not reproduce the associated beliefs.¹⁴ Undermining processes can cause previously self-enforcing behavior to cease being so, leading to institutional change. A sufficient condition for endogenous institutional change is that the institution’s implications constantly undermine the associated behavior. Conversely, a necessary condition for an institution to prevail over time is that the types of situations in which the associated behavior is self-enforcing do not decrease over time: the institution’s behavioral implications must reinforce it, at least weakly. Hence, unless an institution is (weakly) self-reinforced, it will eventually reach a point where its associated behavior is no longer self-enforcing. Endogenous institutional change will follow.

Considering reinforcement highlights the importance of another, indirect way in which an institution endogenously influences its own change—when it influences the magnitude and nature of the exogenous shocks that are necessary to cause the associated beliefs and behavior

to change. When an institution reinforces itself, its associated behavior does not change. But the reinforced institution is nevertheless more robust than the previous one. The behavior associated with it will be self-enforcing even in situations where this would not have been the case previously. The opposite holds true in cases where an institution undermines itself. An institution, whether by reinforcing or by undermining itself, indirectly influences its rate of change by determining the size of the external parametric change required to render its associated behavior as no longer self-enforcing.

Institutions can change because of endogenous processes, exogenous shocks, and combinations of both. The exact mechanism that brings about institutional change, once the associated institutional behavior is no longer self-enforcing, depends on the nature of the quasi-parameters that delimit self-reinforcement. If these quasi-parameters are observable and their importance well understood, decision makers may actually realize that past behavior is no longer self-enforcing, and institutional change will be intentional. Intentional selection of alternative behavior, specification of new rules through collective decision making, and the intentional introduction of organizations are common manifestations of the ways in which intentional selection comes about.

But an institution can cease to be self-enforcing because of changes in quasi-parameters that are unobservable, uncertain, and unrecognizable. In such cases, the mechanism of institutional change is likely to be unintentional. It may reflect individuals' willingness to experiment and risk deviating from past behavior, or it may reflect the actions of a few individuals with better knowledge of the situation. In either case, learning is slow and institutional change is rare. It may take a long time for self-undermining to lead to new behavior.

The Influence of Past Institutions on the Direction of Institutional Change

Recognizing the distinction between institutions and institutional elements provides the basis for studying how past institutions influence the direction of institutional change. Institutional elements inherited from the past, such as shared beliefs, networks, political and economic organizations, and internalized norms, transcend the situations that led to their emergence. They are what members of a society bring with

them to new situations, providing them with the motivation to bring about various new situations through technological, organizational, and institutional inventions. New institutions do not simply emerge in the context of existing ones; they draw on the historical heritage encapsulated in institutional elements inherited from the past.

Past institutional elements influence the direction of change because there is a fundamental asymmetry between these past institutional elements and those alternatives that are technologically possible. Past institutional elements reflect and embody shared beliefs and knowledge among members of the society and constitute legitimate mechanisms to coordinate their actions and expectations. They are embodied in their utility functions and shared cognitive understanding of the environment. Unlike rules of the game that reflect physical possibilities, past institutional elements are properties of individuals and societies. Therefore they do not vanish once a new situation prevails, but rather they influence the processes that lead to new institutions. Indeed, relying on institutional heritage confines the complexity of new problems that people face to an order they can cope with.

Hence, new institutions do not reflect only environmental conditions and the interests of relevant decision makers. They evolve over time in a spiral-like manner, building on existing institutional elements. For example, communities, networks, and political organizations that were formed in the past constitute part of the (“endogenous”) rules of the game in new situations. Beliefs that were crystalized in the past and embodied within existing institutions become the cultural beliefs that individuals bring with them to new situations and influence the selection of new institutions. They are part of the initial conditions in processes selecting among alternative self-enforcing behavior and beliefs in new situations. Although agents thus act strategically and pursue their interests in these processes, they do so within the context implied by past institutions. Past institutions and institutional elements present both constraints and opportunities to individuals who are attempting to pursue their interests in new situations.

Specifically, past institutions influence the direction of institutional change—they impact the details of new institutions—through what can be referred to as *environmental*, *coordination*, and *inclusion effects*. First, past institutions and institutional elements constitute part of the environment within which processes leading to new institutions tran-

spire. This environment is composed of other institutions and institutional elements (such as marriage or political institutions) that are parametric in relation to the new institution. Second, past institutions and institutional elements provide the means to coordinate within this environment. This coordination may be unintentional, occurring through the impact of cultural beliefs inherited from the past (Greif 1994), or intentional, occurring through coordinating organizations inherited from the past, such as parliaments or the council of elders. The ability to coordinate, in turn, depends on the norms of legitimacy inherited from the past. A legitimate coordinator's ability to influence behavior depends, however, on the network and organizations inherited from the past that the coordinator can draw on in disseminating the new rules of behavior.

Third, past institutional elements bias the processes leading to new institutions. Creating new institutional elements, such as shared cognitive systems, shared beliefs, and shared organizations (which themselves include such systems and beliefs), is a time-consuming and costly endeavor with uncertain results. Similarly, institutions that embody existing norms are much more likely to emerge and are easier to establish than those that do not.

Consider, for example, two identical societies that differ only in their contract-enforcement institutions. In the first, economic exchange has always been supported by legal contract enforcement. This society has the appropriate legal organizations (a court and a police force), and the prevailing belief is that people will not renege on their contractual obligations because they fear legal sanctions. In the second society, however, exchange is supported by an informal collective punishment, a social network for the transmission of information, and a shared understanding of what actions constitute a breach of contract. Now suppose that in these two societies a new transaction is possible and in both societies it is technologically feasible to govern it, either by legal or communal contract-enforcement institutions.

It is intuitive that legal enforcement and communal enforcement will be used to govern the new transaction in the first and the second societies, respectively. After all, members of the first society share the knowledge that the legal system can provide contract enforcement, the belief that it will enforce contracts, and the confidence that the punishment is sufficient to deter contractual breaches. Introducing an alternative contract-enforcement institution based on communal punishment

would require creating an appropriate network making the members' identity and their past actions common knowledge so that one can be punished when necessary.

Furthermore, it would require generating a shared understanding of what actions constitute a breach of contract and the belief that individuals would participate in communal punishment and that the threat of such punishment would deter cheating. Yet the process of building relationships, knowledge, and reputations is costly, time-consuming, and uncertain. Similarly, in the second society, establishing an impartial legal system requires much more than knowledge of how to accomplish it, hire judges and policemen, and specify a code of conduct: it also requires that the system gain a reputation for operating effectively and impartially. In other words, people must believe that the legal system will function properly.

However, past institutions and institutional elements *influence* but do not *determine* new institutions. This is so because environmental factors and functional considerations, such as simplicity, efficiency, and distribution, also direct institutional change. The extent of their influence, in turn, depends on institutions inherited from the past. This is the case because existing institutions influence the institutional transaction costs involved in changing institutional elements inherited from the past. Belief in religious law prevailed in the Ottoman Empire but not in premodern Japan. Adopting Western laws was correspondingly more difficult in the former than in the latter. Finally, unless institutional elements inherited from the past become part of a new self-enforcing institution, they will decay and vanish over time. Institutions are outcomes that emerge from within and interact with the legacy of past institutional elements, but for these elements to persist, they must become a part of the new institutions.

This view of institutional evolution as a historical process does not deny the importance of agency (the pursuit of institutional change by goal-oriented actors) in influencing institutional selection. It recognizes, however, that history provides agents—even political agents—with constraints and opportunities in their ability to influence the institutional dynamic. The past influences the future, not because agents are passive but because they find it necessary, useful, and desirable to draw on the past. They do so to determine the best way to behave in new situations when intentionally pursuing institutional change, when contem-

plating the development or adoption of institutional and organizational innovations, or when they are engaged in conflicts over institutional selection. Analytically, it is possible to capture important aspects of the interplay between history and agency by recognizing that past institutions and institutional elements constitute beliefs in and the rules of the game within which interactions lead to new institutions (see discussion in Greif [2006], Chapter 7).

Past institutional elements are incorporated into new institutions, and new institutions emerge within the context of—and hence are complementary to—existing institutions. This implies that they will form an institutional complex, which is a set of institutions that govern various transactions, share common institutional elements, and are complementary to each other. The exact attributes of such complexes, in turn, also influence both the rate and direction of institutional change. These attachments determine, for example, the speed and scope of change, whether it will be continuous and encompass many institutions, and whether new institutions will be more or less likely to include past institutional elements. This implies the need to study a society's institutions from a holistic, systemic perspective.

This view of institutional dynamics considers endogenous institutional change and the impact of institutional heritage on individuals' abilities to influence the direction of institutional change. As such, this view occupies a middle ground between alternative positions. In economics, transaction-cost economics assumes that institutions are instrumental transaction costs optimizing responses to environmental conditions (e.g., Williamson [1985]), but in evolutionary economics it is common to identify them with history-dependent, and not necessarily functional, behavior (e.g., Hodgson [1998]). Similarly, in political science, rational choice analysis examines institutions as instrumental outcomes using equilibrium analysis, while historical institutionalism emphasizes that they reflect a historical process (Thelen 1999).

CULTURE, INSTITUTIONS, AND ECONOMIC OUTCOMES

The importance of integrating the “cultural” and “social” factors into institutional analysis has been recognized by many students of

institutions in economics, sociology, and political science (Hall and Taylor 1996; North 1990; Scott 1995; Williamson 2000). Yet, as noted by Williamson, the social and cultural factors were either ignored or taken as exogenous in the institutions-as-rules perspective. Recognizing that institutions are composed of social factors breaks the conceptual divide between studying institutions as formal rules and studying them as cultural phenomena. In both cases, behavior is guided and enabled by rules providing shared cultural frames, cognition, and behavioral instructions; is motivated by beliefs and norms; and is facilitated by social structures (such as networks and bureaucracies) and procedures.

Consider, for example, beliefs. Whether behavior is formal-rule or culturally driven, one's choice of behavior is constrained by shared beliefs regarding actions that others, such as agents of the state or economic agents, will take in various circumstances. In both cases, when the underlying situation is one of pure coordination, the institutionalized beliefs are self-enforcing. Each decision maker's best response to believing that others will follow the rules is to follow them also. In other situations, such as when the underlying situation is characterized by a free-rider problem, the behavior specified by the rules is not self-enforcing. Hence, rules will be followed only if the decision makers believe that failing to follow them will entail sufficiently costly sanctions imposed by the relevant agents. The credibility of the threat of punishment and its magnitude are essential.

Yet the sources, and hence the nature of rules, beliefs, and norms, differ between the formal-rule-driven and the culturally driven cases. Again, consider beliefs. When behavior is formal-rule-driven, the rules articulated by the state coordinate on beliefs regarding how others will behave. This requires the state to have the organizational capacity to generate and disseminate rules and the necessary legitimacy to induce a sufficient number of individuals to believe others will follow the behavior the rules specify.

When behavior is culturally driven, it is motivated by cultural beliefs.¹⁵ Cultural beliefs are the shared ideas and thoughts that govern interactions among individuals and between them, their gods, and other groups. Cultural beliefs differ from knowledge in that they are not empirically discovered or analytically proved. They usually evolve spontaneously without purposeful design and become identical and

commonly known through the socialization process by which culture is unified, maintained, and communicated.

Such differences notwithstanding, recognizing that a unified theory of action underlies behavior in both cases highlights the many interrelationships between the analysis of formal-rule and culturally driven behavior. Indeed, the analysis of each of these cases complements—rather than substitutes for—the other.

There are two types of interrelationships—1) static and 2) dynamic—between formal-rule-driven and culturally driven behavior. When studying formal-rule-driven behavior, understanding actions and outcomes requires examining the microprocess by which rules and beliefs are enacted. After all, if rules specified by the state are to be followed, it is not enough for them just to be announced. They must be acted upon by the economic agents and, if necessary, enforced by agents of the state. The agents' cultural, social, and organizational attributes and capacities thereby will influence whether the formal rules will be followed or not. The opposite is also true: cultural and social features that were integrated into formal rules are reproduced by the associated behavior. In other words, a society's cultural and organizational aspects are embedded in formal rules that lead to the reproduction of these aspects.

In terms of their dynamic interrelationships, the fundamental asymmetry implies that the past matters, whether behavior is culturally or formal-rule-driven. In either case, beliefs, norms, and social structures inherited from the past affect the processes, leading to new institutions. In particular, they affect the behavior through which the formal rules regulating economic life are enacted, and they have an effect on the resulting rules on behavior. Indeed, the process of reaching formal rules and the rules that are thereby articulated reflect a society's cultural and social features.

This historical heritage influences politically determined rules, is integrated into the resulting institutions, and influences the rate and direction of subsequent institutional change.

The opposite causal relationships also prevail. Formal rules shape culture and social features by influencing behavior and incentives. They have an impact on the formation of networks and other social structures by influencing whose interests are aligned, who interacts with whom, when, and in what contexts. The associated behavior implies particu-

lar role models, the motivation to socialize one's children in a specific manner, perceptions of fairness, feelings of entitlement, informational feedback, and the development of knowledge and beliefs.

To understand economic outcomes, the static and dynamic interplay between formal, state-mandated rules and a society's cultural and social features must be examined.¹⁶ In particular, the rules articulated by the state, and the effectiveness of such rules, reflect social and cultural features inherited from the past. Conversely, past rules influence the trajectory of cultural and social development. Ample evidence reveals such causal relationships.

The following few examples illustrate the impact of cultural beliefs, social structures, and norms on political institutions and the rules the state articulates. Cultural beliefs regarding the objectives and intentions of various groups in a society influence the set of political institutions that support political order. In late medieval Genoa, for example, each of the city's two main clans expected the other to be willing to use military force to gain control over Genoa if the opportunity arose. These beliefs limited their ability to cooperate in the expansion of Genoa's commerce because such expansion threatened to alter the balance of military power between them. After a long and costly learning period, this problem was mitigated by hiring an outside noble with a military force that provided a balance of power among the clans. While successful in the short run, this arrangement sustained the beliefs and clan structure that made the arrangement necessary (Greif 1998, 2006).

Distinct cultural beliefs create different demands for formal-rule behavior supported by state-provided formal contract-enforcement institutions. For example, Greif (1994) documented how, during the late medieval period, collectivist cultural beliefs among Maghribi traders led to an economic self-enforcing collective punishment, horizontal agency relations, segregation, and an ingroup social communication network. In this collectivist society, individuals could be induced to forgo "improper" behavior by credibly threatening informal collective economic punishment. This implied there was relatively little demand for state-provided contract enforcement.

This was not the case among the contemporary Genoese, however. Their individualistic cultural beliefs led to an individualist society with a vertical and integrated social structure, a relatively low level of communication, and no economic self-enforcing collective punishment. In

this society, a relatively low level of informal economic enforcement could be achieved because there was an absence of economic self-enforcing collective punishment and networks for information transmission. Furthermore, the integrated social structure and low level of communication hindered social and moral enforcement mechanisms. To support collective actions and to facilitate exchange, individualist societies need to develop formal enforcement mechanisms. Furthermore, a formal legal code is likely to be required to facilitate exchange through coordinating expectations and enhancing the deterrence effect of formal organizations.

The impact of cultural beliefs on the role of the state did not end in the premodern world. In the nineteenth century, different cultural beliefs in America and Germany led to distinct forms of legislation and laws regulating the interrelations among corporations. Americans believed large corporations were corrupt in nature. They were perceived to be motivated by greed and likely to collude and influence officials to increase their profits. Strict antitrust laws and regulations to curtail their power were therefore enacted in the United States, but in Germany, the opposite view was held. There, corporations were considered responsible entities whose prosperity would benefit the nation as a whole. Antitrust legislation was absent; indeed, collusive agreements were legally binding.

Distinct cultural beliefs regarding the relationship between effort and material success have led to different welfare policies in the United States and Europe. In the United States, the prevailing belief has been that individual effort determines income, and that all have a right to enjoy the fruits of their efforts. The political economy outcome has therefore been one of low distribution and low taxes. In equilibrium, effort is high and the role of luck is indeed limited. Consequently, outcomes are relatively fair, and beliefs are reproduced. In Europe, however, the initial beliefs were that luck, birth, connections, and corruption determined wealth. The political economy outcome was therefore one of high taxation and distorted allocations that reproduced these beliefs (Alesina and Angeletos 2005). Platteau and Hayami (1998) argued that inefficient sharing norms in Africa reflected the belief that personal gain was due to luck and not effort.

The set of rules that a state can effectively enact (and that can be followed with relatively low enforcement costs) is limited by legiti-

macy norms—i.e., norms specifying the confines of the domain within which the state has regulatory rights over behavior. The failure of Prohibition in the United States, which was in effect between 1920 and 1933, reflects more than a love of drinking alcohol. It reflects the belief by individuals that they had the right to consume alcohol and that the government was illegitimately regulating its consumption. Prohibition is much more effective in some contemporary Muslim countries, where different beliefs and norms prevail.

In Muslim countries, legitimacy norms have hindered changes in other rules. Consider slavery, for example. Slavery was eliminated *de facto* within Europe during the late medieval period. Later, of course, it was reintroduced in the European colonies and only abolished *de jure* and *de facto* around the mid-nineteenth century. The elimination of slavery in Europe was “one of the great landmarks in labor history” (Duby 1974, p. 40). This profound change—the early endogenous elimination of slavery—did not occur in many Muslim countries, where legal slavery remained until after World War II. Some Muslim countries abolished slavery as late as 1962, and the institution still exists *de facto* in various contemporary Muslim countries (Lewis 1990; Segal 2001).

Why did the Christian world lead the Muslim world in abolishing slavery? The reason concerns the distinct institutional complexes of the two civilizations. The historical roots of this distinction date back to the rise of Christianity within the Roman Empire. Since the Roman Empire had a unified code of law and a rather effective legal system, Christianity did not have to provide a code of law governing everyday life when creating its own communities of believers. Christianity developed as a religion of orthodoxy and proper beliefs; in earthly matters, Christians followed Roman law and later other secular laws. During the late medieval period, this legacy enabled the new European states to gradually reassert control over civil legal matters, including slavery.

Islam followed a very different process, in which Muhammad established both a religion and a political, economic, and social unit. Islam therefore had to provide and oblige adherents to follow the Islamic code of law, Sharia law. Like Judaism, therefore, Islam is a religion that regulates its adherents’ behavior in their everyday economic, political, and social lives.

The Christian and Islamic holy scriptures discuss behavior toward slaves, giving it moral legitimacy (see, e.g., Leviticus 25:46, Ephesians

6; Quran 16:71, 4:36, 30:28). But in each civilization, the institutions governing slavery were part of distinct institutional complexes. In the Christian world, laws governing slavery fell within the institutional complex, at the center of which were legal and political organizations. Given the European tradition of man-made law, abolishing slavery did not alter the central organization, beliefs, or norms of Christianity.

This was not true in the Islamic world, where slavery was part of an institutional complex at the center of which were beliefs regarding the holiness of religious law. The legal tradition in Islam considers law as “the moral status of an act in the eyes of God” while “assessing the moral status of human acts was the work of the [religious] jurists” (Crone 2004, p. 9). Sharia law recognized slavery; thus, abolishing it implied an action that contradicted a central internalized belief of Muslims—that the Sharia is a sacred law sanctioned by God. Abolishing slavery challenged the faith’s moral authority, the legal authority of the Sharia, and the stature and power of those responsible for administering it.¹⁷ A difficulty in abolishing slavery was that “from a Muslim point of view, to forbid what God permits is almost as great an offense as to permit what God forbids—and slavery was authorized and regulated by the holy law” (Lewis 1990, p. 78). The institutional elements relevant to slavery were central to Muslim religious beliefs.

Past institutional elements provide opportunities as well as constraints in the process of institutional change for able rule makers. Franklin D. Roosevelt insisted that the U.S. Social Security system be defined as insurance and not a welfare system. This was much more than semantic. Framing the issue in a way that linked the system to beliefs associated with the institution of insurance (the belief that one has the right to be paid after paying one’s premiums) was intentional. Roosevelt knew that this would render Social Security self-enforcing in a larger set of circumstances in the future (Romer 1996).

Effective rules also change cultural and social features, which, in turn, influence what other rules can be effectively enacted. Consider, for example, the case of premodern Venice, which, unlike Genoa, devised rules that reduced, over time, the political importance of clans and fostered beliefs in cooperation rather than confrontation. The history of Venice during its early days parallels Genoa’s. After an initial period of interclan cooperation, Venetian history was characterized by interclan rivalries over capturing the office of the Doge (Lane 1973; Norwich

1977). Originally the Doge was a Byzantine official, but shortly after Venice was established in 679, the post became that of an elected monarch. For the next few hundred years, clans fought in Venice for control of the Doge's post. As in Genoa, economic cooperation was hindered by the lack of an institution to contain interclan rivalry.

Changes around the Mediterranean increased the cost of these confrontations. Toward the end of the eleventh century, the decline of Byzantine naval power increased the gains to the Venetians, leading to the formation of a political institution enabling cooperation. As a response to this opportunity, they established a new self-enforcing institution. At its center was the belief that clans would join together to fight against any renegade clan that would attempt to gain political dominance over the city and its economic resources. This belief was sustained by a set of rules whose prescribed behavior was made self-enforcing by that belief. The rules limited the Doge's power to distribute economic and political rents, curtailed each clan's ability to influence the election of a Doge (or any other officer), established tight administrative control over gains from interclan political cooperation, and allocated rents fairly among all the important Venetian clans so that all had a share regardless of clan affiliation. This allocative rule therefore did not provide clans with incentives to increase their military strength and plan interclan military conflicts.

The belief that clans would join together to confront those that attempted to use military power to gain control over the city was made self-enforceable because each clan had a stake in the implementation of these rules. But these rules and the associated beliefs were also reinforcing: they provided clans with few incentives to invest their resources in fortifying their residences or instilling norms of clan loyalty in their members rather than loyalty to the city.

There was therefore a positive feedback from rules to culture. By weakening the clans and fostering a common Venetian identity, Venice's republican magistracy over time increased the range of situations in which it was self-enforcing. This institution also prevented the endogenous formation of a political faction among nonnoble elements of the city, the *popoli*, because the magistracy as an institution did not motivate clans to establish patronage networks that would have channeled rents from political control over Venice's overseas possessions to nonnoble clans.¹⁸

Similar interplay between state-mandated rules and cleavage structures operate in modern states (Greif and Laitin 2004). Rules reflect existing social structures and cultural beliefs, which, in turn, reproduce these structures. In newly independent Nigeria, which gained its independence in 1960, political parties were regionally based, and they catered to the needs and aspirations of the majority tribal groups in their regions. In the Western region, the Action Group catered to the interests of the dominant Yoruba population, and Yorubas largely associated themselves as supporters of that party. Within the Yoruba region, factions of the Action Group represented the interests of Yoruba's subtribes, associated with different ancestral cities. Similarly, the NPC, the party of the Northern Region, catered to Hausa interests, and the NCNC, the party of the Eastern Region, catered to Ibo interests. We can summarize the dominant cleavage structure of newly independent Nigeria as tribally based, with three principal groups dividing the political pie.

In Nigeria, political leaders present platforms and lists of candidates that reflect the interests of nationality constituencies, and voters tend to respond to symbols and messages that speak to them as members of a particular tribal or nationality group. This cleavage structure is sustained by beliefs that have been dubbed "everyday primordialism" (Fearon and Laitin 2000). Primordialism reflects the belief that ethnic or nationality differences are biologically established and ultimately more important than any other possible identification when it comes to social, political, or economic transactions. Primordial beliefs of this sort are hardly universal and were inherited from Nigeria's history. They were created and sustained under previous political structures. British colonialism ruled "indirectly" through tribal chiefs, who were paid by the British colonial state. These tribal chiefs were granted levels of authority they had rarely achieved in the precolonial period, and Nigerians had to petition through tribal authority structures to get a hearing from the British overrulers. Thus, colonialism played an important role in delineating tribal boundaries, clarifying tribal cleavages, and generating primordial beliefs.

Federal institutions that were built into the constitution ratified at the time of independence responded to the existing cleavages and beliefs. Political distributions were made based on formulae that returned federal funds to the original three regions. In 1967, the eastern region (whose leaders were opposed to the formula for the distribution

of newly gained oil revenues) attempted secession, but the region lost a bloody three-year war fought against federal forces. Subsequently, several minority tribes were given their own federal units (then called states). Each of the 12 states had a budget supported in large part by federally collected oil revenues. Since each state got a base allocation to cover the provision of public goods, smaller and smaller nationality groups, spurred by this incentive, demanded their own states. By 1999, there were 36 separate states, almost all dominated by a single tribal group.

While the above discussion emphasizes the importance of social structures and cultural beliefs, the same argument can be made regarding norms. Laws protecting labor evolved in Europe for various economic and political reasons following World War II. After prevailing for a long period, however, such laws began to be viewed by people not as a protection but as an entitlement. As the recent labor riots in France indicate, this drastically altered the ability of the state to change them by fiat. These laws became a right, not a privilege.

CONCLUDING COMMENTS

This chapter provides a sketch of a theory of action (Greif 1994, 2006) that accommodates both formal-rule and culturally driven behavior. In both cases, the same social factors—rules, beliefs, and norms that often manifest themselves as organizations (social structures)—generate regularities of behavior. This theory of action does not presuppose that behavior is formal-rule or culturally driven. It restricts the set of permissible behavior by requiring that each individual is guided, able, and motivated to adopt a certain behavior, given the social factors influencing his actions, while these social factors must be reproduced in a similar manner.

From this perspective, asking whether society or the state is more important in determining economic outcomes understates the complexity of studying the sources of economic behavior. Society and state intertwine in generating behavior. In particular, for the formal-rule approach to influence behavior, the state has to be sufficiently effective in formulating and disseminating rules and creating the self-enforcing

and reproducing beliefs, norms, and organizations that are required to motivate and enable the corresponding behavior. Yet, society—its cultural beliefs, norms, networks, and other social structures—influences a state's effectiveness in achieving this task. The ability to institute rule-driven behavior is affected by culturally driven behavior. The converse also holds: effective formal rules shape society.

It is sufficient to note that a functioning state is an outcome, and its ability to formulate rules depends on the cultural beliefs of various groups regarding not only their interests but also the goals and expected behavior of other groups. The difficulties in creating a functioning government in Iraq after the American occupation reveal the extent of this problem. Similarly, compliance with state-mandated rules depends on cultural beliefs and norms regarding sources of legitimacy, appropriate behavior, and obligations toward kin and members of other social structures, such as tribes and ethnic groups. The limits the modern state faces in ensuring compliance to formal rules in the absence of complementary beliefs and norms is well reflected in the large size of the informal sector and the prevalence of corruption in many modern economies.

Studying the many varieties of capitalism is an important line of research in comparative political economy and sociology (Hall and Soskice 2001). Focusing on developing countries, this research has successfully examined the distinct formal rules that enabled various types of capitalism to flourish. The argument presented above suggests that a complementary useful line of analysis would be to explore the common factors in these societies that render these formal rules relatively effective in influencing behavior. Such an investigation would be likely to enhance our understanding of why capitalism—in any form—has failed to emerge in so many societies, leaving their members in relative, if not absolute, poverty.

Notes

1. The discussion in this chapter draws on Greif (2006) and, more generally, on an approach to institutional analysis known as comparative and historical institutional analysis. For related discussions of this approach, see also Greif (1997, 1998) and Aoki (2001).
2. Barzel (1989), North (1990), Eggertsson (1990), Furubotn and Richter (1997), and Williamson (1985, 1996) are classic expositions in economics.
3. This approach is sociological in nature because it accommodates the four main

distinctions between the economic and the sociological views as summarized by Smelser and Swedberg (1994, pp. 4–8) in the *Handbook of Economic Sociology*. The socioeconomic perspective does not presuppose methodological individualism (namely, that actors' preferences can always be studied as uninfluenced by the actions of others); rather, it holds that the allocation of resources reflects only formal rationality adopted in neoclassical economics, that social structures and meaning are not important in constraining behavior, and that the economy is not an integral part of the society. As a matter of fact, the perspective adopted here—as is now so common in economics in general—accepts that preferences and rationality are socially constructed, that social structures and meaning are important, and that the economy is an integral part of the society and has to be studied accordingly.

4. In a sense, this analysis follows a well-established sociological tradition (e.g., Berger and Luckmann [1967]) by concentrating on the social construction of what each individual considers the environment in which he acts.
5. I use the term *system* to highlight the interrelations among an institution's various elements, but an institution that need not have all of the elements of the system (rules, beliefs, norms, and organizations).
6. The term *guide*, in this case, means to provide the knowledge required to take and coordinate a particular action. The term *motivate* here means to induce behavior based on external or intrinsic rewards and punishments.
7. Scott (1995, p. 33) advances a different, nonunitary notion of institutions, according to which institutions “consist of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behavior.” Chapter 5 clarifies the relationships between the two definitions.
8. Sociologists have explored this foundation (for reviews, see Wrong [1999] and Scott [1995]). Its importance has also been stressed by many prominent economists, including Akerlof (1984), Arrow (1981), Becker (1974), Hirshleifer (1985), Lal (1998), North (1990), Platteau (1994), and Samuelson (1993).
9. Psychologists define an intrinsically motivated act as one that is taken without any reward but the value of the action itself (see Frey [1997], pp. 13–14).
10. On norms and their transmission, see Cavalli-Sforza, Luca, and Feldman (1981); Davis (1949); and Witt (1986).
11. I use the term *norms* to note both the values specifying the preferred or the desirable (e.g., winning the game) and norms specifying the legitimate means of achieving these goals (e.g., winning by playing fair).
12. The classical game-theoretic framework, for example, assumes a complete model and common knowledge and focuses on equilibrium strategies played by highly rational individuals. This corresponds to a situation in which institutionalized rules that aggregate private knowledge and information provide shared cognition, information, and coordination. The analysis thus restricts the set of admissible rules, beliefs, and behavior to those in which each limitedly rational individual, responding to the cognitive, coordinative, and informational content of the institutionalized rules, follows the behavior expected of him. In situations in which an institution generates behavior, the knowledge and information that are compressed into the institutionalized rules enable and guide individuals, despite their limited

- perception, knowledge, and computational ability, to act in a manner that leads to behavior (and reflects the constraints on admissible beliefs and behavior) that the game-theoretic equilibrium analysis captures. Classical game theory can be usefully employed to study situations in which it is reasonable to assert that social rules were institutionalized. See Greif (2006, Chapter 5).
13. For an extensive recent discussion, see Greif (2006), Chapters 10–11 and the references therein.
 14. The focus here is only on the issue of endogenous institutional change due to self-reinforcement and undermining, but the above observations regarding the nature of institutions, institutionalized rules, and beliefs also enable addressing related issues—e.g., intentional, coordinated action by individuals to change others' beliefs, draw attention to change, coordinate actions by some to influence others' optimal behavior, and establish organizations to foster or halt reinforcement or undermining.
 15. On cultural beliefs in general, see, for example, Davis (1949, in particular pp. 52ff., 192ff.). Regarding their importance in influencing institutional change, see Greif (1994) and Nee and Ingram (1998).
 16. Even symbols, terms, and gestures associated with past institutions, such as “signing a contract” or “the crown,” influence institutional selection. They constitute commonly known external representations of encapsulated knowledge on which individuals condition their behavior. Sociologists have long emphasized the importance of a shared cultural understanding (script, cognition, or interpretive frames) in constraining the behavior that leads to new institutions by determining what actors can conceive (DiMaggio and Powell 1991; Dobbin 1994; Meyer and Rowan 1991; Scott 1995).
 17. I do not argue that the laws specified in the Sharia were static and immutable to change. This definitely was not the case. The argument is that different constraints and opportunities for legal changes exist in societies with and without religious law. More broadly, legal dynamics are distinct among systems in which the law has different normative contents and in which different decision makers influence legal development.
 18. This group had been extended several times to absorb emerging nonnoble families. The system therefore had the flexibility required for its perpetuation.

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