

Hierarchies, Markets and Power: Some Foundational Issues on the Nature of Contemporary Economic Organizations

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1. *Introduction*

An adequate summary of the multiple lines of discourse, results and controversies offered by the papers which follow is obviously beyond the scope of a short introduction. Rather, what I shall try to do is to outline some major themes which cut across many of the contributions. Indeed, many topics addressed in this special issue of *Industrial and Corporate Change* touch the very foundations of modern social sciences. And the time is probably ripe for a fresh reassessment. After all, the identification of specific foundations and methodologies with specific disciplines has become increasingly blurred. For example, a trend that many consider a form of 'economists' imperialism' has forced the archetype of *Homo economicus* and the mainstream economist's toolkit (with rational choice, equilibrium, etc.) into other disciplines such as political science and sociology.¹ Many scholars, in different quarters, have begun sharing similar formal instruments, such as game-theoretic models, whose use was originally confined mainly to economics. The challenge of methodological individualism is felt, with excitement or apprehension, well beyond the boundaries of economic theory.²

However, at the same time, theses and conjectures traditionally pertaining to disciplines other than economics have started penetrating the latter. Issues such as path-dependence, boundaries between organizations and markets, institutions, endogenous preferences and self-reinforcing collective phenomena are increasingly part of the discourse of economists (and not only of those who call themselves 'evolutionists' or 'institutionalists'). Organizational

¹ For an excellent discussion of 'the impact of economics on contemporary sociology', see Baron and Hannan (1994).

² Just to name two examples of excitement, cf. Coleman (1990) in sociology and Milgrom and Roberts (1992) with respect to organization theory and management.

studies have become a fruitful crossroads among practitioners from different disciplinary origins. We thus have the studies of technological and organizational innovation. At last one is starting to follow up Simon's invitation to study what actually goes on in the heads of people and in the (metaphorical) 'heads' of organizations, if such exist. Hence, also, issues of learning, cognition and adaptation have gained importance outside the domains of cognitive and social psychology. Models of path-dependency of various sorts have started 'bringing history into economics', as David puts it. And the list goes on.

In brief, the strong impression that one gets from contemporary developments in social science is that themes increasingly overlap disciplines. To some extent, this also applies to methodologies and basic analytical 'paradigms'. (For example, it is nowadays rather common to find 'neoclassical' sociologists and political scientists, or, conversely, evolutionary economists who talk a language which is more familiar to sociologists than to their own mainstream colleagues.) For all these reasons it might be fruitful to reflect on the 'basics', while at the same time referring to a relatively precise, albeit very broad and complex, domain, namely the forms of economic organization in contemporary economies, their nature and their origins.

Certainly, in the articles contained in this issue, the balance between 'inductive reasoning' [i.e. what Nelson and Winter (1982) have called 'appreciative theories'] and more explicitly theory-based propositions varies a great deal. And the underlying theoretical assumptions differ profoundly. Possible axes of classification concern the (implicit or explicit) role attributed to individual rationality in the development of collective institutions; the inertia (or 'path-dependency') of the latter; the analytical importance of 'choice' as compared with 'constraints' in explaining individual and collective behaviors; the degrees to which preferences and actions are shaped by history and institutions; and the very nature of the organizations within which most human beings operate.

In turn, with regard to the forms of economic organization, these interpretative dimensions obviously influence the units of analysis that one selects (are they 'information partitions', 'transactions', 'specific resources', 'social roles', 'utilities and endowments' or 'cognitive frames?'), the description of both individual actors and aggregate entities (such as 'institutions'), and the interactions between the two.

The extreme boundaries on the distribution of 'primitive' theoretical building-blocks are set, on the one side, by nearly theological axiomatizations of human behavior derived from simple invariant principles (resulting in an unconditionally self-seeking forward-looking rationality *à la* Becker, or older religious theories on grace, predestination and temptation) and, on the

opposite side, purely 'functionalist' or holistic theories of collective dynamics. Indeed, while there might be little scope for a constructive debate with fundamentalist believers, most of the challenging controversies concern precisely the relative interpretative merits of theories, all acknowledging some role to both motivational microfoundations and system-level effects, which, however, differ profoundly in the ways they describe and combine these two levels of analysis. In my view, a fruitful reassessment of 'foundations' rests precisely at this level (which is where the 'grand' debates in social sciences have found their ultimate ground—from Hobbes to Smith, Durkheim, Weber and Schumpeter). Without any ambition of thoroughness, let me try to highlight some of these foundational issues.

2. *On the 'Ultimate Primitives'*

Behind each specific interpretative story, there is a set of *ceteris paribus* assumptions and also some fictitious tale on a 'once upon a time' reconstruction of the theoretical primitives of the story itself. Needless to say, most of (but not all!) scholars realize that the tales are just tales, but they still influence the way that interpretative stories are told, the selection of dominant variables, the modeling assumptions, etc.

Pushing it to the extreme, as I see it, there are in the social sciences two archetypal (meta) tales. The first says, more or less, that 'once upon a time' there were individuals with reasonably structured and coherent preferences, with adequate cognitive algorithms to solve the decision–action problems at hand, and (in most cases) with self-seeking restrictions on preferences themselves. They met in some openings in the forest and, conditional on the technologies available, undertook some sort of general equilibrium trading or, as an unavoidable second best, built organizations in order to deal with technological non-convexities, trading difficulties, contract enforcements, etc. Here, clearly, the rough 'primitives' of the tale are preferences, endowments and given technologies (of production and exchange), while 'institutions' or 'organizations' are derived entities.

In a second and alternative tale, 'once upon a time' there were immediately factors of socialization and preference-formation of individuals, institutions like families shaping desires, representations and, possibly, cognitive abilities. Non-exchange mechanisms of interactions appear in the explanation from the start: authority, violence and persuasion of parents upon children; obedience; tribes; schools; churches; and, generally, the adaptation to particular social roles. Here 'institutions' are the primitives, while 'preferences' and the very notion of 'rationality' are derived entities.

Certainly, with enough refinements, both basic tales become analytically

respectable and in many variations observationally indistinguishable. So, for example, in the 'rational' tale one can easily admit that preferences, too, are endogenous, but on a longer time scale. However, in principle, institutions and organizations ought to be considered relatively plastic and adaptable, while the interests, motivations and menus of strategies available to the agents ought to be relatively invariant. Conversely, in the 'institutionalist' tale it is easy to account for the influence of individual preferences and strategies upon the evolution of social organizations. However, one is inclined to view institutions as the relatively inertial entities and agents' motivations and behaviors as comparatively flexible and adaptive.

Foundational tales obviously influence also the derived interpretive heuristics. Consider the problem of 'why does one observe organization x at time t ?'. In the first perspective, one would start answering by focusing upon the interests of the agents involved in such an organization, the tasks that the organization is meant to handle and the technologies available, and then try to impute its existence to the intentional efforts of the agents to 'do their best', given the constraints. (The exercise, as Granovetter remarks in his contribution, is often riddled with a good deal of teleological reasoning; see also below.) In contrast, in the second perspective, one would look much more carefully at the organization(s) that existed at time $(t - 1)$, at the linkages between organization x and other institutional entities, and then try to tell an explicitly dynamic story on how one got from the state at $(t - 1)$ to the state at t . In this respect, the answer to 'why something exists' relies a good deal on the account of how it came about.

Note that I am not suggesting that the first story is institution-free and the second is agent-free. Consider, for example, Williamson's contribution to this issue (which certainly belongs to the 'rationalist' camp as defined here): he emphasizes that institutions intervene in the parametrization of the economic problem at hand — in his case, the transaction-governance problem — and also exert a (weak) influence on the characteristics of the agents. Of course, they play a more prominent role in any 'institutionalist' story, and they do so by shaping and constraining the opportunities, incentives and motivations of the actors (cf. Granovetter in this issue).³ I would add that they also help shape the representations that agents hold of what their interests are and of the instruments at their disposal to pursue them (i. e. their 'rationality').

The presumption in strong versions of the 'rationalist tale' is that agents

³ A version of the 'institutionalist tale' trying to make a detailed link between the behavioral motivations traditionally emphasized by 'rationalists' (such as sheer utility maximization), on the one hand, and other motivational factors (including moral and ethical ones), on the other, is 'socio-economics' (see Etzioni, 1988). Incidentally, note that, as the latter approach shows, non-utilitarian motivations can be brought into the picture without giving up 'rational' (at least in the sense of purposeful and coherent) decision-making. But see also below.

somehow possess a kit of algorithmic devices sufficient to adequately represent the environment in which they operate and to choose the appropriate courses of action. 'Boundedly rational' versions—such as Williamson's in this issue or the contributions that come under the heading of 'evolutionary games' in economics—relax the assumption by allowing computational and memory limitations, but still tend to define 'bounded' rationality as an imperfect approximation to the 'unbounded' one.

At the opposite end of the spectrum, the 'institutionalist tale' finds intuitive links with all those inquiries, such as cognitive psychology and artificial sciences, which start from the presumption of general (nearly ontological) gaps (a) between what one sees and believes, and 'what is really out there'; and (b) between what one could notionally do, given the environmental constraints and opportunities, and what one is actually capable of doing. As a consequence, in this perspective, the challenge to the theory is to investigate the nature and process of emergence of particular cognitive frames, interpretative categories, patterns of behaviors, routines, etc. [Within an enormous and diverse interdisciplinary literature, examples Shafir Tversky (1992) on reasoning and choice; Holland *et al.* (1986) and Lakoff (1987) on adaptive learning and category formation; and the analyses of behavioral routines in Nelson and Winter (1982), Cohen (1987), Cohen and Bacdayan (1991) and Dosi and Egidi (1991).]

Related issues concern the separability between cognitive and motivational dimensions of decision-making. Clearly, the 'rationalist tale' demands such separation between 'what one desires' (i.e. goals, utilities, etc.) and 'what one knows' (i.e. the assessment of the status of the environment and the means available to achieve given goals). Conversely, the 'institutionalist tale' is comfortable also with blurred coupled dynamics between the two, possibly yielding endogenous preferences, coexisting contradictory models of cognition and action in the heads of the same individuals, phenomena of cognitive dissonance, etc.⁴

I mention these basic dichotomies in the underlying views of social interactions because they also cut across the contributions that follow and might be where some of the interpretative divergences ultimately rest (compare, for example, Williamson and Ostrom on the one hand, and Granovetter and Hamilton-Feenstra on the other).⁵ Differences at such a deep method-

⁴ Relevant discussions in these respects are Cohen *et al.* (1972), Earl (1983, 1988, 1992), Elster (1979, 1983). A thorough introduction is in March (1994).

⁵ Clearly, the majority of economists tend to be more comfortable with the first tale and sociologists with the second. However, it is deeply misleading, in my view, to identify the dichotomy with disciplinary boundaries (a bit along the lines of Pareto, who equated economics and sociology with the study of 'rational' and 'irrational' behaviors respectively). In fact, I personally consider it good news that these diverse perspectives increasingly affect *all* social disciplines.

ological level are most likely undecidable, but they also influence propositions and conjectures at lower levels of abstraction that in principle may be assessed against the empirical evidence. Indeed, the papers in this issue provide a rich and solid point of departure for this type of exercise.

3. *Power, Authority and Hierarchies*

Another major 'foundational' issue concerns the nature of hierarchies, the notion of authority and the associated notion of power. Again, for the sake of simplicity, let me suggest two caricaturally simple archetypes.

The first one (represented by Williamson in the issue with much higher sophistication) proposes that (a) the notion of 'power' does not have any clear analytical status; (b) the basic unit of analysis ought to remain as much as possible that of transactions; and (c) organizations are primarily governance structures. Call this model the *exchange view* of interactions and organizations. The second, which I shall (improperly) call the *political view*, holds on the contrary that (a) an essential, although not unique, feature of organizations is their authoritative structure (cf. Hamilton-Feenstra in this issue); (b) authority relations are inherently different from exchange relations; and (c) power must be considered an autonomous interpretative dimension.

Some definitions are in order. Consider the following: authority involves 'the transfer of the locus of decision from the subordinate or follower to the authority' itself (Kemp, 1993, p. 161). Authority entails domination, as Weber would put it, so that the conduct of the 'ruled' is such that it is 'as if the ruled had made the content of the command the maxim of their conduct for its very own sake' (Weber, 1968, p. 946; also cited in Kemp, 1993). Therefore, obedience and identification with the authority, and not self-interest, are the motivational drives.

Related to this, let me define power as the ability of some agent (the 'ruler' or authority) to determine the set of actions available to other agents (the ruled) and to influence or command the choice within this set according to the deliberations of the ruler himself [this definition echoes in many ways the analysis of Luhmann (1979)]. Hence, the units of analysis are the dimensionality and boundaries of the 'choice sets', and the mechanisms by which 'domination' by means of authority is enforced.

The political view, of course, does not claim to be exhaustive: command and exchange coexist in different forms within and outside organizations. But it claims—at least as I interpret it—that the sole consideration of exchange relations prevents a full understanding of what goes on within the 'organizational black box', of the boundaries between organizations and of organizational dynamics.

Note also that the dichotomy between the exchange and political views is not entirely orthogonal to the previous one between 'rationalist' and 'institutionalist' foundations. In fact, the political view demands microfoundations involving socially adaptive preferences and behavioral modes (such as 'obedience' or 'identification with the role' and with the authority)⁶ quite at odds with the rationalist tale. Conversely, any strong version of the latter almost inevitably leads to the interpretation of seemingly authoritative relations as the outcome of some sort of voluntary meta-exchange by self-seeking, forward-looking agents.

Ultimately, the rationalist tale-cum-exchange view entails a sort of unitary and invariant anthropology, based on well-formed, consistent interests as the basic motivational drives and criteria for action. At the other extreme, the institutionalist tale-cum-political view is naturally consistent with the idea of an irreducible multiplicity of motivational dimensions, and, possibly, with multiple 'identities' coexisting within the same agent. So, for example, the latter perspective builds upon broad historical generalizations such as Hirschman's account of the changing balance between 'passions' and 'interests' in modern Western culture (Hirschman, 1977) or Sen's fascinating discussion of the (sometimes uneasy) coexistence between 'ethical' and 'economic' motives (Sen, 1987). The same phenomena would be interpreted in rationalist/exchange perspectives as varying restrictions on some sort of 'enlarged utility functions' or changing 'social technologies' for the governance of exchanges and production.⁷

Moreover, the 'institutionalist' perspective would see exchanges themselves as embedded in particular institutions (e.g. 'the markets') whose origins and characteristics demand to be explained [on the notion of embeddedness, cf. Granovetter (1985) and this issue]. Finally, note that the political view is quite in tune with the picture of business firms provided by most organizational theorists and business economists alike (cf. Pfeffer, 1981; March and Simon, 1993).

4. Origins, Dynamics and Efficiency Property of Organizations

Let me go back to the question of 'why organization *x* exists'. As already mentioned, there are two types of answer. One involves an explicit account of the dynamics (i.e. how it got to become what it is). The second answer

⁶ Classic discussions of these processes are in Milgram (1974), Simon (1976) and Lindblom (1977).

⁷ Of course, pushing the interpretation to the extreme, one reaches a Becker-type anthropology whereby, for example, the only remarkable difference between Adolf Hitler and Sister Theresa of Calcutta rests on diverse weights of the arguments of their (dimensionally identical) utility function and, analogously, the differences between Micronesian civilizations and L. A. yuppies can be reduced to differences in available social technologies.

derives necessary and sufficient reasons for its existence from the tasks it performs and its efficiency properties. With the former methodology, admittedly it might be quite difficult to achieve general theoretical propositions, since it involves the identification of classes of processes and sets of initial conditions yielding specific classes of outcomes. But, with the second methodology, functionalist or teleological fallacies are an easy temptation, as vigorously argued by Granovetter in this issue (i.e. 'organization x exists because it is good at performing function a '). This need not necessarily be the case, but then the challenge is to show that functional efficiency is a robust outcome of either intentional constructive processes or collective, unintentional mechanisms of selection among a variety of alternative organizational solutions. It is fair to say that, so far, neither proof is available.

On the constructive, intentional side, the game-theoretic route does not seem able to deliver the goods. Without entering into any detailed discussion of the state of the art, one should just recall the hurdles facing selection among multiple equilibria or the implications of the Folk theorem in repeated games (which basically says that any behavioral sequence that one observes can be interpreted as an equilibrium strategy).⁸ All this applies to interactive setups involving individual agents and, plausibly, even more to collective entities such as formal organizations or institutions in general.

Alternatively, the selection route is the most rudimentary form of a dynamic, evolutionary argument. It dates back at least to Friedman's 'as ... if' proposition, according to which, due to some unspecified selection mechanism, observed behavioral traits (and, implicitly, also organizational forms) can be interpreted as if they were the outcome of an explicit optimization process, since no other behavior would survive in equilibrium. However, apart from a lot of hand waving, the analytical results are mainly negative: only under quite restrictive conditions on the selection space, selection mechanisms and initial conditions does such an outcome obtain [cf. Winter (1971), and the critical surveys in Silverberg (1988) and Hodgson (1993)].

To sum up, it seems to me that no matter what kind of explanation one offers as to why particular organizations exist, an answer to the 'how' question is unavoidable. This, in turn, implies some explicit dynamic account of how formal organizations—and, more generally, institutions—emerge and change over time. To be brief, I shall continue to reason in terms

⁸ Incidentally, I would like to point out that these critical remarks primarily refer to game theory as both an analytical device and a *weltanschauung* (including all ontological commitments to rationality, common knowledge, etc.). A much more cavalier use might be also heuristically much more useful, especially in the exploration of incentive-compatibility problems: see Ostrom (this issue), or Schelling's pioneering work (Schelling, 1960).

of dichotomous archetypes. The first archetype—call it the *constitutional model*—is based on the idea of intentional interactions among purposeful, forward-looking agents who try to establish ground rules for their cooperative endeavors (Ostrom's paper in this issue is a good example of that methodology). In opposition, one may conceive the origin and evolution of organizations primarily in terms of collective, largely unintentional outcomes of interactions—call this the *self-organization model* (with respect to organizational evolution, see Warglien in this issue). Needless to say, empirical processes of organizational formation are likely to involve different mixtures between the two modes, but the formal study of the properties of each archetype adds important insights to the understanding of which kinds of interaction mechanism yield which kinds of feasible outcome.

The question of origins and change of organizations inevitably demands an account of the mechanisms of adaptation and selection (Levinthal, 1990, 1992; Warglien, this issue). This is straightforward under the self-organization model, but it applies also to the constitutional model, unless one assumes that one gets it perfectly right every time (i.e. that agents are always able to construct 'optimal' organizational arrangements, whatever that means). Crucial issues, in this respect, are (a) the processes of organizational learning; and (b) the criteria and mechanisms of selection within and among organizations. (In fact, there might not be such a clearcut distinction between the two since organizational learning and adaptation may be seen as resting on intra-organizational selection of behaviors, skills, etc.; see Warglien in this issue.) In any case, organizational learning directly links with the current debate on the nature of organizational competences [cf., among others, Dosi and Marengo (1992) and Teece *et al.* (1994), and the ways they are modified over time]. Warglien's work in this issue contributes a novel view of this dynamics, based on hierarchically nested processes of learning and selection within each organization that unfold on multiple temporal and spatial scales.

Can one univocally define the criteria of selection? And what is the dimensionality of the selection space? The dynamic story implicit in Williamson's contribution to this issue is that there is only one dominant selection criterion (i.e. cost-minimizing efficiency). Interestingly, an implicit one-dimensional selection is shared also by some of the most vocal critics of Williamson's transaction-cost theory, namely American 'radical political economists', but the fundamental criterion for them concerns power over the labor process and income distribution (cf. Bowles and Gintis, 1993). A fascinating perspective, however, stems from the possibility of multiple selection criteria within and among organizations: organizational dynamics in that case could be understood as the imperfect outcome of adaptation and

selection according to possibly conflicting objectives of the members of the organization and of the organization as a whole.

Think, for example, of the following 'toy model'. Suppose that an organization could be actually described according to the following five dimensions:

- the distribution of (formal) authority;
- the distribution of (actual) power (in the above definition);
- the incentive structure;
- the structure of information flows;
- the distribution of knowledge and competence.

Note that even with one-dimensional selection (e.g. based on some efficiency criterion) one should expect to observe imperfect alignment among the five dimensions whenever organizational traits appear in a correlated form (so that, for example, the 'most efficient' distribution of knowledge and competences comes together with a highly 'suboptimal' incentive structure; or, conversely, an efficient exercise of authority is correlated with a high frequency of idiots in the organization).⁹ Hence (bounded) variety of organizational forms might coexist. Moreover the hypothesis of one-dimensional selection is not sufficient to guarantee that being 'more efficient' at any one point in time is necessarily monotonic into 'dynamic efficiency' [e.g. survival probabilities; there is more on these topics in Levinthal (1992)].

These considerations apply to a greater degree under multiple selection criteria (e.g. cost-minimizing efficiency with innovative capabilities and 'political' coherence). Then, one starts having a co-evolutionary picture whereby the changes of particular organizational traits — say, those impinging upon the forms of transaction governance — are shaped and constrained by other organizational characteristics related, for example, to the reproduction of power within the organization or to its past strategic commitments.¹⁰ At a broader level of analysis, this co-evolutionary view holds also in the case of multiple organizations and institutions; indeed, the idea that adaptation and selection are nested into broader institutional environments — which might themselves change but on a different timescale — seems quite in tune with the spirit of Granovetter's concept of embeddedness (cf. also Nelson, 1994; Granovetter and Hamilton-Feenstra, this issue).

⁹ The idea comes from a recent suggestion by Levinthal on 'epistatic correlation' among organizational characteristics.

¹⁰ For a thorough reconstruction of the 'coevolutionary' processes between technical change and market orientation in the case of AT&T, see Lipartito (1994).

5. *Path-dependency and Discontinuities*

Whatever dynamic story one tells, it naturally involves the question of where the dynamics is leading to (which economists, perhaps too easily, confine to the nature of asymptotic properties of the process). And, symmetrically, one may ask the question of whether one would have got to a certain observed state, say, a certain organizational setup at time t , irrespectively of any initial conditions, further back in time. As is known, when initial conditions matter and their effect is not vanishing but possibly self-reinforcing over time, one says that the process is path-dependent. Hence, simplifying to the extreme, an integral part of the explanation of 'where one is going' or 'why we are here' is the account of 'where we come from'. Conversely, note that a necessary (although not sufficient) condition for a 'teleological' interpretation of an observed organizational phenomenon is the lack of path-dependency. As David puts it,

whether the focus falls upon the supposed evolutionary tendency toward efficiency in the development of property rights and other macro-institutional arrangements, or upon the conceptualization of a firm's internal organization and mode of doing business as the consequence of rational, optimizing decisions, the implicit presumption [is] that institutional arrangements are perfectly malleable . . . (David, 1992, p. 3).

David suggests at least four reasons why one should expect path-dependency in organizations and institutions. First, they incorporate shared conventions and mutually consistent expectations grounded in 'shared historical experiences and conscious perceptions of the shared past' (David, 1992, p. 9). Second, they provide 'role-typing' and acculturation mechanisms which is a sort of 'sunk capital' of organizations (on this point, see also Douglas, 1986). Third, they embody 'codes' for communication and information processing (and it is precisely their irreversibility which make them useful: if a language could be frequently changed it would become worthless for communication with the others!). Fourth, the interrelatedness of different organizational functions—in terms of information processing, incentives, roles, etc. (see also above)—self-reinforces specific organizational structures, possibly well beyond the time of their purported usefulness.¹¹

Other complementary reasons are implicit in the earlier discussion. In particular, 'the processes of adaptive learning may result in a competency trap whereby increasing skill at the current procedures makes experimentation with alternatives less attractive. In this sense, organizational learning contributes to organizational inertia' (Levinthal, 1992, p. 432).

¹¹ David (1992) uses, appropriately, the analogy with technological interrelatedness, whereby technical interdependencies within complex systems make it hard to change any one component without affecting the whole structure.

Organizational routines, while being an effective way of storing and reproducing organizational knowledge (Nelson and Winter, 1982; Cohen, 1987), are by their very nature a source of organizational inertia (cf. also Robertson and Langlois, 1994). And finally, entrenched, socially shared expectations, such as particular forms of trust or lack of it, underlie the reproduction over time of behavioral patterns, irrespectively of their collective efficiency [cf. Lorenz (1994) on the lack of trust, conflict and competitive decline in the British industry]. All these factors enhance the importance of path-dependent development and lock-in in particular self-reinforcing institutions and organizations. History, so to speak, solidifies into structures which constrain future developments.

The co-evolutionary view briefly discussed above, however, entails also some potentially 'de-locking' factors. First, the imperfect alignment of different functions within organizations always implies the possibility of far-reaching changes in the overall organizational structure triggered by the accumulation of adjustments on single dimensions.

Similar properties are likely to apply also at more macroscopic levels to the co-evolution of networks of interrelated organizations and the institutional context in which they operate.¹² Several contributions to this issue present rich examples of this general point.

Coriat studies the cumulative changes in intra- and inter-organizational routines induced by adjustments to increasing product variety. Ultimately, this has led to significantly different forms of inter-firm networking — with different types of hierarchical relations between final producers of goods (in this case automobiles) and component suppliers; a different distribution of knowledge within the network; and different combinations between contractual and trust-based relations.

Lazonick and West show in a comparative perspective how embedding roughly similar technologies into different organizational structures might yield quite diverse performances: long-term competitiveness is the outcome of the interactions between institutions, industries and firm. Part of the argument strengthens the view of path-dependency and (limited) lock-in. But they also show examples of how an institutional context — e.g. the American — can, so to speak, be successfully 'invaded' by alternative organizational arrangements — in this case, more 'integrated' and participatory firms.

Galambos' paper raises puzzling questions on the influence of the changing

¹² In a different analytical context, Padgett and Ansell (1993) show how the simultaneous membership of agents within multiple social networks is a source of opportunities and dynamics. The illustration that they provide of this point is a fascinating reconstruction of the rise of the Medicis in Renaissance Florence.

balance between 'authority' and 'responsibility' of CEOs in the USA upon the strategic capabilities of top management and ultimately upon the internal structure and boundaries of large enterprises.¹³ Finally, Chavance's article vividly illustrates the dynamics toward collapse engendered in centrally planned economies by deep-seated mismatches between formal hierarchies, incentives and actual decision powers.

More generally, a major theoretical challenge concerns the determinants of 'de-locking' (that is, ultimately, of major discontinuities, 'revolutions', etc.) even in the presence of path-dependent, cumulative dynamics. Of course, there is the easy answer: try to trivialize them as much as possible in terms of unforeseen exogenous shocks.¹⁴ However, for those who do not take that as a serious explanation, the much more difficult task is to understand, in different social domains, how 'success contains also the seeds of its own demise'. Clearly, it is the domain of Schumpeter's 'creative destruction', and of Moore's (1978) analysis of the social bases of obedience and revolt, to name but two famous examples, and it applies also to the dynamics of economic organizations and institutions at large.

6. Some 'Grand' Empirical Questions

Foundational issues—such as 'rationalist' versus 'institutionalist' primitive tales; *Homo economicus* versus *Homo politicus*; history and path-dependency; role-determined versus 'free-choice'-determined behaviors, and the ultimate sources of social dynamics—stand also behind the kind of 'grand' empirical questions that one asks and the ways one answers them. By that I mean broad questions, in principle, of a historical nature, covering, for example, the nature of contemporary socio-economic organizations or the long-term patterns of development.

One of these grand questions, namely the 'Coasian' question, 'why do firms exist?', is one of the points of departure of three papers in this issue (Williamson, Granovetter and Hamilton-Feenstra). And highly related themes concern the boundaries of organization themselves and the ways they

¹³ The author concludes that the recent movements toward deregulation, LBOs, and dismantling of the welfare state have brought about a closer identification of responsibility and authority, thus improving the performance of top managers. However, quite opposite conclusions could be drawn from that same evidence. For example, the fall in the domains of 'responsibility' may well lower the pressure to build 'integrated' organizational structures, with an active involvement of the labor force, which Lazonick and West identify as a major ingredient of long-term competitiveness. And it could strengthen financial skills—as many have argued—at the expense of more idiosyncratic competences related to production and innovation.

¹⁴ Interestingly, note that both those believing in purely teleological, hyper-rationalist rules and those standing for purely functionalist, agent-free rules are the most likely candidates to be satisfied with such an answer.

internally operate. Williamson's (approximate) identification of organizations with hierarchies, on the one hand, and what is not a formal organization with markets, on the other, is already part of his own answer. Granovetter and Hamilton-Feenstra challenge, at least partly, that interpretation and suggest that there are many more 'non-market' relations among firms and between firms and individual agents than Williamson's theory is acknowledging.¹⁵

In fact, one could push the argument further and ask a sort of 'anti-Coasian' question, namely why do markets exist? How do they actually function? How did they come about? Incidentally, notice the relevance of these issues also from a normative point of view with respect to the transition of previously centrally planned economies (cf. the conclusions of Chavance in this issue). It seems to me that it is an unforgivable negligence to allow the field to be monopolized by apprentice sorcerers, with very little knowledge of how Western capitalist economies actually work, but ready to miraculously promise to do in a few hundred days what in the West was imperfectly accomplished in a century or two.

Another grand question that is implicit in some of the papers that follow (compare, for example, Lazonick-West and Galambos) concerns the ordering properties that institutions and non-market relations retain *vis-à-vis* purely economic exchanges and purely self-seeking behaviors.¹⁶ In a sense, it is the grand question on the destiny of contemporary societies. It has been asked, in several perspectives, since the birth of modern social sciences. For example, Smith inquired into the nature of 'moral sentiments' which would allow the invisible hand of markets to yield non-disruptive collective outcomes. Weber asked what the collective outcomes of the diffusion of means-end (i.e. instrumental) rationality would be. And an illustrious tradition—ranging from Tocqueville to Lindblom—investigated the relations between politics and economics which made democracy viable and self-reproducing. Ultimately, to paraphrase Hirschman (1982), is the very process of economic development self-destructive in the sense that it progressively eats out the institutional base upon which it can operate in an orderly manner? Is it plausible to think that those forms of capitalism that work 'better'—in the sense that they deliver more competitiveness, growth, employment—are also those that present organizational forms which deviate more systematically from pure self-seeking motivations (the way I read Lazonick-West, this is not far from their perspective)? Or, conversely, is a greater incentive-

¹⁵ The point that what we call markets are themselves institutional constructions and, conversely, organizations embody as well a lot of exchange relations is also emphasized by Hodgson's 'impurity principle' (Hodgson, 1988).

¹⁶ Much more on these issues will be found in Polanyi (1944), Hirsch (1976), Lindblom (1977), Hirschman (1982) and Redner (1993). I discuss some of them at greater length in Dosi (1988).

alignment monotonic into 'better' collective performances (as seems implicit in parts of Galambos' analysis)?

Pushing it to the extreme, one can see here, again, two opposite archetypes of the way contemporary societies operate. The first one is inclined to assume self-adjusting, ordering properties of various sorts of invisible (or visible) hands, even outside the economic arena, grounded into purposeful, utility-maximizing, forward-looking agents. Purposefulness and rationality — irrespectively of whether via market interactions or via the construction of organizations and institutions — carries over to the collective domain (with some caveats stemming from the possibility of multiple, Pareto-rankable, equilibria). Vice versa, the alternative archetype is much more gloomy on the self-adjusting properties of these same visible or invisible hands, and is inclined to point at institutions as the 'primitive' glue which keeps society, and also the economy, together.¹⁷

7. An Invitation to a Debate, by Way of a Conclusion

Needless to say, the general issues and questions that I have tried to raise in these introductory notes go well beyond what can be thoroughly discussed in a dozen articles, even if of the extremely high quality found in this issue. But the editors of *Industrial and Corporate Change* would like to see them as the beginning of a debate ambitiously tackling some of the core themes in social sciences, civilized, robustly grounded in empirical inquiries and theoretical models. In this respect, the articles that follow are nearly a paradigm of the genre. After all, the ways economic activities are organized and the ways they link up with other institutions provide crucial ingredients of the setup of the whole social fabric. I do not think one is exaggerating by suggesting that understanding them better will give us also a better understanding of how contemporary democratic systems work, and also better ways to preserve and defend them.

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¹⁷ Within this archetype fit also many investigations of the 'institutional architecture' of the socio-economic system which make growth viable or, alternatively, engender 'mismatching' and crises (cf. Boyer, 1988a, b).

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