

Chapter 7 Institutional Trajectories: How Past Institutions Affect Current Ones

Societies face new situations when an institution that governed a transaction is no longer self-enforcing, when it is perceived to be losing its self-enforcing characteristics, or when technological, organizational, and other changes bring about new transactions. Do past institutions—perhaps even institutions that are no longer effective in influencing behavior—affect the direction of institutional change? If they do, why and how?

The intentionally created perspective on institutions, which often views them as rules, emphasizes that new institutions reflect the interests and inductive reasoning of economic or political agents. Evolutionary institutionalism emphasizes the importance of environmental — structural — forces and the lack of deductive reasoning. To explain the impact of past institutions, these perspectives commonly invoke as exogenous one set of institutions to explain subsequent ones. In studying economic institutions as rules, for example, it is common to study the formation of the rules while considering either political or informal - culturally determined - institutions as given. This position, however, amounts to pushing the question of institutional impact one step back.

In contrast, this chapter explores why and how the past, encapsulated in institutional elements, directs institutional change and leads societies to evolve along distinct institutional trajectories. Exploring the properties of the social elements that make up an institution is the central focus of this argument. These properties imply a *fundamental asymmetry* between institutional elements inherited from the past and technologically feasible alternatives. Because of fundamental asymmetry, beliefs, norms, and organizations inherited from the past influence subsequent institutions by constituting the default in new situations; they are part of the initial conditions in the processes that influence selection among alternative new institutions. This is the case even if these elements originally emerged as components of an institution that is no longer self-enforcing.

The fundamental asymmetry, as will be further articulated later, reflects that institutional elements are not only attributes of institutions but attributes of individuals and the social and cultural worlds they know and share. Institutional elements reside in individuals' memories,

constitute their cognitive models, are embodied in their preferences, and manifest themselves in organizations; they are what individuals bring with them when they face new situations. Institutional elements inherited from the past are the default in providing the micro-foundations of behavior in new situations; creating alternative, technologically feasible institutional elements requires action. History matters.

When considering the forces that shape institutional development, this historical-process perspective is less permissive than the intentionally created agency perspective in allowing agents to change institutions; agency (the pursuit of institutional change by goal-oriented actors) is limited by the shackles of history. At the same time, the historical-process perspective recognizes that 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 how to behave in new situations when intentionally pursuing institutional change, and when contemplating the development or adoption of institutional and organizational innovations. The perspective developed here is therefore more permissive than the evolutionary or other structural perspectives in allowing for intentional institutional change and recognizing the role of agency.

The historical-process perspective thus recognizes that history's influence on the direction of institutional change complements rather than substitutes the role of agency. This mitigates the analytical difficulties in studying new institutions as reflecting either historical forces or agency. History is central to the sociological approach to institutional analysis, which argues that culture provides a "tool kit" that facilitates the reconstitution of a society facing new situations (Swidler 1986). Social networks inherited from the past provide the foundations of new institutions (Granovetter 1985, 2002; Greif 1989), while past cognitive models shape the way new situations are perceived (DiMaggio and Powell 1991a). Yet history is littered with cultural, organizational, and cognitive models that ceased to influence behavior (see Thelen 1999). To be meaningful, the assertion that the past matters requires delineating its limitations. Without a discipline imposed by a deductive framework, purely historical analyses of institutional dynamics risk being ad hoc.

At the same time, the ability to study the direction of institutional change deductively while adopting an agency perspective is also limited. Game theory highlights the fact that in

situations central to institutional analysis—strategic repeated situations with a large action space—multiple equilibria, and hence institutions, usually exist (see Appendix A). We cannot satisfactorily limit the set of admissible institutions deductively by requiring that an institution be self-enforcing.

Recognizing the importance of the fundamental asymmetry and the role of agency in influencing the direction of institutional change, highlights a way to and the usefulness of combining historical and deductive analyses. It is conceptually sound and analytically useful to rely on *contextual refinement* in studying the direction of institutional change. The force of history is limited by recognizing that the new institution has to be self-enforcing. The set of admissible self-enforcing institutions is also limited, however, by relying on the knowledge of the context, specifically, knowledge of institutional elements inherited from the past. Such knowledge rules out possible yet contextually irrelevant institutions. Institutional elements inherited from the past constitute part of the initial conditions in the processes that lead to new institutions. History and theory discipline one another. The analysis is far less permissive (in allowing intertemporal links among institutions) than the standard historical analysis, and it is also far less permissive (in terms of the set of admissible institutions at each point in time) than the standard game-theoretic equilibrium analysis.

In presenting this argument, section 7.1 elaborates on the fundamental asymmetry between institutional elements inherited from the past and technologically feasible alternatives. Section 7.2 discusses the implications of this asymmetry on new institutions while sections 7.3 and 7.4 discuss the role of agency and institutional innovations respectively. Section 7.5 presents the contemporaneous implications of the fundamental asymmetry and illustrates them by considering the history of slavery in Europe and the Muslim worlds. Section 7.6 summarizes the argument and presents the concept of contextual refinement.

7.1 The Fundamental Asymmetry between Institutional Elements Inherited from the Past and Technologically Feasible Alternatives

In new situations, no institutionalized rules guide behavior, and forward-looking individuals have a limited ability to deduce how to behave. Individuals seek a cognitive framework, information,

normative guidance, and a way to anticipate what others may do to coordinate their behavior with their responses. In seeking these micro-foundations of behavior, individuals draw on institutional elements inherited from the past, even those that were part of institutions that are no longer self-enforcing. Past institutional elements are attributes of both institutions and of the social world individuals know, share, and remember. They reside in memories, constitute cognitive models, embody preferences, and constitute commonly known behavioral beliefs.

Alternative institutional elements can also provide these micro-foundations of behavior—new organizations or behavioral beliefs can coordinate behavior in new situations, for example—but past institutional elements are the default. Introducing other technologically feasible institutional elements and rendering them effective in new situations requires action: generating new knowledge, changing commonly known beliefs about what others can and will do, and replacing internalized beliefs and norms. There is therefore a fundamental asymmetry between a society's institutional heritage and alternative institutional elements. One reason for this asymmetry is that creating new institutional elements involves bargaining, coordination, search, and learning costs. Moreover, the results of such actions and the implied institutional change are likely to be uncertain, take time to transpire, and have unknown and uncertain welfare and distributive implications. Often such actions also imply the provision of a public good, by setting standards, providing a unified interpretation of past events, or establishing new organizations such as a court of law. Hence they are plagued with collective action, free-rider problems, and strategic manipulations. These transaction costs of institutional transition contribute to the asymmetry between institutional elements inherited from the past and alternatives.

The fundamental asymmetry between institutional elements inherited from the past and technologically feasible alternatives reflects more than just the cost of introducing alternatives. It reflects the cognitive, informational, coordinative, and normative contents of past institutional elements. These contents, in turn, result from poorly understood and often unintentional processes of socialization, internalization, learning, and experimentation, as well as the acquisition and diffusion of capacities and knowledge by individuals and organizations. Hence past institutional elements constitute what individuals believe about their environment, what they

believe others believe about what action will be taken in various circumstances, and what they consider morally appropriate. Past institutional elements represent what is expected, and what is perceived as true and morally correct.

The rules against which individuals play embody a cognitive model of and information about the nature and the details of various observable and unobservable aspects of the situation, such as the physical environment, discount factors, attitudes toward risk, and the objectives of various decision makers. New, alternative rules of behavior are devoid of such content (see Chapter 5). Developing an alternative model—a new set of internalized beliefs—and gaining new information is a lengthy, costly, and uncertain endeavor. Even more fundamental is the fact that as long as individuals hold a particular model to be true, they will not attempt to develop an alternative one but will try to use the existing model—perhaps slightly modified—to direct behavior in a new situation. For atheists, for example, contract enforcement institutions based on the fear of God are not viable.

The incentives to develop a new model (internalized beliefs) are further dulled by the common-knowledge feature of existing models. Even if one recognizes the existence of a better model, as long as others follow the behavioral instructions embodied in a different one, the best response may be to follow that model as well.¹ Existing institutional elements constitute the environment within which new institutions will establish themselves, because they represent the domain within which individuals can make decisions.

Cognitive dissonance—the mental conflict that occurs when beliefs or assumptions are contradicted by new information—further contributes to the asymmetry between past and alternative mental models (internalized beliefs). To avoid mental conflicts and preserve order in one's concept of the world, an individual uses various defensive measures, such as confirmatory bias and avoidance of conflicting evidence.² Past institutions and institutional elements provide

¹ The conditions under which this is true have not been worked out. Clearly, having a different model can leave an individual better off. Kuran (1995) examines the conditions under which others' expected negative (social or coercive) response motivates people to refrain from revealing their true model.

² I am not aware of an analysis of the factors influencing when people will or will not use such defensive measures.

much of what individuals wish to preserve by constituting, generating, and maintaining internalized norms, beliefs, and their related behavior. Responses to the demands of a new situation are characterized by an attempt to retain the beliefs and norms constituting the institutional elements inherited from the past.

Consider, for example, the experience of the Jewish people after the destruction of the First Temple and their exile in the sixth century B.C.E. How could the Jews reconcile such a military defeat with their belief in an almighty God who had promised to defend his followers? To eliminate cognitive dissonance, the biblical prophecies argued that the defeat had been a punishment for the Jews' failure to follow God's ordinances. Reality was explained in a manner consistent with the internalized beliefs inherited from the past. Furthermore, when most people are expected to do so, each individual is less motivated to rely on the new information.

The fundamental asymmetry of behavioral beliefs reflects the limited ability to rely on deduction in guiding behavior in recurrent strategic situations. As game theory highlights, in such situations there are a multiplicity of self-enforcing behavior. People use behavioral beliefs inherited from the past to direct their actions and to predict others' behavior. They rely on past behavioral beliefs because there is a fundamental asymmetry between institutional elements inherited from the past and alternative ones. Those inherited from the past are commonly known: each individual knows that everyone else knows them. Changing what everyone believes everyone else believes is inherently difficult.

The fundamental asymmetry of norms inherited from the past reflects the fact that once internalized, they constitute a part of individuals' identities or concepts of themselves that is transferred to a new situation. A norm constitutes part of one's identity that influences his or her behavior in new situations. While preferences in economics are defined over outcomes (in such forms as goods and services), norms differentiate among such outcomes by the process of reaching them. Norms imply that the welfare an individual derives from one dollar may well depend on whether it was stolen or earned. Changing one's identity or concept of oneself is psychologically costly. Eradicating existing norms and creating new ones requires time-

consuming processes, such as socialization, indoctrination, and observation of others' behavior as well as rationalization of why the old norms are not applicable in the new situation.³

Asymmetry also exists between past organizations and alternative ones. The rules, beliefs, and norms that govern behavior among the organization's members and between them and nonmembers are part of their historical heritage. Furthermore, organizations have a dual nature, as both institutions and institutional elements. (Chapters 2 and 5). They are institutions with respect to transactions among their constituting members and possibly between them and outsiders (e.g., transactions among police officers and transactions between the police and other members of the society). Organizations are components of institutions generating behavior in other transactions (e.g., the police alter the set of self-enforcing beliefs in transactions among criminals and law-abiding citizens). Because organizations are also institutions, they do not instantly cease to be self-enforcing, even when the institution in which they were elements is no longer self-enforcing. It is often useful to think of this argument as follows: an organization encompasses self-enforcing behavior and beliefs in a subgame, while the institution to which it belongs encompasses behavior and beliefs in the entire game.

Organizations inherited from the past have various capacities that they acquired through their operation: routines, information, and other assets, such as legitimacy; intraorganizational personal relationships and communication codes; information-processing capacities; technological know-how; and human, social, and physical capital.⁴ These assets increase their ability to accomplish various tasks. Hence once an organization begins to operate, positive

³ While intuitive, this argument does not explain which past internalized beliefs and norms will be effective in a particular new situation. Should, for example, the internalized norm of not stealing from one's neighbor also apply to a traveling merchant?

⁴ The importance of such assets in providing initial conditions in processes that lead to a new institution has been recognized in economics, political science, and sociology. See Greif (1989); North (1990); Rothstein (1996); and Granovetter (1985, 2002). Greif (1994a); Banerjee and Newman (1993); and Galor and Zeira (1993) provide some explicit analyses of such dynamics. The accumulation of such assets can also render a new institution possible in given situation. As notaries in *ancient regime* France gathered sufficient information over time, they created new contract enforcement and matching institutions (P.Hoffman, Postel-Vinay, and Rosenthal 2000). Modern credit bureaus exhibit a similar process (Klein 1996). Legitimacy is often acquired gradually as past successes of a leader or an organization in influencing behavior leads others to expect such success in the future.

feedback contributes to the asymmetry between it and alternative organizations (David 1994). Organizations inherited from the past are also in a position to advance their interests in processes that lead to new institutions. Organizations that do not yet exist have neither voice nor the ability to take action.

The extent of the fundamental asymmetry depends on institutional elements inherited from the past, which determine the transaction costs of institutional transition. E.g., in a theocracy, attempts to change the rules associated with the religious dogma in a non-institutionalized manner can be psychologically costly and may imply social, economic, and coercive sanctions. In an effective democracy, individuals have much less to lose from forming lobbies that attempt to change various rules governing economic behavior. Indeed, effective democracies are geared toward facilitating changes. The transaction costs of institutional transition—the cost to an individual of taking actions motivated by such considerations as efficiency, greed, or fairness and aimed at introducing new institutional elements—is a function of institutional elements inherited from the past.⁵

To sum: that actors play against rules that encompass cognition and knowledge, search for coordination drawing on the past, and seek consistency of behavior with internalized norms and beliefs implies a fundamental asymmetry between institutional elements inherited from the past and alternative ones. The extent of this asymmetry is a function of the institutional elements inherited from the past.

7.2 The Implications of the Fundamental Asymmetry

The fundamental asymmetry implies that institutional elements inherited from the past are part of the initial conditions of processes that lead to new institutions. Processes leading to new institutions reflect agents' responses to the cognitive, informational, coordinative, and normative content of past institutional elements. Institutional elements inherited from the past, rather than technologically feasible alternatives, provide the means to cognitively order new situations,

⁵ The beliefs and norms governing the standard of proof of one's argument regarding what is correct and appropriate are particularly important (Mokyr 2002). In the late medieval period, Europeans began adopting beliefs about the appropriateness of scientific (analytical and empirical) standards of proof. During this period, the Muslim world emphasized relying on statements by past scholars.

obtain information, coordinate behavior, identify one's interests and receive normative guidance. Institutional heritage matters and new institutions bear its imprint.

The fundamental asymmetry manifests itself through four implications on the relationships between past institutional elements and new institutions. As further discussed in this section, the first implication is that in response to institutional failure, new institutions are not created *de novo* but emerge or are established by marginally altering elements inherited from the past. New institutions reflect this *institutional refinement*. Other implications of the fundamental asymmetry are the *environmental, coordination, and inclusive* effects. Institutions more compatible with the environment spanned by existing ones, those reflecting the coordinating influence of past institutional elements and incorporating institutional elements inherited from the past, are more likely to result.

Institutional change is characterized by institutional refinement, that is, attempts to reinforce failing institutions rather than create new ones. Such reinforcement takes the form of marginally altering an institutions' elements or adding new ones to render it self-enforcing. The failure of an institution that governs a particular transaction to deliver an expected outcome will usually also not lead to a completely new institution. The response is to build on the knowledge that the failure generated and mitigate the institution's deficiencies by reinforcing it. Reinforcement also takes place when an institution is recognized as being bound to fail or having undesired limitations or implications. Reinforcement, rather than creating a new institution, transpires when and because institutional failure and expected failure highlight the difficulties of effectively devising institutions due to limited cognition, knowledge, information, and coordination. More generally, the fundamental asymmetry implies that an institution that emerges or is established in new situations is more likely to be a refinement of an existing institution or reconstituting existing institutional elements.

The history of the Hanseatic League (Chapter 4) reflects such institutional refinement. To prevent rulers from abusing their rights, merchants needed to coordinate a response. Initially, such coordination among German merchants was provided by a local organization that included only the merchants who were present at the center where the abuse occurred. The growth of trade that this institution enabled, however, exposed its limitations: it could not support trade

expansion beyond a relatively low level and hence abuses continued to occur. In response, the institution was reinforced by shifting coordination to an intercity organization, the Hansa, which coordinated actions by merchants in a particular trade center and other merchants. The knowledge generated by an existing institution led to its adaptive refinement.⁶

Intentional, wholesale institutional change tends to follow an institutional crisis when the outcomes associated with past institutions are perceived to be so deficient that, despite the fundamental asymmetry, comprehensive change is initiated. Such comprehensive changes are more likely to be attempted if there is a “role model,” a known alternative institution with better outcomes whose operation reduces some of the fundamental asymmetry.⁷ The major military defeats of the Ottoman Empire in the modern period by Western powers and the economic and technological decline it reflected motivated comprehensive institutional reform. Not surprisingly, the reforms tried to imitate many of the institutions that prevailed in the West.

Institutions inherited from the past exert an *environmental effect* on new institutions by constituting part of the exogenous, albeit socially constructed, rules of the game within which interactions leading to new institutions occur. This is clearly the case with respect to institutions exogenous to *all* the decision makers relevant to the process leading to the new institution:⁸ I considered the institutions that enabled the emperor to mobilize an army against Genoa as exogenous because they were beyond the Genoese control.

Some institutions endogenous to the relevant decision makers also exert an environmental effect. One reason why this is the case is that these institutions are exogenous to each decision maker. Because they constitute an equilibrium and due to the fundamental asymmetry, each agent finds it optimal to follow the behavior expected of him and expects that others will do the same.

⁶ The institutions-as-rules approach (discussed in Chapter 1) emphasizes the important point that those who lose from an institutional failure attempt to reinstitute it by trying to retain the *outcomes* associated with past institutions. The argument here is different. It regards retaining the *form* (institutional elements) inherited from the past in a new institution.

⁷ At the same time, the fundamental asymmetry implies that adopting such institutions is likely to be difficult without adjustment to local conditions (see Chapter 12).

⁸ North (1990) refers to institutions within which others establish themselves as the *institutional environment*.

In addition, in noninstitutionalized situations, decisions regarding behavior have to be made without the assistance of institutionalized behavioral rules and the cognitive model and information they embody, aggregate, and disseminate. In these situations, a decision is facilitated by economizing on scarce cognitive resources (Simon 1987 [1957]). This is achieved by taking existing institutions as given, which reduces the complexity of the problem and restricts it to a more manageable size. Taking existing institutions as given also reduces the extent of coordination required to lead to new institutionalized behavior.

Although this assertion is probably not controversial, it is difficult to state analytically which institutions should be considered exogenous in a particular study. If, however, the environmental effect reflects attempts to reduce the cognitive and coordinative loads of decision making in a new situation, then the farther away a transaction is from the central transaction under consideration, the more the interacting individuals are likely to take the related institutions as given. The analytical problem is how to measure the distance between transactions. Nevertheless, common sense can take us a long way toward recognizing institutions appropriately taken as exogenous. In studying the transition to the *podesteria*, for example, I considered as exogenous institutions that were endogenous to the Genoese yet remote from political transactions, such as their language and institutions governing marriage. The environmental effect implies that new institutions establish themselves within the structure provided by existing ones.

The *coordination effect* reflects the impact of past institutional elements on selection among the multiple institutions that can be self-enforcing given this structure. In seeking to coordinate their behavior with that of others in the new situation, individuals seek guidance in past institutional elements, such as formal coordinating organizations, past behavioral rules, and behavioral beliefs. In Genoa, the consulate—an institutional element—coordinated the transition to the *podesteria*. The governing bodies of various cities coordinated in establishing the Hanseatic League. I show in Chapter 9 how distinct culturally determined behavioral beliefs inherited from the past coordinated on different institutions among two groups of medieval traders. All else being equal, new institutions are more likely to be those that reflect the coordinating impact of past institutional elements.

The environmental and coordination effects imply that, all else being equal, new institutions are likely to complement those that already exist. One institution *complements* another if it extends the set of parameters in which the other is self-enforcing or if the benefits to those who can coordinate on that institution are larger when the other institution exists.⁹

The Maghribis' coalition was complemented by the institutions that provided secure property rights created by the Fatimids Caliphate, which was interested in increasing revenues within the empire. The implied increase in the expected value of trade increased the net present value of being honest to a Maghribi trader (Chapter 3). Clans restricted the set of parameters in which democracy could have been self-enforcing in Genoa. (Chapters 6 and 8). The community responsibility system extended the set of parameters for which the *podesteria* was self-enforcing (see Chapter 10). Under that institution, a member of a community present in another's territory was held liable for contractual default by any member of his commune against a member of the local commune. Every Genoese traveling abroad could have been held liable for the failure by the Genoese commune to pay the *podestà* at the end of his term. This increased Genoa's ability to commit to pay a *podestà*.

All else being equal, a new institution is more likely to include institutional elements that were crystallized in the past than those that were not. This *inclusion effect* reflects the fundamental asymmetry and people's response to it. In Genoa the inclusion effect manifested itself by including the same norms, beliefs, and organizations in the institutional foundations of the state under the consulate and the *podesteria*. As discussed in Chapter 8, the *podesteria* incorporated the existing clan structure, norms justifying the use of force to achieve political aims, and the belief that one clan would challenge another if the appropriate opportunity emerged. These institutional elements were part of the initial conditions in the process leading to

⁹ Aoki (1994, 2001) and Okazaki and Okuno-Fujiwara (1998) present a related concept of institutional complementarities. Building on Milgrom, Qian, and Roberts (1991), this concept conditions complementarities on supermodularity. Roughly speaking, payoffs from a particular equilibrium behavior in one game increase because a particular equilibrium behavior is followed in another game. For various empirical analyses, see Greif (1994a, 1996a, 1998a); Baliga and Polak (2004); Moriguchi (1998); Yang (2002); and Pagano and Rossi (2002).

the new institutions—as part of the rules of the game and beliefs in it—and the resulting institution incorporated them.

Like the coordination effect, the inclusion effect influences selection among alternative self-enforcing institutions. Although conceptually distinct, at times the two effects overlap. Past behavioral beliefs, for example, can coordinate on new behavior *and* become an integral part of the resulting new institution. The relationships between the consulate system and the *podesteria* in Genoa, discussed in Chapters 6 and 8, reflect this overlap. An integral part of Genoa’s political foundations under the consulate were the cultural beliefs that each clan would attack the other if the opportunity arose. These beliefs coordinated on expected behavior under the new institution, which included the *podestà* and became an element in the resulting institution.¹⁰ The distinction between the coordinating and inclusion effects is nevertheless conceptually beneficial, as some institutional elements coordinate on new institutions without becoming part of them. The Genoese consulate was an organization that coordinated on the *podesteria* system but did not become a part of it.

7.3 Agency and History

The fundamental asymmetry implies that institutional elements inherited from the past are part of the initial conditions of processes that lead to new institutions. These effects reflect agents’ responses to the cognitive, informational, coordinative and normative challenge of choosing behavior, through reasoning or by default. The influence of past institutional elements on the trajectory of institutional change is therefore intermediated through agents’ responses to the opportunities and constraints these elements entail.

Indeed, the influence of past institutional elements implies that agents can have a larger impact on institutional selection than otherwise would have been the case. Institutional elements inherited from the past provide them with common cognition, shared beliefs, similar norms and

¹⁰ Chapter 9 presents an elaborated example of this overlap. It discusses how cultural factors inherited from the past led to cultural beliefs associated with a particular self-enforcing behavior in a new situation.

the organizations required to influence institutional selection.¹¹ Furthermore, the role of institutional entrepreneurs in influencing institutional selection is facilitated, because new institutions do not require a wholesale systemic change. They can be created by changing, introducing, or manipulating past institutional elements.

Consider first the case in which the past seemingly exerts the least influence on new institutions, namely, the case in which there is an institutionalized way to reach a new institution. By an institutionalized way to reach a new institution, I mean that there is a system of institutionalized rules, beliefs, norms, and organizations regarding how to reach a new institutional equilibrium. In particular, there is a social entity—a leader or an organization for collective decision making—that sets the rules to guide behavior in the new situation. For this guidance to be effective in leading to new institutionalized behavior, for that entity to have power, three conditions must hold. First, the announcer has to have the legitimacy to convince a sufficiently large number of people to believe that others will follow the announcement or the ability to render the announced behavior a best response of those who are supposed to follow it.¹² Second, the announcer has to have the organizational capabilities to disseminate the rules and render them common knowledge. Third, the rules must specify self-enforcing behavior.

Because of the fundamental asymmetry, the beliefs, norms, and organizations inherited from the past are those that confer legitimacy and imply power; determine the ability to disseminate rules; and, by constituting part of the rules of the game and coordination devices in them, influence whether a particular behavior is self-enforcing. They determine who has the

¹¹ 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 (Zhang 1997) 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 (see Zucker 1983, 1991; Meyer and Rowen 1991; DiMaggio and Powell 1991a; Dobbin 1994; and Scott 1995).

¹²On legitimacy, see section 5.4. Power reflects institutional hierarchy (see section 2.1) in which a particular institutionalized behavior can be dictated. There is a social entity with the ability to make this behavior the best response of those whose behavior the institution influences.

ability to coordinate on new institutions, in what environment, and to what extent. The resulting institutions therefore reflect the coordination, environmental, and inclusion effects.

Consider, for example, the transition to the *podesteria*, which was coordinated by the consulate (although, as I discuss further in Chapter 8, it also reflected the intervention of the emperor). The consulate had the power to effect the transition because it was a legitimately elected body and, more important, its members were the representatives of Genoa's leading clans. It also had the formal organizational capacity, developed when it governed the city, to inform the Genoese of the transition. The new institution reflected the coordinating effect of institutional elements inherited from the past.

The *podesteria* also reflected the constraints the consuls faced in the form of institutional elements inherited from the past. These constraints influenced the set of self-enforcing institutions on which the consulate could coordinate. Specifically, the consuls were constrained in their choices by the existence of clans, their internalized norms, and their behavioral beliefs. The set of institutions on which the consulate could coordinate was restricted to those incorporating these institutional elements.

In modern societies, institutional elements inherited from the past similarly entail constraints and provide opportunities when new institutions are selected in an institutionalized way. The failure of the prohibition of alcohol in the United States between 1920 and 1933 reflected more than the love of drink. It reflected beliefs that individuals had the right to consume alcohol and that the government had no legitimacy in regulating such consumption. The same prohibition is much more effective in some contemporary Muslim countries, in which different beliefs and norms prevail.

Past institutional elements provide opportunities as well as constraints in the process of institutional change that able coordinators take advantage of. Franklin D. Roosevelt's insistence that the U.S. Social Security system be defined as an insurance and not a welfare system involved more than semantics. 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 (see Romer 1996).

The demand for coordination in new situations can lead to the development of new coordinating organizations, but these new organizations often draw on past ones and the associated beliefs and capacities. The need for better coordination among actual and potential merchants in foreign lands made it beneficial to create the Hanseatic League. The actions of institutional entrepreneurs, the mercantile elite who governed German cities, led to the establishment of an assembly—a diet—of the cities’ members in the Hanseatic League. The diet emerged through a process that built on institutional elements inherited from the past, specifically, the institutions of self-governance in the German cities. Drawing on organizations and associated beliefs inherited from the past, agents engaged in actions that led to new coordinating organization. It therefore reflected the coordination and inclusion effects. The diet was made up of representatives of the cities; the beliefs and organizational capacity rendering these cities’ self-governance effective also served the league.

Institutional entrepreneurs who attempt to coordinate on new institutions also operate outside the institutionalized process for selecting new institutions. Indeed, some of the most dramatic and important institutional changes throughout history have been brought about by leaders, prophets, and visionaries who were successful in creating new institutions without relying on institutionalized means to do so. Indeed, the changes they brought about were revolutionary exactly because they brought them about without relying on the existing institutionalized means for creating new institutions. Their choice of actions was nevertheless influenced by the constraints imposed and the opportunities afforded by past institutional elements. These institutional entrepreneurs relied on institutional elements inherited from the past to mobilize resources, predict responses to their actions, frame the new situation, and influence what individuals considered to be their interest or the morally appropriate response.

As an institutional entrepreneur, Muhammad established a new religion and polity without relying on an existing institutionalized way of creating new institutions. He was nevertheless constrained by and took advantage of existing institutional elements and their implications. Consider the case of Mecca, which before the rise of Islam had already been a

center of commercially profitable religious pilgrimage focusing on the Kaaba.¹³ Beliefs about the religious importance of such a pilgrimage and the Kaaba were later integrated into the Muslim system of beliefs and it is toward the Kaaba that Muslims face in their prayers. Not contradicting the behavioral manifestations of previous beliefs may have facilitated the propagation of the new system of beliefs. It also alleviated the fear by Mecca's commercial elite that the new religion threatened its prosperity (B. Lewis 1991). The ability of institutional entrepreneurs to coordinate on a particular outcome relies on manipulating past institutional elements even if they do not rely on institutional ways to reach a new situation. Hence, even new institutions that emerge in such 'revolutionary' ways, often include past institutional elements.¹⁴

In the absence of a coordinated response, the process of selecting among possible institutions is a spontaneous, individualistic one that reflects the combined impact of the actions of many individuals. In this case as well, institutional elements inherited from the past provide opportunities and constraints, which manifest themselves in the inclusion and coordination effects.

Annex 7.1 provides an example in which economic agents, in an uncoordinated manner, acquired membership in existing organizations, thereby enabling new behavioral beliefs to be self-enforcing and leading to a new contract enforcement institution. It examines the case of U.S. traders in Mexican California, who intentionally integrated into local communities, enabling them to trigger social sanctions against community members who cheated them.¹⁵ These traders retained their affiliation with a reputation-based economic institution that enabled exchange

¹³ The Kaaba (*cube* in Arabic), is the central, cubic, stone structure, covered by a black cloth, within the Great Mosque in Mecca, Saudi Arabia. The sacred nature of the site predates Islam and pre-Islamic Meccans used it as a central shrine housing their many idols. Also known as the House of God, it is the center of the circumambulations performed during the *hajj* (the pilgrimage to Mecca). The circumambulations also have a pre-Islamic origin.

¹⁴ In advocating passive resistance in India's fight for independence, Mohandas Gandhi took advantage of the predictability of responses that past institutions entailed. His strategy built on institutional elements inherited from the past, namely, the internalized norms of the British regarding the appropriate coercive response to civil resistance. Bates et al. (1998) argue that one cannot understand responses to violent political actions without understanding the historically determined meaning of the object under attack.

¹⁵ This discussion builds on Langum (1987) and Clay (1997).

among long-distance traders from the United State who operated in Mexico and beyond. The local U.S. traders became intermediaries in credit relationships between community members and the long-distance U.S. traders. They rendered effective a new, two-tier contract enforcement institution that supported exchange among the local population and the long-distance traders from the United States. A U.S. long-distance trader could lend to a member of the local community holding that, in case of need, the local U.S. trader would be able to recover the debt. The local U.S. trader was able to commit to provide this agency service to the long-distance trader, because cheating entailed losing his reputation among the long-distance traders.

In uncoordinated processes leading to new institutions, past institutionalized norms and beliefs provide individuals with a means of forming expectations about others' behavior and hence deciding on their own behavior. When a new situation is similar (by whatever criteria) to an old situation, individuals expect that others will behave in the new situation as they did in the old one. Self-enforcing beliefs formed in one context constitute a *focal point* (Schelling 1960) that coordinates behavior in a new one.

7.4 Knowledge, Institutional Innovations, and the Direction of Institutional Change

Different institutions generate different observable outcomes and hence different knowledge, implying that institutional learning is local in the sense of being specific to that institution. The implied local knowledge influences the direction of institutional change by shaping perceptions about possibilities and interest.¹⁶ The failure of the Genoese consular system in a civil war in 1164 revealed its fragility in the absence of an external threat. Despite an enhanced external threat, in 1194 the clan that had lost the civil war refused to cooperate under the consular system.

Different institutions also provide different incentives for developing and adopting various contractual forms, ways to organize information, and organizations. These distinct innovations influence the subsequently possible set of self-enforcing institutions and other outcomes. The reputation-based institution that governed agency relationships among the Maghribis implied that per venture accounting was sufficient, as it enabled a merchant to

¹⁶ The literature has emphasized the importance of knowledge that institutions imply about the activity (e.g., piracy or farming) it generates (see North 1990).

compare his agent's report on a venture with information obtained from other sources. In contrast, in Venice the state gathered the information required to monitor agents (Gonzalez de Lara 2002). As merchants did not have to organize their information on a per-venture basis, they were better motivated to devise an accounting system that reflected their overall financial situation. The result was the invention of double-entry bookkeeping (or the Venetian system, as it was known at the time).

The separation between ownership and control in medieval merchant and craft guilds led to the invention of auditing and the creation of the profession of external auditors (Watts and Zimmermann 1983.) Double-entry bookkeeping and auditing played important roles in the eventual rise of the modern business corporation, in which ownership is separated from control because these procedures enable owners and investors to better evaluate the performance of managers and firms.

The impact of institutional elements on institutional innovations and on the adoption of such innovations is more subtle. Institutional elements affect organizational, contractual, and procedural innovations by shaping expectations regarding the implications of pursuing them. Past institutional elements influence what one expects will happen in new situations brought about by adopting such innovations. A necessary condition for organizational change is that those who are able to initiate it expect to gain from it. Their expectations depend on existing institutional elements—particularly culturally determined behavioral beliefs—that enable them to form these expectations. Different institutional elements thus lead to different trajectories of organizational development.

The distinctiveness of each trajectory is reinforced by the process of modifying and refining "microinventions," which follow an "organizational macroinvention."¹⁷ Diverse paths of organizational development, in turn, further affect the historical process of equilibrium selection. Once a specific organization is introduced, it influences the rules of historically subsequent games and hence the resulting institutions.

¹⁷ Mokyr (1990) introduced these terms with respect to technological change.

In Chapter 9, I present an extensive analysis of this influence, arguing that the collective punishments practiced by the Maghribis entailed disincentives to invent and adopt institutions to support impersonal exchange. This was not the case among Genoese merchants, among whom a bilateral reputation mechanism supported by the legal system governed agency relationships.

7.5 Institutional Complexes: The Contemporaneous Implications of Institutional Dynamics

The intertemporal relationships among institutions that the fundamental asymmetry implies affect the contemporaneous (contemporary) relationships among institutions. The environmental, coordination, and inclusion effects imply that institutions will cluster in *institutional complexes*. Within a complex, institutions complement one another, reflect the influences of the same coordinating factors, or share the same institutional elements. These synchronic relationships among institutions further influence selection among alternative institutions in new situations, as well as the timing of institutional change.

Institutional complexes differ from each other along various dimensions such as the following: which institutions are grouped within the same complex, what is the degree of institutional complementarities within it, to what extent is a particular element shared by many institutions, whether coordination is based on explicit decision-making organizations, what combination of reward and punishment provides motivation, and what are the objectives of those who administer it. The details of a society's institutional complexes affect the transaction costs of institutional transitions.

To see the relationships among a complex's details and the cost of institutional change, consider one of the most profound institutional changes that occurred during the late medieval period: the de facto elimination of slavery within Europe. The practice was, of course, later reintroduced in the European colonies, only to be 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). It may have been a major factor contributing to the changing long-run trend of European economic growth: while growth was slow during the millennium of Roman control and negative during the five hundred years that followed Rome's collapse, it rose during the following millennium, which began with the decline of slavery. The change may

suggest that slavery provides worse incentives than freer labor and enterprise to produce and innovate productivity-enhancing technology. Indeed, the origin of "labor-saving power technology, which has been one of the distinctive characteristics of the Occident in modern times," began in the late medieval period (White 1964, p. 79; see also Mokyr 1990).

This profound change—the early endogenous elimination of slavery—did not occur in Muslim countries, many of which retained legal slavery 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 (B. Lewis 1990; R. Segal 2001).

Why was the Christian world ahead of the Muslim in abolishing slavery? The explanation has to do with the two civilizations' distinct institutional complexes. The historical root of this distinction dates 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 in creating 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 reassert control gradually over civil legal matters, including slavery.

Islam rose through a very different process, in which Muhammad established both a religion and a political, economic, and social unit. Islam therefore had to provide, and emphasize the obligation of adherents to follow, the Islamic code of law, the *Shari'a*. Like Judaism, therefore, Islam is a religion that regulates its adherents' behavior in their everyday, economic, political, and social life.

The holy scriptures of both Christianity and Islam discuss behavior toward slaves, thereby 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 organization, beliefs, or norms central to Christianity.

This was not true in the Islamic world, where slavery was part of an institutional complex at the center of which were beliefs in 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). The *Shari'a* recognized slavery; abolishing it thus implied an action that contradicted a central internalized belief of Muslims—that the *Shari'a* is a sacred law sanctioned by God. Abolishing slavery challenged the faith’s moral authority, the legal authority of the *Shari'a*, and the stature and power of those responsible for administering it.¹⁸ 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.” (B. Lewis 1990, p. 78). The institutional elements relevant to slavery were central to Muslim religious beliefs.

Institutions within a complex reinforce one another, rendering institutional change more difficult than otherwise would be the case. Institution A reinforces institution B if A implies changes in quasi-parameters that make B self-enforcing in a larger set of parameters. Because an institution that is undermined by another will either vanish or require further reinforcement, institutions within an institutional complex will eventually be the ones that are mutually (weakly) self-reinforcing. It is therefore more difficult to replace one institution in the complex, if such replacement requires undermining an institutional element common to other institutions in that complex, because these institutions will reinforce this element.¹⁹

Institutional complementarities also increase the cost of institutional transition. These complementarities imply that one institution extends the set of parameters in which the other is self-enforcing or that the benefits to those whose actions lead to that institution are larger when the other institution exists. In the case of the merchant guild, the institution that generated

¹⁸ I do not argue here that the laws specified in the *shari'a* 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 different decision makers influence legal development.

¹⁹ For the appropriate analytical framework, see Milgrom and Roberts (1990); Milgrom, et.al. (1991); Milgrom and Shannon (1994); and Topiks (1998).

behavior in the ruler-merchant transaction was complemented by the institutions that governed the relationships among the merchants themselves. Such complementarities imply that changing one institution renders the other self-enforcing in a smaller set of situations or provides fewer benefits to those whose actions led to this institution to begin with. Intentionally changing an institution will therefore be more challenging.

The details of a society's institutional complex also influence the nature of institutional change, that is, the nature of the processes leading to new institutions. Institutional change can be gradual or sudden, local (encompassing a few institutions) or comprehensive (encompassing many); it can reflect intentional and explicit decision making or spontaneous evolution.

To exemplify the relationships between the details of an institutional complex and the nature of institutional change, consider the case in which an institutional complex is characterized by mutual reinforcement and institutional complementarities. Mutual reinforcement implies that institutional change is not likely to occur often, but complementarities imply that once one institution is no longer self-enforcing, many other complementary institutions are likely to cease being self-enforcing as well. Institutional change is thus less likely to occur, but when it does, it is likely to be comprehensive and include many institutions.

The same holds when many institutions in a society share the same institutional element. A change in this fundamental element implies a comprehensive institutional change that will affect many institutions. Once it is no longer self-enforcing, the resulting institutional change will be "revolutionary": it will rarely happen, but when it does, it is likely to be comprehensive, influencing many institutions and reflecting actions by a large number of people. If an institutional complex is characterized by relatively weak interrelatedness among various institutions, institutional change is likely to be gradual and affect only a few institutions at a time.

Because once particular institutions prevail they influence subsequent institutions, the sequence in which institutions established themselves is significant. Particularly important in directing subsequent institutional developments are periods or events when an institution or an institutional element establishes itself and gives rise later to an institutional complex.²⁰ The

²⁰ This idea is closely related to that of *critical moment* in Historical Institutionalism (see Collier and Collier 1991; Pierson and Skocpol 2002). Collier and Collier define *critical moments* as "major

adoption of the Roman legal tradition in Europe and of the *Shari'a* in the Muslim world were both such times.²¹ These distinct legal traditions influenced the subsequent development of commercial and political institutions (see, e.g., Kuran 2004 and chapter 10).

7.6 Concluding Comments

What are the implications of the arguments made here regarding the way we should study the dynamic of endogenous institutions? What more should we learn to further our understanding of the impact of past institutions on new ones? After summarizing the main assertions made in this chapter, this conclusion turns to address these two questions.

7.6.1 Institutional Trajectories and the Influence of the Past

The past, encapsulated in institutional elements, leads societies to evolve along distinct institutional trajectories. The details of new institutions and the capacity of institutions to change are functions of history, because there is a fundamental asymmetry between institutional elements inherited from the past and technologically feasible alternatives. Institutional elements inherited from the past provide and reflect what is understood, what is expected, and what is conceived to be morally appropriate. As such, these elements, although components of institutions, reside in individuals and groups. They are embodied in preferences and memory and provide shared cognition and beliefs. Even elements that were part of an institution that is no longer self-enforcing—norms, beliefs, and organizations—still prevail, at least for a while, as a cultural and social heritage. Institutional elements inherited from the past are part of what individuals bring with them to new situations; creating alternative, technologically feasible institutional elements requires action and a process of learning, experimentation, and

watersheds in political life [which] establish certain directions of change and foreclosure of others in a way that shapes politics for years to come” (1991, p. 27). But as Thelen (1999, p. 397) notes, developing this argument requires delimiting the events constituting a critical moment and the details of subsequent institutional development. The perspective here advances toward this goal.

²¹ By the Roman legal tradition I mean that of explicit, man-made, secular laws. (Stein 1999; Kelly 1992.) Although the Islamic legal tradition drew greatly on the Roman and other codes of laws, it obscured these origins and emphasized those that were divine. For discussion see Crone (2002, chapter 1), Rahman (2002, chapter 6).

socialization. Past institutional elements thus constitute part of the initial conditions in processes leading to new institutions.

Whether or not the process leading to new institutions is coordinated, it reflects the historical heritage encapsulated in institutional elements. New institutions reflect institutional refinement—the marginal alternation of existing institutions—and the environmental, coordination, and inclusion effects of past institutional elements. The institutions that are more likely to establish themselves are those that the institutional elements inherited from the past render self-enforcing for a larger set of parameters, reflect the coordinating influence of these elements, and incorporate them. Using the jargon of game theory, institutional elements inherited from the past constitute part of the relevant rules of the game in a new situation, coordinating devices given these rules, and factors influencing the cost of taking actions leading to new institutional elements. Institutional elements inherited from the past influence subsequent games and equilibria in them.

Does the final outcome—the resulting institutions—depend on which institutional elements are inherited from the past? Game theory suggests that it does. In strategic situations, the set of possible self-enforcing outcomes—equilibria—depends on the details of the relevant rules of the game. A particular outcome can be self-enforcing if some rules of the game and not others are relevant. Even small differences in rules can have a significant impact on the equilibrium set. Furthermore, for given rules of the game, multiple equilibria—and hence institutions—are usually possible. The details of the institutional elements influencing selection among different outcomes therefore matter.

The past also affects the details of new institutions because the environmental, coordination, and inclusion effects lead institutions to form institutional complexes. Institutions within a complex are interrelated, complementing and reinforcing one another and sharing institutional elements. Moreover, past institutional elements influence the process of institutional, organizational, and contractual innovations, as they influence expectations about behavior and outcomes following the introduction of these innovations.

It is therefore difficult to alter institutional dynamics to induce better outcomes. New rules can be declared and organizational forms can be established, but their impact on behavior

still depends on institutional elements inherited from the past. Declaring new rules and establishing new organizational forms don't necessarily lead to new institutions and in particular, they don't necessarily lead to the institutions whose effectiveness inspired the change. Adopting new institutions requires more than adopting new rules and organizations. It requires a transition from one set of self-enforcing institutions to another, despite the fundamental asymmetry. Doing so is difficult, however, particularly because it requires changing norms and beliefs inherited from the past. Altering what people believe is right and what people believe others believe is not an easy task.

Because of the fundamental asymmetry, it is particularly difficult to change institutions without taking into account the constraints and opportunities provided by past institutional elements or recognizing the details and implications of institutional interrelatedness. Institutional entrepreneurs do just that in influencing institutional selection. In pursuing institutional change, entrepreneurs are aided by the fact that institutions are not a unitary entity. Creating new institutions does not require a wholesale systemic change: they can be created by refining existing institutions or building on and recombining institutional elements inherited from the past. Agents can therefore have a big impact on institutional selection and institutional dynamics is not predetermined by past institutions.

7.6.2 Endogenous Restrictions on the Direction of Change: Contextual Refinement

Game theory, as already noted, highlights the fact that in situations of interest to institutional analysis—strategic repeated situations with a large action space—multiple equilibria, and hence institutions, usually exist (see Appendix A). We cannot satisfactorily limit the set of admissible institutions deductively in a given situation by requiring that an institution be self-enforcing. We can do better than imposing only theoretical restrictions on the set of admissible institutions, however, by considering the influence of history on subsequent institutional development.

History influences the direction of institutional change by providing relevant initial rules of the game and coordinating mechanisms within the resulting structure. The impact of institutional elements inherited from the past both reflects and is restricted by agents' responses to them. Indeed, when institutional elements inherited from the past are not integrated into a new

institution—when they are not self-enforcing and (weakly) self-reinforcing in the new situation—they will gradually decay and vanish.²²

We can therefore study the selection of new institutions by using contextual refinement, by refining (restricting) the set of admissible institutions based on knowledge of the historical heritage (encapsulated in institutional elements), recognizing that it influences the relevant rules of the game and provides coordination within them by requiring that the resulting institutions be self-enforcing. We can use knowledge of the past to eliminate theoretically possible but contextually irrelevant institutions, and we can use the analytical power of game theory to restrict the impact of the past by requiring that only institutional elements that are self-enforcing *ex post* can be part of the new institution.

Contextual refinement constitutes a departure from game theory that is larger than just restricting the set of admissible institutions based on historical knowledge. In game theory, the rules of the game are taken as given, and beliefs and behavior are determined endogenously. The argument advanced here recognizes the possible importance of the reverse line of causality. Beliefs and norms inherited from the past are part of the initial conditions in the process leading to a new institution. Relevant games—and hence institutions—are constructed around the beliefs and norms inherited from the past by establishing supporting rules and organizations.

7.6.3 Taking Stock and Looking Ahead

The discussion in this chapter is preliminary; its further development requires addressing the many questions it raises. What institutional factors determine the extent of the fundamental asymmetry? What are the characteristics of institutions with low institutional transition costs, which also imply transitions to new welfare-enhancing institutions? These questions are

²² This is true unless they are propagated by mechanisms, such as socialization, that are distinct from the one captured here. More generally, institutional elements will propagate if members of the society are motivated to propagate them through interactions in the relevant transactions. In particular, propagation of cultural features through direct socialization reflects the internalized norms and beliefs of the socializing agents; propagation through indirect socialization (through schools, activities of political parties, and other means) reflects the interests of those who control them. Recall (from Chapter 5) that self-enforcement also includes the requirement that the institution be self-reproducing in the sense that the related beliefs and norms are not refuted or weakened by the institution's observable implications.

paramount, because no institution is efficient under all circumstances; the ability to change flexibly to accommodate new needs is at least as important to long-term success as static efficiency.

The argument that past institutionalized beliefs and organizations shape the direction of institutional change also merits further analytical development. Individuals employ past beliefs in subsequent strategically similar situations. But what determines similarity?²³ What determines the mapping of beliefs from one situation to another? Are framing effects, analogy, or structural similarities important?

These questions notwithstanding, Chapters 8 and 9 present empirical analyses that support the assertions made here regarding why and how history leads societies to evolve along distinct institutional trajectories and the empirical benefits of using contextual refinement. They establish the importance of organizations and cultural beliefs inherited from the past in influencing selection among alternative institutions, becoming an integral part of the resulting ones, and influencing the subsequent trajectory of institutional evolution.

²³ Sugden (1989) notes that individuals choose behavior in a new situation by analogy, but the question raised here is how to identify what makes two situations analogous. A similar problem arises in the context of case-based optimization (Gilboa and Schmeidler 2001).

Annex 7.1: Intentional Use of Past Institutional Elements in the Development of Uncoordinated Institutions: The Case of U.S. Merchants in Mexican California

This annex illustrates the intentional use of past institutional elements in the development of uncoordinated institutions. It also provides an example for linking institutions based on social exchange and economic reputation. Social relationships within communities were central to contract enforcement in Mexican California during the nineteenth century.²⁴ They were intentionally used to form a new economic institution that supported trade between these communities and traders from the United States. Social and economic transactions were linked to change the set of self-enforcing beliefs in yet another economic transaction.

Mexican California was a remote part of a vast country in which, in the early nineteenth century, communication and transportation were slow. Communities were small—by 1840 the largest settlement in what is today California was Santa Barbara, with eighteen hundred residents—and the hand of the state was invisible in contract enforcement. The local judicial officer, the *alcalde*, drafted contracts and maintained an archive of them, but the state did not enforce commercial contracts (although it did attempt to enforce the law in criminal matters). In Monterey, the capital, 65 percent of the 374 civil suits filed between 1831 and 1846 were for debt collection or recovery of damages. None of these cases ended in the seizure of the debtor’s assets to satisfy the judgment. As one observer from the United States remarked at the time, these courts were “inefficient, at times unpredictable, and they lacked any semblance of effective enforcement techniques” (Langum 1987, pp. 115, 123).

That observers from the United States perceived the courts as ineffective does not imply that social order did not prevail or that the courts played no role in creating it. As Langum (1987; see also Clay 1997, pp. 504–7) notes, contract enforcement and social order in these small Mexican communities was based on social control: the expected social responses of others motivated members of these communities to adhere to customary behavioral conduct. The

²⁴ This discussion builds on Langum (1987) and, in particular, on Clay (1997).

alcalde was a locally elected, unpaid, community official who did not rely on a written code of law. Indeed, he did not need to be literate.

The legal process reflected the role of social control. Before filing a suit, the plaintiff and the defendant participated in a mandatory reconciliation hearing, in which two local “good men,” selected by each party to the dispute and the *alcalde*, listened to both sides and proposed ways to resolve the dispute. About 85 percent of cases were resolved in this way (Langum 1987, chap. 4). The court was used to inform the community of who was at fault. It did not impose punishment if reconciliation was achieved. The expectations of the social consequences of failing to reconcile once a decision had been made induced reconciliation.

The small size of these communities, the high cost of emigrating from them, the large number of interactions among community members, and presumably the transmission of information through gossip provided the conditions for motivating behavior based on social relationships. The immobility of residents implied that they had to take the community and their membership in it as exogenous. At the same time, the community was an organization that altered the rules of the game relevant to each of the interacting individuals while remaining endogenous to the actions of all of them. The court was an organization that provided a public signal regarding who was at fault in cases of dispute.

During this time, the economic benefits of linking these local communities to the larger economic system around them were increasing. California was rich in hides, tallow, furs, horses, and lumber, which the United States, Mexico, Hawaii, and China sought. As the supply of these goods declined, as a result of political unrest in Latin America, demand for them rose.

Traders from the United States became increasingly involved in international shipping of goods in and out of California. They bought goods ahead of time, providing credit to local producers, in order to ensure that when they reached California they would have goods to export. But establishing credit relationships with the local population presented a contractual problem. The legal system did not enforce civil suits, and the social control institution that was effective within a local community was not extended to the traders from the United States. The local community had no incentive to punish those who cheated outsiders; an outsider’s threat of punishing the community as a whole for failing to punish one of its members was not credible,

given the small number of settlements and the high sunk cost of coming to trade. Moreover, the community of the United States traders lacked an effective means of coordinating and ensuring the collective punishment of a community.

A new institution was required to facilitate long-distance trade. The solution that emerged involved a strategic manipulation of the social control system. Traders from the United States integrated into the local community in settlements that were important to their trade. They married into local families, converted to Catholicism, became Mexican citizens, spoke Spanish, and raised their children as the locals did. By becoming members of the community, these traders gained access to the local contract enforcement institution. Trade between traders from the United States and the local community was channeled through these “Mexicanized” traders, who received credit from other merchants from the United States. When a trader from the United States had a collection problem in a community in California, he called on a “Mexicanized” expatriate for help.

How could these Mexicanized traders commit to be honest in their dealings with other U.S. traders? Among the U.S. traders (Mexicanized or not), honesty was maintained through a multilateral reputation mechanism based on economic sanctions. An agent who cheated a trader was punished by all the others. Such punishment was costly to the Mexicanized trader, because of the sunk costs he had invested in settling in Mexico. At the same time, his local connections implied that punishing him was relatively costly to the other traders. The optimal punishment was a gradual one, in which some trade partially ceased after the first instance of cheating and ended completely after the second instance (Clay 1997).

The U.S. traders used their extensive network of commercial correspondence to disseminate information about the conduct of various individuals. Their relatively small number ensured the personal familiarity required for the threat of collective punishment to be possible.

Among the Mexicans the *alcalde* and other communal leaders provided the public signal required to coordinate punishments. Their decisions were based on customs that had evolved over time. The merchants from the United States lacked such a coordination device, and they lacked a long tradition of customary behavior. Instead, they relied on common law to specify appropriate behavior. An institutional element that was part of a formal institution was also part

of the historical heritage these merchants brought with them and integrated into a new, private-order institution.