Historical and Comparative Institutional Analysis

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Among the most fundamental questions of institutional economics are: Why do societies evolve along distinct institutional trajectories? Why do societies often fail to adopt the institutional structure of more successful ones? How may we examine the interrelations between the implicit and informal aspects of societies' institutions, on the one hand, and their explicit and formal aspects, on the other? A particular conceptual framework and empirical methodology, historical and comparative institutional analysis (HCIA), has recently been developed and employed to address these and other questions regarding the origins, nature, and implications of institutions and institutional change. What follows is a short elaboration on HCIA, its essence, and some preliminary insights.[1]

HCIA is historical in its attempt to explore the role of history in institutional emergence, perpetuation, and change; it is comparative in its attempt to gain insights through comparative studies over time and space; and it is analytical in its explicit reliance on context-specific micro models for empirical analysis. HCIA conceptualizes institutions as the nontechnologically determined *constraints* that influence social interactions and provide incentives to maintain regularities of behavior. It considers institutions that are *outcomes* emerging endogenously and that are *self-enforcing* in the sense that they do not rely on external enforcement. HCIA thus considers the *relevant* rules of the game that actually constrain behavior in a society (as distinct from the technologically feasible rules) to be a self-enforcing outcome of forces, such as strategic interactions, evolutionary processes, and limits on cognition. These rules, in constituting part of a society's institutions, are complemented by self-enforcing constraints generated through interactions within these rules. An essence of HCIA is thus the examination of the factors determining the relevant rules of the game, the forces that make these rules self-enforcing, and the self-enforcing constraints on behavior that emerge within these rules. State-mandated rules, values, or social norms that actually constrain behavior, for example, are considered as outcomes rather than exogenous forces.

To advance such an examination, HCIA has so far mainly utilized the lens provided by the study of equilibria in a game-theoretical sense. The study of institutions through equilibrium analysis, the view of institutions as equilibrium constraints, enables examination of the static, endogenous, and self-enforcing constraints generated in strategic situations in the absence of external enforcement. Furthermore, it provides the basis for examining institutional origin and change as reflecting the interrelations among society's decision-makers, their past institutions, and the evolving environment within which they interact. The analysis, however, neither assumes the appropriateness of using standard game-theoretic solutions nor the prevalence of an institution with particular attributes, such as efficiency or equity. Rather, at the heart of HCIA's research strategy is an inductive, empirical analysis regarding the relevance of particular institutions based on evaluating and synthesizing micro-level historical and comparative evidence and insights from context-specific, micro theoretical models. The sensitivity of outcomes to specifications and the indeterminacy of equilibrium indicate the importance of integrating historical and comparative studies in pursuing empirical institutional analysis.

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[1] This approach builds on existing lines of research in economics, the new institutional economics, sociology, and political science. For previous elaborations see Masahiko Aoki (1996), particularly on the use of evolutionary game theory to examine complementary organizations through comparative institutional analysis, and Greif (1997), particularly on the use of game theory for comparative studies of organizations and beliefs through historical institutional analysis (also see Aoki [1998] and Greif [1998]).

There are two lines of analysis within HCIA. The first considers the impact of the internalization of traits through evolutionary process and learning on the set of the relevant rules. It utilizes evolutionary game theory and learning models to study the process through which decision-makers with particular traits, such as specific organizational features, preferences, or habits, emerge and the constraints on behavior that their interactions entail. It further examines the complementarities among traits in various spheres of economic activities, and between them and government regulations and rules. The focus of the empirical studies in this line of analysis has been mainly on situations in which traits are relatively easy to observe, such as the emergence of firms with particular capabilities and their institutional complementarity with financial systems, employment relations, and government regulations (Aoki, 1994, 1995; Tetsuji Okazaki and Masahiro Okuno-Fujiwara, 1996). Related, more theoretical works also have examined such issues as the emergence of conventions, customary property rights allocations, and preference traits (e.g., Robert H. Frank, 1987; Robert Sugden, 1989; H. P. Young, 1993).

The second line of analysis considers the impact of strategic interactions and exogenous and endogenous cultural features, beliefs, social structures, and cognition (such as awareness) on the set of the relevant rules. It employs mainly (classical) game theory, particularly the theory of repeated games, and concentrates on the origin and implications of (nontechnologically determined) "organizations," and the constraints implied by beliefs prominent in a society regarding behavior on and off the path of play. Organizations alter the set of the relevant rules of the game by constituting a new player (the organization itself), changing the information available to the players, or changing payoffs associated with certain actions. Examples of such organizations include the merchant gild, the firm, the bank, and the credit bureau. While these organizations alter the set of the relevant rules of the game in the societies in which they prevail, and some organizations are strategic players, their emergence nevertheless represents actions taken, in the appropriate meta-game by those who established them. Conceptually, these actions differ from other actions only by potentially having a "profound" impact, implying a qualitative change in the set of possible institutional constraints relative to those possible in the same game in the absence of the organization under consideration.

The empirical methodology employed in this line of analysis reflects its concentration on the identification of relevant organizations and beliefs on and off the path of play and its attempt to evaluate, rather than assume, the relevance of game theory. The point of departure for the analysis is the identification of relevant institutions, sets of self-enforcing expectations and organizations and related features, such as behavior and social structures, relevant in the particular historical episode under consideration. It does not begin by contemplating the set of theoretically feasible institutions and choosing among them based on some deductive theory or objective criteria, because the extent of knowledge, rationality, and cognition is to be evaluated rather than assumed.

An hypothesis regarding the relevance of a particular institution is formulated based on a micro-level, detailed examination of the evidence. It is expressed with the assistance of a context-specific model whose details are based on the evidence and whose robustness is evaluated, particularly regarding aspects that are not well reflected empirically. Furthermore, since game-theoretical formulation is the benchmark of empirical analysis rather than the mold, the hypothesis regarding the relevance of a particular institution and its game-theoretical formulation has to be empirically substantiated. Substantiation is particularly important because game theory provides a limited guide to equilibrium selection, and it entails contrasting predictions implied by the theoretical analysis with the historical and comparative observations and data.

Following substantiation, the factors leading to the *emergence* of the institution, as well as its *implications,* are examined. This examination rests upon the game-theoretical insight that multiple equilibria are likely to exist in a given strategic situation. It indicates that the study of institutional emergence can benefit from considering their interrelations with noneconomic factors: the historical, cultural, social, and political aspects of the particular society under consideration. Similarly, recognizing that historical actors have a limited rationality implies that studying institutional change and innovations requires going beyond the conceptual confines of game theory. HCIA postulates that institutional dynamics might not be an optimal response to the changing environment, a reflection of random mutation in organizations or beliefs, or a change in the power of a particular political actor. Rather, it explores the possibility that institutional changes also reflect the limits on rationality, cognition, and knowledge, and the incentive for institutional innovations, adoption, and change implied by the existing institutions and circumstances.

The empirical studies in this second line of analysis have focused on many topics, such as the formal and informal institutional foundations of the market and informal systems for contract enforcement (Greif, 1989, 1993, 1997a; Marcel Fafchamps, 1996; Karen Clay, 1997); the role of culture in the emergence and perpetuation of distinct institutional and organizational trajectories (Greif, 1994b); the institutional foundation of the state and the political foundations of market economies (Douglass C. North and Barry R. Weingast, 1989; Greif, 1997b; Weingast, 1997); the interrelations among social structures, culture, and economic and political institutions (Greif, 1994b, 1997b); and the emergence, perpetuation, and change of alternative formal and informal financial systems and distinct institutions governing labor relations (Timothy W. Guinnane, 1994; Aoki and Serdar Dinç, 1997; Chiaki Moriguchi, 1997). The focus of the more theoretical works has been on issues such as the role of various organizations in facilitating cooperation, organizational complementarities, and the institutional foundations of the state (e.g., Paul Milgrom et al., 1990; Milgrom and John Roberts, 1992; Randall L. Calvert, 1996; Robert Gibbons and Andrew Rutten, 1997).

Studies in HCIA highlight the nature, origin, and implications of institutions and institutional change in particular historical episodes. Yet some insights have emerged in more than one work, suggesting that they may be general in nature. These insights indicate, for example, that complementarities among past economic institutions impact institutional evolution (Aoki, 1995; Greif, 1994b; Moriguchi, 1997). By providing information, enabling the conditioning of strategies on social identity, and making social sanctions feasible, initial social structures permit the emergence of particular self-enforcing economic and political institutions whose functioning further influence these social structures (e.g., Greif, 1989, 1994b, 1997a, b). Cultural beliefs embedded in existing institutions direct the process of organizational innovation and adoption, as well as cultural and social evolution, while intentional and unintentional organizational learning and innovations are shaped by the incentives provided by current institutions and organizational failure (e.g., Greif, 1994b, 1997b; Greif et al., 1994; Guinnane, 1994).

Together, these insights indicate that a society's institutions are a complex in which informal, implicit institutional features interrelate with formal, explicit features in creating a coherent whole. These interrelations direct institutional change and cause this institutional complex to resist change more than its constituting parts would have done in isolation. Hence, this institutional complex is not a static optimal response to economic needs. Rather, it is a reflection of an historical process in which past economic, political, social, and cultural features interrelate and have a lasting impact on the nature and economic implications of a society's institutions (e.g., Greif, 1994a, b, 1997; Aoki, 1995; Moriguchi, 1997).

HICA thus reveals both the forces that lead societies to evolve along distinct institutional trajectories and the sources of the difficulties that societies face in adopting the institutions of more successful ones. More broadly, it indicates the importance of examining a society's self-enforcing endogenous institutions as products of an historical process in which past institutional, economic, political, social, and cultural features interact in shaping the nature of contemporary institutions and their evolution. Furthermore, HCIA's achievements prove the feasibility of conducting such an analysis based on integrating game-theoretical and empirical, historical, and comparative studies.

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