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COORDINATION OF ECONOMIC ACTORS AND SOCIAL SYSTEMS OF PRODUCTION

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This volume addresses several distinctive but interrelated problems. First, it is very much concerned with identifying the various institutional mechanisms by which economic activity is coordinated, with understanding the circumstances under which these various mechanisms are chosen, and with comprehending the logic inherent in different coordinating mechanisms. Throughout Eastern and Western Europe as well as in North America during the 1980s, there was a dramatic shift toward a popular belief in the efficacy of self-adjusting market mechanisms. Indeed, the apparent failure of Keynesian economic policies, the strains faced by the Swedish social democratic model, and the collapse of Eastern block economies led many journalistic observers to argue that capitalism is a system of free markets that has finally triumphed. Some added that the more pervasive the market could become, the more impressively national economies would perform.

Paradoxically, during the same period, there was a rapidly accumulating theoretical literature that demonstrated that markets were not ideal mechanisms for coordinating transactions among actors when either the quality of products is uncertain, increasing returns to scale prevail, most future contingencies are uncertain, or there is a multitude of repetitive transactions within a truly decentralized monetary economy. Moreover, there has been increasing evidence that the market as a coordinating mechanism does

not lead to the best economic performances in industries whose products have technologies that are very complex and change very rapidly (Campbell, Hollingsworth, and Lindberg, 1991; Chandler, 1977; Hollingsworth, 1991a; Hollingsworth, Schmitter, and Streeck, 1994; Piore and Sabel, 1984; Sabel and Zeitlin, 1985, 1996; Williamson, 1975, 1985). In short, the basic features of most modern economic activity point to the importance of coordinating mechanisms alternative to markets. Indeed, the history of twentieth-century capitalism demonstrates that nation-states have different trajectories of capitalist development, in which there is considerable variation in the role of markets and other institutional arrangements as coordinating mechanisms (Crouch and Streeck, 1996), and this volume focuses on several of these trajectories.

Second, the volume develops the argument that markets and other coordinating mechanisms are shaped by and are shapers of social systems of production. By a social system of production, we mean the way that the following institutions or structures of a country or a region are integrated into a social configuration: the industrial relations system; the system of training of workers and managers; the internal structure of corporate firms; the structured relationships among firms in the same industry on the one hand, and on the other firms' relationships with their suppliers and customers; the financial markets of a society; the conceptions of fairness and justice held by capital and labor; the structure of the state and its policies; and a society's idiosyncratic customs and traditions as well as norms, moral principles, rules, laws, and recipes for action. All these institutions, organizations, and social values tend to cohere with each other, although they vary in the degree to which they are tightly coupled with each other into a full-fledged system. While each of these components has some autonomy and may have some goals that are contradictory to the goals of other institutions with which it is integrated, an institutional logic in each society leads institutions to coalesce into a complex social configuration. This occurs because the institutions are embedded in a culture in which their logics are symbolically grounded, organizationally structured, technically and materially constrained, and politically defended. The institutional configuration usually exhibits some degree of adaptability to new challenges, but continues to evolve within an existing style. But under new circumstances or unprecedented disturbances, these institutional configurations might be exposed to sharp historical limits as to what they may or may not do (Friedland and Alford, 1991). Why these configurations occur within a particular place and time is a complex theoretical problem which has yet to be solved. In this volume, we tend to confine most of our attention to mapping the coordinating mechanisms that are important in various types of social systems of production.

Why do all of these different institutions coalesce into a complex social configuration which we label a social system of production? The literature suggests two contrasting interpretations. Part of the answer – indeed a controversial one – is that these institutions are functionally determined by the requirements of the practice of capitalism in each time and place (Habermas, 1975; Parsons, 1951, 1967). Another part of the explanation emphasizes the genesis of the actual configuration, via a trial and error process, according to which the survival of firms, regions, or countries is the outcome of complex evolutionary mechanisms (Maynard-Smith, 1982; Nelson and Winter, 1982). However, the problem is even more complex. Markets and other mechanisms for coordinating relationships among economic actors place constraints on the means and ends of economic activity to be achieved in any society. The other coordinating mechanisms include different kinds of hierarchies, various types of networks and associations (e.g., trade unions, employers, and business artisan associations; see Campbell, Hollingsworth, and Lindberg, 1991). These various coordinating mechanisms provide actors with vocabularies and logics for pursuing their goals, for defining what is valued, and for shaping the norms and rules by which they are to abide (Friedland and Alford, 1991). In short, in contrast to the logic of the neoclassical paradigm, we argue that economic coordinating mechanisms place severe constraints on the definition of needs, preferences, and choices of economic actors. Whereas the neoclassical paradigm assumes that individuals are sovereign, we argue that individual action is influenced by the hold that institutions have on individual decision making (Campbell, Hollingsworth, and Lindberg, 1991; Etzioni, 1988; also see the essays in Streeck and Schmitter, 1985; Hollingsworth, Schmitter, and Streeck, 1994).

That is the basic and common inspiration of the various authors whose work is presented in this volume, but this does not mean that they agree on every detail concerning their conceptions about institutions. Some authors come from industrial sociology and tend to emphasize the importance of labor institutions and their impact on the organization of firms and economic specialization. Others have studied the governance mode of national economies by a close investigation of sectoral differences across nations (Hollingsworth, Schmitter, and Streeck, 1994). Still others have tried to work out an economic theory that does justice to the impact of the wage labor nexus, forms of competition, and monetary regimes on long-term growth (Boyer, 1990). There is a political science perspective which argues that the architecture of economic institutions cannot be understood independently from a given constitutional order (see the paper by Sabel in this volume). Some authors try to extend transaction cost economics to the issue of networks, and in the process they develop the concept of adaptive costs

(Hage and Jing, 1996). Some are concerned with the economic rationale behind international regimes, whereas those with a background in political science prefer to consider the issue of power in the building of supranational economic rules of the game, as well as in European institutions (see the chapters in Part III).

Despite the different backgrounds of these authors, they share a common set of concerns about complementary institutions that constitute a social system of production. Given their diversity of backgrounds, it is remarkable how much they share in common. Their commonality suggests that the study of institutions and how they configure in a social system of production has the potential to facilitate a great deal of integration among the social sciences. This book aims at presenting a set of common definitions in order to analyze the complementarity of institutions that may borrow their legitimacy and efficacy from quite different sources. We do not argue that a process of homogenization among authors, approaches, and theories is fully achieved within this text. Nevertheless, the issue of the coherence of social systems of production is a unifying theme, which has already been discussed in previous publications by several of the authors (Hollingsworth, 1991a, 1991b; Hollingsworth, Schmitter, and Streeck, 1994; Hollingsworth and Streeck, 1994) and is being pushed a step forward again in another study (Hollingsworth, Whitley, and Hage, 1996).

The third problem the volume confronts is whether specific forms of economic coordination are more likely to be used at some levels of society than at others. There are four levels of society at which there may be variation in the dominant forms of economic coordination:

1. The regional level within a country.
2. The level of the nation-state.
3. Transnational regions, such as the European Community.
4. The global level.

Thus far, social scientists have made little effort to specify how institutions for coordinating economic actors vary at these four levels of society. We believe we make some advance in the social science literature by confronting these issues.

Basically, the post–World War II order has been built upon a rather stable international regime, which has allowed significant differences in economic institutions across rather independent nation-states. There has been a blending of interdependence among nation-states, along with a significant

autonomy for national preferences, both of which are now being challenged by two shifts away from the national level. On the one hand, internationalization puts severe constraints upon some national economic arrangements, both through more competition among interdependent markets and through the building of supranational rules of the game. Both shifts constrain national governments, even though they participate in the development of organizations that undermine the autonomy of nation-states (World Trade Association, European Union, NAFTA, etc.). On the other hand, some sources for competitiveness exist at a lower level – e.g., the regional or even local levels where under some circumstances trust and tacit knowledge are better nurtured within communities and networks than within large firms and hierarchies.

This volume therefore surveys how each institutional arrangement for coordinating economic actors may evolve according to these two trends. Will an anonymous market mechanism replace previous coordination by the state? Or will alternative devices emerge, such as coordination by communities at the local level or various types of associations at the transnational level? Is there an ideal mix of institutional arrangements for coordinating economic actors for each broad system of production? Should we attempt to contemplate a future with the emergence of the different coordinating mechanisms that are associated with or complementary to a supranational state?

These questions are too complex and underresearched for us to reach definitive answers at this time. The reader may note a few different assumptions among the following authors, but this is not a weakness of the volume. Rather, it is a reflection of variation in knowledge at the frontiers of research on social institutions. Some of the authors think that the nation-state is bound to remain an important actor and level for the coordination of economic activity, and they argue that social systems of production will continue to have a strong national flavor (see chapters by Boyer, Hollingsworth, Streeck). Others suggest the importance of regional economies, especially for such emerging social systems of production as flexible specialization (Sabel, Zeitlin). Still others believe that the absence of any recognized polity at the international level provides a premium to market mechanisms (Schmitter). Clearly, the jury is still out, but readers will find new elements to feed their curiosity. Nevertheless, the book suggests that we are living in an epochal shift, from one mix of international-national-regional institutions to another configuration with different weights and feedbacks. At no single level are institutions able to triumph, nor will they vanish completely from any level.

A fourth issue the volume raises is whether forms of economic coordination and social systems of production are converging at the level of sector, region, nation-state, or global economy. The convergence thesis tends to assume that there is one best solution for organizing labor, raw materials, and capital in order to manufacture and distribute goods. The authors herein tend to express scepticism about such arguments of convergence.

FORMS OF ECONOMIC COORDINATION

All capitalist economies involve a matrix of interdependent exchange relationships, or transactions that occur among individual actors and organizations, either individually or collectively, in order to develop, produce, and distribute goods or services. Transactions occur among a wide range of interdependent actors, including producers and suppliers of raw materials, researchers, manufacturers, labor, and many others, who must routinely solve various problems such as raising capital, determining the quantity of output, setting wages and other conditions of employment, standardizing products, establishing prices, and communicating information about product quality to consumers. At a rather general level, economic coordination or governance is the process by which these problems are managed among various actors.

In many countries there has in recent years been a widely shared belief that the market is the most efficient institutional arrangement for coordinating economic activity, and that most alternative forms of collective activity and state intervention generally do more harm than benefit. In the eyes of many, there is considerable evidence to support such a view. Have not the various forms of Keynesian compromises led to stagflation, budget and external trade deficits, and capital flights? Have not the "socialist" regimes of Eastern Europe collapsed?

Under these circumstances, the market as an ideology has made an impressive comeback in the design of economic policies, at odds with the previous Keynesian orthodoxy. Similarly, within academic research in the social sciences, the neoclassical paradigm has become very pervasive and conquered new territories: The interactions and bargaining processes among conflicting actors have increasingly been modeled according to the concepts of economic rationality and market equilibria (Etzioni, 1988). The micro analytic neoclassical paradigm is individualistic, rationalistic, and utilitarian, and shapes not only much economic analysis but also public choice scholarship (Coleman, 1992) in political science (Ostrom, 1986), sociology (Hechter, 1987), history (North, 1981, 1990), and law (Posner, 1977).

The following essays do not deny the importance and utility of the market as a coordinating mechanism. However, the achievements of the market as a dominant mode of coordinating an economy rest less on the grounds of static efficiency, as argued by many who rely on the neoclassical paradigm, than on terms of dynamic efficiency (Leibenstein, 1966, 1976). In fact, the major achievement of the market has not been so much the invisible hand as formalized by modern equilibrium theory, but the stimulus to innovation which markets as coordinating mechanisms bring about, a neglected theme first put forward by Adam Smith.

In the following essays, we use a more restricted definition of market than that which exists in much of the contemporary literature. For us, the classic market occurs when transacting actors engage in decentralized, arm's-length bargaining, the parties are generally informally organized and remain autonomous, each actor presses his/her own interests vigorously, and contracting is relatively comprehensive. Actors then specify preferences and prices through contracts that, when completed, are self-liquidating and require no further interaction among the transacting parties. Moreover, the identities of the parties do not influence the terms of the exchange (Lindberg, Campbell, and Hollingsworth, 1991; Williamson, 1975, 1985). Basically, no durable relation is observed among economic actors, and the only purpose of the market adjustments is to make on-the-spot, coherent instantaneous transactions, without any concern about future strategies. Within this restrictive definition for markets, however, there are a lot of variants, for example, the African market for craft art, Christies' auction market for antiques, the Wall Street stock market, or the Chicago market for futures. These transactions can become embedded in, or shade off into, various types of networks (see the chapter by Hage and Alter on networks). Obviously this characterization of markets as a coordinating mechanism encompasses only a fraction of the transactions that occur in a capitalist economy.

Many scholars who operate within a neoclassical paradigm recognize that markets are not always the most efficient institutional form for economic coordination. Thus, according to Williamson (1975, 1985), economic actors often carry out their transactions within a firm or a hierarchy, in order to enhance efficiency, reduce transaction costs, and minimize the opportunism inherent in exchange relations. Alternatively, Alfred Chandler (1977, 1990) argues that it is the incentive to achieve lower production costs and greater economies of scale that encourages economic actors to do within firms – i.e., hierarchies – what might otherwise be done outside the firm – i.e., in a market. Thus, for Chandler, the modern corporation has been a functional response to the demands of large-scale markets and capital intensive but relatively stable technologies. Instead of con-

ducting transactions among actors outside firms, the modern corporation has internalized the process. And for Chandler, this process has provided firms with the capability of overcoming risk and uncertainty and of achieving lower costs and higher levels of productivity through administrative coordination. While Chandler has little to say about industrial relations, Williamson (1985) and others (Marglin, 1974, 1991) argue that capitalists adopted the modern factory system in order to restrain opportunism and to economize on costly bargaining with labor. As human asset skills become more firm-specific and idiosyncratic, firms develop elaborate internal labor markets in order to promote training, discipline, promotions, and layoffs (also see Coase, 1960, 1981).

Also using the neoclassical paradigm, a number of scholars have identified and theorized forms of coordination that are neither markets, coordination within a corporate hierarchy, nor coordination by the state. This literature clearly acknowledges the limits of what organizations can do in coordinating economic actors (Arrow, 1974; Stinchcombe and Heimer, 1985). For example, Eccles (1981) has analyzed the quasifirm, Williamson (1985), Macneil (1978), and Powell (1990) have discussed long-term contractual relations among actors who are neither in a market nor within a firm, while others have elaborated on the concepts of coordination by network (Alter and Hage, 1993; Campbell, Hollingsworth, and Lindberg, 1991; Chisholm, 1989; Scharpf, 1993). In all of this, actors are neither integrated into a formal organization nor do they act autonomously within a market. Rather, actors are loosely joined to each other in long-term relationships that ensure their capacity to cooperate and collaborate with each other through repeated exchanges.

Much of the literature on economic coordination remains fragmented and unintegrated. However, by reflecting on these various forms of coordination, we might array them in a complex two-dimensional taxonomy, as in Figure 1-1:

- Along the vertical dimension, the economists' vision of a self-interested agent is contrasted with a more sociological perspective, according to which obligation and compliance with social rules are the guiding principles shaping human actions.
- Along the horizontal dimension, we display a continuum of modes of coordination. At one extreme, horizontal coordination takes place when many and relatively equal agents interact (e.g., in a well organized spot market). At the other extreme, inequality in power results in a hierarchical form of coordination whereby either a private or public hierarchy structures the interaction between a principal and an agent or between a leader and a follower.

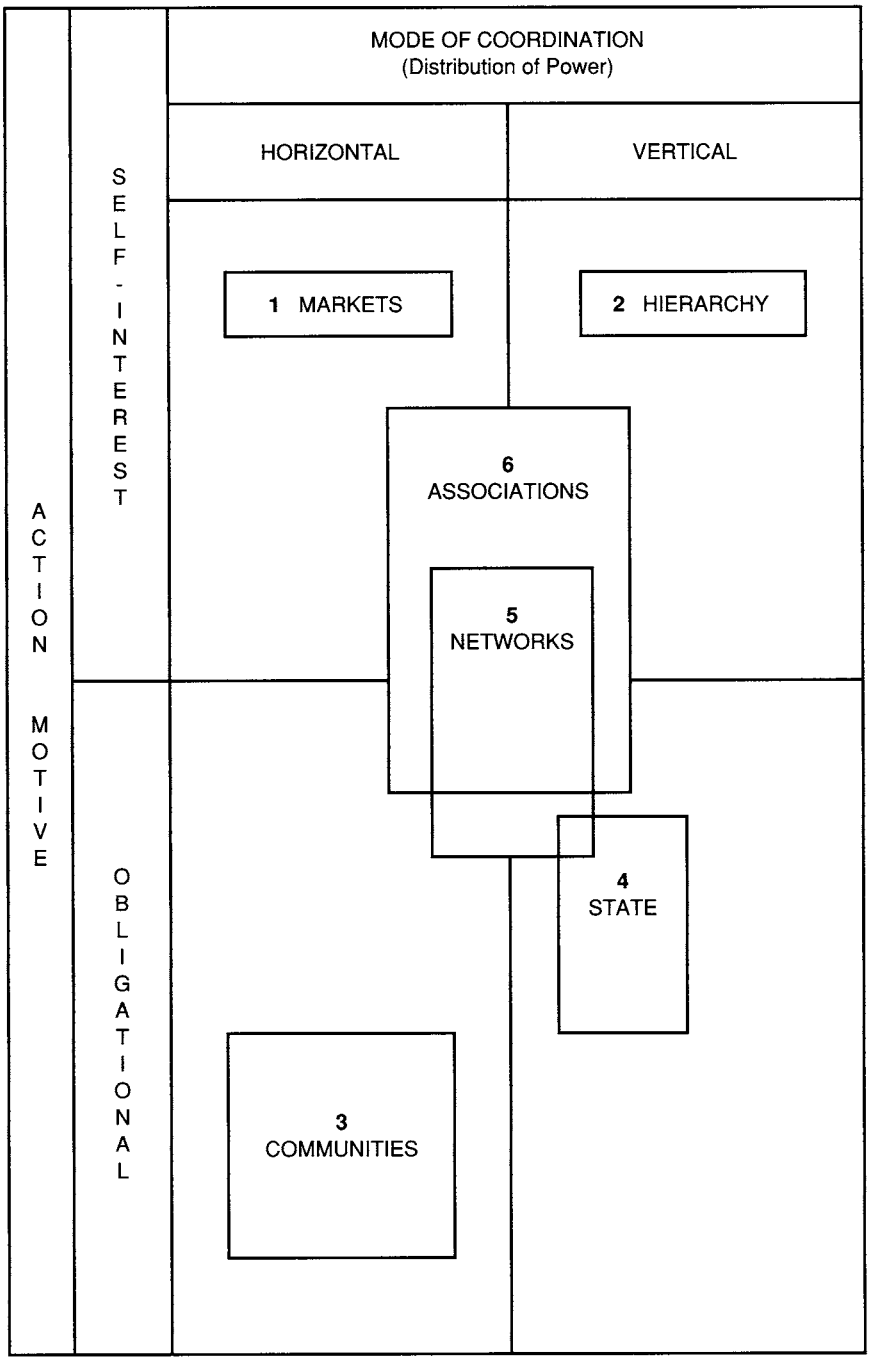

Figure 1-1. A General Taxonomy of Institutional Arrangements

Thus, institutional arrangements can be disentangled from this combination of the two dimensions: the nature of action motive on the one hand, and the distribution of power on the other. Markets (cell 1) combine self-interest with horizontal coordination transactors, and they reflect sensitivity to concerns about supply and demand, thus providing ex post an unintended equilibrium. Paradoxically, the more pure and perfect the market competition, the greater the need for codified rules of the games for coordinating economic transactions. Thus, collective associations (cell 6) and various forms of state intervention (cell 4) are required to enforce rules for transacting partners (Schneiberg and Hollingsworth, 1990; Schmitter and Streeck, 1981; Garcia, 1986). There are also networks (cell 5) which exhibit various mixes of self-interest and social obligation, with actors being formally independent and equal, even if some networks (the large firms and their subcontractors) partially rely upon unequal power and initiative. Networks may constitute all kinds of actors, ranging from those consisting only of firms to those that also include associations and the state.

Along the horizontal axis, actors are linked together in a high degree of integration, being joined within an organization or a firm: "hierarchy" is the generic term for this institutional arrangement (cell 2). Along the horizontal line, one recognizes the choice between market transactions and their integration within the firm. The work of Coase (1960, 1981) and Williamson (1975, 1985) uses the role of transaction costs in explaining the emergence of corporate hierarchies. But we must also turn to the vertical axis. The vertical axis deals with action motives. Toward the upper part of Figure 1.1, actors are engaged in individualistically oriented behavior, whereas toward the lower part, actors are more engaged in collective behavior and strive to cope with problems of common interest. Cell 3 – communities – consists of institutional arrangements that are based on trust, reciprocity, or obligation, and thus are not derived from the pure selfish computation of pleasures and pains. This is an unconventional perspective for most economists (however, see Arrow, 1974), but not for many anthropologists, political scientists, and sociologists (Streeck and Schmitter, 1985; Polanyi, 1946; Gambetta, 1988; Fukuyama, 1995; Sabel, 1992; Putnam, 1993). In the neoclassical paradigm, theorists argue that actors engage in those forms of exchanges that best promote their individual interest. If some structural conditions are fulfilled (absence of increasing returns to scale, the reversibility of transactions, absence of uncertainty, and complete contingent markets, with no collusion between actors), then the invisible hand theorem applies, and markets function quite well and also provide the optimum for society, therefore combining efficiency, harmony, and order. However, our view is that transacting exchanges may well lead to ruinous competition and excessive conflict. In-