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From the Search for Universal Correlations to the Institutional Structuring of Economic Organization and Change: The Development and Future of Organization Studies

Richard Whitley
Manchester Business School, UK/
Erasmus University Rotterdam, The Netherlands

Abstract. *Organization studies became institutionalized as a distinct research field in North America in the 1960s as leading universities expanded to include the new behavioural and management sciences. In keeping with the prevailing image of science, it adopted an empiricist epistemology and an atomistic ontology that portrayed formal organizations as isolated, reactive hierarchies adapting to market selection mechanisms. The further expansion of higher education in North America and Europe in the 1970s and 1980s, especially in business and management studies, together with the failure of the logical empiricist research programme in the Anglo-Saxon philosophy of science and the decline of Fordism, encouraged considerable fragmentation of organization studies around rival frameworks. Additionally, the success of East Asian firms in many international markets and continued divergence of many European forms of capitalism from the US norm led to increasing interest in the role of institutional frameworks in structuring and reproducing competing forms of economic organization. This involved a radical reconceptualization of both the nature of formal organizations and their environments, which complemented developments in evolutionary and institutional economics. As a result, organizations have come to be seen as key mediating collectivities between national and international political-economic institutions and economic outcomes in different kinds of market economy.* ***Key words.*** *comparative analysis; economic coordination and control systems; empiricism; Fordism; scientific field*

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Organization studies has had a brief but turbulent existence since the analysis of work organizations became established as a distinct field of research in many North American universities in the 1960s (Scott, 1987). As a new system of knowledge production coordinated through the competitive pursuit of reputations for contributions to collective intellectual goals (Whitley, 1984; 2000a), it bore the marks of the circumstances in which it was institutionalized, like any other new organization (Stinchcombe, 1965). In particular, it was influenced by the prevailing understandings of the nature of social scientific knowledge and the specific pattern of intellectual production in US research universities at the time (Ackroyd, 1992; Perry, 1992; Silverman, 1970).

Since then it has expanded considerably, but also become quite differentiated into a variety of subfields within and across national academic communities. These often pursue divergent intellectual purposes, sometimes with contrasting research styles and strategies, which restrict the coordination of results. The extent, then, to which organization studies continues to exist as a single, distinct and coherent reputational system in the 21st century is debatable, especially beyond the English-language academic community (Knudsen, 1999).

In addition to spawning a variety of intellectual frameworks and approaches, much of the field has become reoriented away from the search for universal regularities of relationships between properties of formal organizations towards a greater concern with the societal specificity of different ways of organizing, and explanations of how these might be changing. This involves comparative historical analysis of the ways that different market economies coordinate economic activities, and their resultant varied patterns of sectoral and technological development. This reorientation of the field represents a substantial shift from the prevalent view of organization studies that became institutionalized in the 1960s, and is complementary with more recent developments in economic sociology, political economy and the theory of the firm.

In this article, I briefly enlarge upon these points as a contribution to the discussion of the present state of, and future prospects for, organization studies. First, I summarize the main characteristics of the research field that became established in North America in the 1960s and its underlying assumptions. I then explore the major intellectual and institutional reasons for its fragmentation and reorientation, before suggesting how integrating the study of the firm as a system of authoritative coordination with the capabilities theory of the firm offers a useful way of connecting institutional frameworks to economic development and outcomes.

The Establishment of Organization Studies as a Distinct Research Field

According to Richard Scott (1987: 8): 'until the late 1940s, organizations did not exist as a distinct field of sociological inquiry', and it was only with the translation of Weber's and Michels' studies of bureaucracy into English that the Anglo-Saxon academic world began to study organizations as such. He went on to suggest: 'For the first time sociologists were engaged in the development and empirical testing of generalizations dealing with the structure and functioning of organizations viewed as organizations.' These studies led to three influential textbooks dealing specifically with formal organizations and to the establishment of a new interdisciplinary journal, *Administrative Science Quarterly (ASQ)*.

This new field did not really become entrenched in the US academic system, let alone those of Europe and elsewhere, until the late 1960s, by which time sales of *ASQ* had reached 3690 and new doctoral programmes had started to produce specialized researchers (Perry, 1992). This was, of course, greatly facilitated by the expansion of US higher education in the 1960s, and the willingness of the leading research universities in North America to incorporate business studies as a research-led field following the Carnegie and Ford Foundations' reports on management education (Locke, 1989; Whitley, 1984). From being a collection of rather uncoordinated research areas within sociology, psychology and other academic disciplines, the study of organizations became a distinct intellectual endeavour with its own journals, training programmes and teaching positions in major US universities in the 1960s and 1970s.

As the above quotation from Scott indicates, the new field was overwhelmingly concerned with how formal organizations were structured and functioned effectively. Although remarkably little attention seems to have been given to clarifying exactly how these phenomena should be identified and conceptually bounded, beyond rather vague discussions about them being goal-seeking, consciously structured collective entities, much of the early research focused in practice on employment organizations, as in the inducements-contributions framework of March and Simon (1958). This reflected widespread concerns with worker productivity and control, as well as issues of managerial authority and legitimacy, in bureaucratic organizations (Perrow, 1972).

Such predominantly 'internal' studies of work organizations gave way to the so-called 'open-systems' approach popularized by Katz and Kahn (1966) in the 1960s. Scott (1995: xiv) suggests that this conceptualization 'transformed existing approaches by insisting on the importance of the wider context or environment as it constrains, shapes, and penetrates the organization' and led to the domination of contingency theory in organization studies. It was this interest in how certain 'contingences' were related to formal properties of organization structures, such that particular combinations were more or less effective in different circumstances, which provided the foundation for the professionalization of organization studies in North America in the 1960s and 1970s, especially when combined with the formal scaling techniques developed by the British 'Aston' research group (Burrell and Morgan, 1979: 160–84; Perry, 1992).

In developing this approach, researchers in organization studies became focused on the collective goal of understanding these relationships with a common set of formalized research skills inculcated through the newly established doctoral programmes. By agreeing on the sorts of phenomena that were to be investigated, and on the ways in which they should be studied, they could establish the new research field as a separate reputational organization with its own goals and skills, in a similar manner to the more established sciences (Whitley, 1984, 2000a).

One of the key aspirations of the new field, at least among some of its leading practitioners, was to establish a supra-national or 'world' organizational theory that would identify how organizational variables such as size and specialization were related to each other in all societies (Hickson et al., 1979). It was thought essential to find invariant connections between these kinds of variables in all kinds of work organizations before studying societal differences since the alternative was too confusing and 'terrifying' (1979: 29).

Such a search for universal empirical regularities reflected the dominant epistemological empiricism of many Anglo-Saxon social scientists in the 1960s and 1970s, which understood the aim of science to be the discovery of highly general relationships between discrete properties of phenomena (Burrell and Morgan, 1979: 104–06). To establish organization studies as a separate and legitimate branch of the social sciences, it had to find empirically stable connections between organizational phenomena that appeared to be highly general. The analysis of the societal specificity of organizations, as practised for instance by the 'societal effects' approach to understanding work organizations (Maurice, 1979, 2000; Noorderhaven, 2000), was subsidiary to the goal of establishing a generalizing organizational science based on statistical correlations of abstract properties of formal structures.

Although much contingency analysis concentrated on how particular combinations of formal organizational characteristics were correlated with variations in core technologies, markets and environments in general, it rarely considered how the world outside the open systems of organizations was itself organized. In particular, it did not analyse how different kinds of 'environments' might be structurally connected to varying kinds of organizations such that their nature could be expected to differ systematically in contrasting situations (Perrow, 1972: 198–201). By focusing so much on the formal properties of organizations considered essentially as varieties of bureaucracies, much of the leading work in the new field assumed that they were well bounded, authoritatively integrated social systems that operated at arm's length from each other and from other collective agencies such as the state.

In many ways this early consensus replicated the traditional economists' contrast of markets and hierarchies in which firms were seen as islands of order amidst a sea of disorder (Grant, 2001; Richardson, 1972). In both cases, highly organized coordination through formal authority hierarchies was counterposed to relatively disorganized market coordination through the price mechanism. The possibility that market-like coordination might coexist with formal authority within the boundaries of the firm, and that authoritatively coordinated cooperation might become institutionalized between firms, was rarely considered (Imai and Itami, 1984).

A further similarity between contingency theory in organization studies and orthodox economics concerns the role of markets in selecting efficient forms of organizing economic activities. While less explicitly expressed in most organization theorizing, both fields assume that what exists is *ipso facto* effective since the environment destroys uncompetitive organizations. Statistically significant correlations between structural characteristics and environmental contingencies are thus taken to reflect efficient organizational arrangements in particular circumstances, simply because they have been identified and are assumed to be stable. Exactly how the selection mechanism works to privilege the more effective remains unexplored, not least because the nature of different kinds of environments is rarely specified. In both fields, a pervasive functionalism presumes the dominance of competitive markets that ensure the survival of the more efficient enterprises (Whitley, 1999b).

This dominance of external pressures is also reflected in the concern of much contingency analysis to identify the characteristics of formal organizations that 'fitted' their environment. Essentially, organizations were seen as adapting to the demands and constraints of their external circumstances in a largely passive manner. While some authors did consider how managerial elites could make strategic choices (Child, 1972), most took a passive view of organizations that ignored the efforts of companies to control other economic actors and organize markets.

The view of organizations as integrated authority hierarchies in a largely anomic, unstructured environment was perhaps understandable in the USA during the heyday of Fordism when the Chandlerian stereotype of the large, managerially integrated, diversified company dominated the economy, and markets were weakly organized. The kind of organization studies that became established in North America can be seen as reflecting the particular variant of capitalism that became institutionalized in the USA for much of the 20th century, rather than a more general attempt to understand how different kinds of organizations developed and changed in varied kinds of historical and institutional circumstances. It is perhaps ironic that a field so concerned to establish universally valid correlations between properties of formal organizations should presume the generality of one kind of economic organization that characterized a relatively small number of countries in one period of their historical development.

The Fragmentation of Organization Studies and the Development of the Comparative Analysis of Economic Organization

As a number of commentators have suggested (e.g. Reed, 1992; Knudsen, 1999), this research programme 'did not spawn the long term, cumulative growth of theorizing and research glimpsed as a possibility in 1970' (Aldrich, 1992: 17), and its enthronement as the orthodoxy of the new field was short lived. Instead, according to Reed (1992: 3): the 'retreat from systems-based conceptualisations of organisation and the scientific legitimations of organisational analysis which they reinforced—that is, the commitment to organisation studies as a social *science* geared to the identification of causal relationships between "organisation" and "environment"—had turned into a rout' by the end of the 1970s.

Not only had the contingency programme lost many of its adherents and failed to overcome internal conflicts, but its whole intellectual approach and presuppositions came under sustained attack from a number of contrasting perspectives on what organization studies should be about and how research should be conducted. By the end of the 1980s it had been replaced by a plethora of research programmes in North America, which pursued different goals with quite different methods and strategies, each with their own intellectual standards and ways of evaluating competent contributions, much to the distress of those like Pfeffer (1993) who sought cognitive and social integration within a single paradigm.

This fragmentation of purposes and frameworks can be attributed to a variety of intellectual, organizational and phenomenological factors. One of the major intellectual reasons for the collapse of contingency theory as a hegemonic research framework was the popularization of Kuhn's *The Structure of Scientific Revolutions* (1970; Silverman, 1970) and the concomitant decline of the logical-empiricist research programme in the Anglo-Saxon philosophy of science. In many of the social sciences, the contradictions and difficulties of this programme to establish intellectual standards that could guarantee scientific progress, exemplified most directly perhaps by Lakatos's attempts (1970, 1971) to integrate some of Kuhn's ideas into the Popperian canon, legitimized the development of diverse intellectual standards and goals.

Not only could some argue for the distinctive nature of the human sciences on the basis of their subject matter, as in the disputes over the nature of social realities and how they were to be understood, but it now appeared that there was no reliable means of ensuring progress in the sciences as a whole, and so no justification for privileging any particular approach to developing an organization *science*. While many, if not most, researchers in the newly established field probably remained unaware of these developments, they seemed to license radical intellectual innovation among those dissatisfied with the empiricist orthodoxy. As the success of Burrell and Morgan's (1979) textbook indicated, there was a large audience for comparative analyses of contrasting 'paradigms' that did not elevate any single one to hegemonic status on the basis of it being the only 'scientific' one. Indeed, the widespread diffusion of various misconceptions of Kuhn's analysis of intellectual change in the physical sciences encouraged much paradigm-hunting in management studies, as well as a reluctance to accept opposing groups' intellectual standards (see, e.g., Carman, 1980; Pfeffer, 1993).

This proliferation of research programmes, frameworks and standards in organization studies was greatly facilitated by the rapid and widespread expansion of business and management studies in North American and European universities from the 1960s to the 1980s (Locke, 1989). The growth of jobs and markets for research outputs enabled deviant academics to establish their own specialist goals in separate reputational organizations without first having to overcome the current intellectual hierarchy. In the sciences, as elsewhere, rapidly increasing demand facilitates new entrants developing innovative competences and products so that novel ideas, methods and frameworks are not only able to gain a hearing but can also become the basis of separate identities and resource-controlling organizations.

In the case of organization studies, this expansion meant that new journals dedicated to unorthodox research objectives and styles provided outlets for innovative approaches, as well as providing a considerable market for books outlining the new frameworks. While not necessarily being able to control separate labour markets and research funding decisions, leaders of these deviant approaches could more easily set distinctive research agendas and promote their standards because of this growth.

Intellectual pluralism has been especially marked in Europe where academic structures and traditions vary considerably, particularly in the human sciences. Organization studies here has been less structured around a common intellectual style and approach than in the USA because of major variations in the organization of intellectual competition and institutional contexts (see, e.g., Amdam, 1996; Engwall, 1995; Engwall and Zamagni, 1998; Jonsson, 2003; Whitley, 2003b). Intellectual approaches have tended to be developed by distinct schools of thought, often dominated by particular individuals or small groups, which rarely engage directly in sustained, continuing conflict over competing programmes and access to resources. Coordination of research results has tended to be weak across such schools and specialisms. Because the English-language reputational system does not dominate most continental European countries in this area as much as it does in, say, the study of finance, both intellectual and organizational variety are likely to continue to be considerable as long as national higher education systems and other institutions remain organized in different ways.

These intellectual and organizational factors encouraging the differentiation, if not fragmentation, of organization studies in the 1970s and 1980s were reinforced by considerable changes in the nature of leading firms and patterns of economic organization in many market economies. These encouraged a number of research groups to pursue different kinds of intellectual objectives and strategies, particularly to understand how and why different forms of economic coordination and control systems—or business systems (Whitley, 1992, 1999a)—became established and reproduced in different historical and institutional circumstances, as well as their economic consequences. The development of this kind of comparative institutionalist analysis of organizations overlapped with the revitalization of economic sociology and political economy (Crouch and Streeck, 1997; Guillen et al., 2002), as well as being consonant with 'regulationist' accounts of post-Fordism and similar analyses of social systems of production (Boyer and Saillard, 2002; Hollingsworth and Boyer, 1997).

While the establishment of the 'new paradigm' of management science (Locke, 1989) in the USA in the 1950s, and of organization studies as a distinct field in the 1960s, occurred when US big business was seen as the most successful and modern in the capitalist world, this was no longer the case in the 1980s. The celebration of flexible specialization in Europe, exemplified by the success of Piore and Sabel's *The Second Industrial Divide* (1984), and the success of Japanese and other East Asian firms in the domestic US market as well as in Europe, had cast considerable doubt upon the universal superiority of US firms and their management methods. These alternative models of economic organization appeared to be highly competitive in certain industries without the associated panoply of elite business schools, MBA programmes and management consultancies, and so suggested to some that expensive formal training in codified knowledge was not necessary to produce effective managers (Locke, 1996).

As well as stimulating a minor academic industry on Japanese management techniques in business schools and consultancies, the apparent decline of the US model from worldwide dominance, and increased awareness of the variety of ways that market economies could be organized effectively, helped to shift scholarly interest from the study of universal correlations between measures of bureaucratic formal organizations to the analysis of how organizations and their environments were mutually structured in different societies. Rather than concentrate on abstract properties of formal organizations that could be treated largely in isolation from their historical and institutional contexts, this concern focused on how different kinds of economic organization became established and reproduced in different circumstance such that varied kinds of economic outcomes ensued.

This change in focus was both methodological and phenomenological. It directed attention to particular kinds of organizations in particular kinds of situations, i.e. firms in market economies, as opposed to all work organizations in all kinds of contexts, and sought to explain how and why they varied as a result of contrasting economic logics derived from different societal institutions. It thus reflected a shift from the search for empirical generalizations to attempts to provide causal explanations through comparative analysis, from 'extensive' to 'intensive' research designs (Harre, 1979: 132–9; Sayer, 1992: 241–51; Tsoukas, 1989).

It also involved a reconstruction of the phenomena being analysed. Rather than assuming that organizations were all integrated authority hierarchies operating at arm's length from each other in disorganized markets, the comparative analysis of economic organization has focused on how firms and markets interdependently varied in their degree and mode of integration. Thus, the authoritative coordination of economic activities was not restricted to managerial hierarchies but also extended across formal organizational boundaries, as well as to those conducted in different kinds of public and private organizations. Highly integrated monolithic bureaucracies and spot market transactions between anonymous traders are only two possible types of economic coordination mechanisms, and it is a major concern of this variant of organization studies to describe and explain historical and territorial variations in these mechanisms.

Differences in forms of economic organization are usually explained in terms of contrasting institutional arrangements governing capital and labour markets, as well as more general differences in state structures and policies, and in broad cultural norms dealing with authority and trust relationships between actors. As numerous comparative studies have shown, variations in types of firms, markets, industrial structures and patterns of technological specialization can be understood as outcomes of societal institutions and their historical development (see, e.g., Casper et al., 1999; Hall and Soskice, 2001; Hollingsworth, 1991; Hollingsworth and Streeck, 1994; Whitley, 1992, 1999a). These studies conceive firms as organizations to be mutually constituted by their environments rather than isolated entities so that what an organization is reflects its internal relationships with particular features of its context, especially the organization and goals of social groups.

This emphasis on the interdependently developed nature of organizations and their environments is particularly noticeable in studies of European firms and markets, especially those influenced by the 'societal effects' approach to comparative organizational analysis (Maurice, 1979; 2000; Noorderhaven, 2000; Sorge, 1991, 2000). The rules of the competitive game within and between organizations are seen here as being constructed and contested by a variety of occupational and other groupings rather than imposed by an external and asocial market. These groupings are themselves societally constituted by different state structures and policies, forms of association and prevailing patterns of collective mobilization, and so differ significantly between institutional contexts.

Formal organizations, in this view, are more arenas for competing social groups to seek control over priorities and resources than stable authority hierarchies establishing distinctive routines and procedures separate from the rest of society. Especially in many continental European societies, the 'breaking down the walls of the organisation' described by Callon and Vignolle (1977) reflects the horizontal penetration of many organizational activities by broadly based groupings and ideologies (cf. Kristensen, 1996, 1997).

A further factor affecting the direction of organization studies was the restructuring of Anglo-Saxon financial markets in the 1970s and 1980s, and the subsequent reorganization of US big business. The combination of increasing inflation, changes in regulatory regimes and the growth of institutional shareholding and control led over time to an integration of the corporate bond and equity markets, the development of the junk bond market as a means of engaging in hostile takeovers, and the aggressive pursuit of greater shareholder returns (Lazonick and O'Sullivan, 1996, 1997).

In particular, the increasing concentration of control over company shares through investment banks and other fund managers in the 1980s and 1990s intensified the market for corporate control and facilitated the break-up of many large and established organizations in the UK and USA. Together with the changes in consumer markets that reduced the viability of the classic Fordist recipe, this restructuring devalued existing organizational routines and increased managerial uncertainty. As a result, diversified Chandlerian hierarchies began to reduce the scope of their activities and competences through disintegration and outsourcing.

The declining predictability of markets and growing fluidity of ownership and industrial structures in the USA in the 1980s and 1990s meant that many companies sought to reduce their risks by entering alliances, albeit usually short term and highly specific, with other firms rather than developing new competences internally. This was especially the case in the new and emerging industries that dominated much research in US business schools in the long 1990s boom. Together with the revitalization of Silicon Valley after the recession of the early 1990s and the growth of other high technology entrepreneurial districts, such restructuring led to both an increased interest in the ways that firms managed change and the institutional circumstances in which different kinds of innovation flourished (see, e.g., Kenney, 2000; Saxenian, 1994), as reflected for instance in the burgeoning literature on innovation systems (Edquist, 1997; Lundvall, 1992; Nelson, 1993; Whitley, 2000b).

Firms as Mediating Actors between Institutions and Economic Development

These changes in intellectual goals and approaches, together with the shifting organization of firms and markets in many societies, encouraged many researchers in organization studies to study the key processes through which different institutional frameworks led to contrasting systems of economic coordination and control emerging as distinctive varieties of capitalism. In particular, the dynamic linkages between general institutional features, firm governance and behaviour and patterns of technological and industrial development have become the central concern of those seeking to understand how different societal arrangements structure economic phenomena and their change.

A, if not the, central agent in these processes is the firm. However, the firm is not here understood solely as the legally defined agent of property rights holders but rather as the unit of financial control that develops unique organizational capabilities through the authoritative coordination of economic activities. Such capabilities vary in their flexibility and adaptability from those being largely concerned with: (a) the coordination and control of activities, through (b) improving products and processes incrementally by individual and collective learning, to (c) transforming skills and knowledge quite radically.

The generation and improvement of these capabilities involves the coordinated integration of skills and knowledge of different groups within and across formal organizational boundaries to achieve collective goals. This usually depends on the exercise of authority to obtain compliance. As Hamilton and Feenstra (1997: 56) have emphasized, firms, and economic organizations in general, are 'above all authoritative organizations that structure relationships according to established rules of conduct' in which participants recognize that they are bound to the authoritative norms of the organization, and there are coercive means to enforce the collective rules.

The extent of such authoritative integration of activities carried out by business partners and skilled workers does, of course, vary considerably between firms, sectors and societies. This, in turn, implies that the degree to which organizational integration overlaps with the legal boundaries of formally defined 'firms' differs between types of market economy, as the contrast of Chinese family businesses in Pacific-Asia and large Japanese companies with UK and US firms illustrates (Redding, 1990; Westney, 1996; Whitley, 1992). In talking of firms here, I am therefore referring to the authoritatively integrated organization that generates distinctive organizational capabilities rather than purely legally defined entities.

For firms to develop distinctive organizational competences it is especially important to gain the commitment of particular groups of employees, including those of business partners in some cases, to joint problem-solving and the improvement of employer-specific knowledge and skills, sometimes at the expense of enhancing their own individual competences. The more complex and risky are problem-solving activities, and the more they involve the coordination of complementary activities and types of knowledge, the more important such commitment becomes.

A major means of developing skilled employee involvement in joint problem-solving activities, and so developing the firm's collective capacity to deal with complex issues, is the willingness of owners and top managers to share authority with them and to delegate considerable discretion. Because the degree of such authority-sharing with different groups of employees and business partners varies greatly between companies, so too do their capabilities to integrate varied activities and types of knowledge in dealing with complex problems, and to develop new routines.

An additional means of developing continuing commitment to organizational goals in order to enhance firm-specific problem-solving capabilities is to offer long-term organizational careers to key groups of employees. This is especially significant when investment in such collective capabilities may limit the visibility and external labour market value of individuals. However, there are considerable differences in the longevity of the careers that are offered, and the range of employees to whom they are available, between the large Japanese firm, the US managerial hierarchy and small firms in local production systems (Crouch et al., 2001). These affect the sorts of organizational capabilities that firms develop.

The extent to which owners and managers decide to share authority with different groups and offer organizational careers is greatly affected by societal institutions, especially those governing trust relations and skill formation and control. As a result, economies with contrasting institutional frameworks vary significantly in the concentration or dispersion of authority over various kinds of decisions in work groups, organizational divisions, firms and business associations, as well as the significance of organizational careers, and these differences affect the sorts of collective capabilities that firms and other organizational units are able to generate in them. Consequently, firms' abilities to innovate and deal with uncertainty vary between types of market economy.

Differences in these characteristics of firms therefore help to explain how different institutional frameworks generate distinctive patterns of sectoral and subsectoral technological specialization, such as those highlighted by Casper (2000), Soskice (1997; 1999) and others. Because societal institutions encourage varying degrees of authority-sharing and differently structured organizational careers in companies, firms develop distinctive coordinating, learning and reconfigurational capabilities. These enable them to be more or less effective in dealing with particular kinds of problems and innovating in different ways. As a result, market economies with contrasting institutional arrangements tend to display different kinds of economic development and specialization.

For example, firms with strong competences in the integration of complex forms of knowledge and advanced skills to develop and commercialize systemic technologies are unlikely to be successfully established in societies where trust in formal institutions is low and the state is antagonistic to independent control of major economic activities. Rather, companies in these sorts of contexts are more likely to compete by being highly flexible to be able to deal with an uncertain environment, and responding rapidly to changing customer requirements through centralized decision-making.

More systematic coordinating capabilities are more likely to be developed by firms in arms' length institutional frameworks that combine regulatory states with liquid capital markets. These features encourage owners to delegate some authority to salaried managers by providing a more predictable environment for investments than where the legal system is unreliable and/or corrupt, as well as an educational system that identifies the more academically able and offers a range of publicly certified skills. However, the largely adversarial and fragmented relationships between economic actors typical of such societies prevent lock-in effects and limit the effectiveness of attempts to sanction opportunistic behaviour.

The limited authority-sharing characteristic of these kinds of market economy restricts skilled workers' contributions to problem-solving and hence the ease of developing continual improvements to production processes and innovating by upgrading products on a continuing basis. The Chandlerian firm is a typical product of such an environment in which coordination of specialists takes place through the managerial hierarchy and its routines, rather than at the project level, and unilateral decision-making is more common than joint problem-solving and development. Accordingly, the ability of firms to develop strong organizational learning capabilities is often quite restricted by this kind of business environment.

More coordinated institutional frameworks restrict opportunism to a greater extent and encourage higher levels of authority-sharing within and between companies. As a result, owners, managers and skilled employees become more willing to invest in the relatively long-term development of organization-specific problem-solving skills and knowledge. In these circumstances skilled workers are more likely to pursue organization-specific careers than to concentrate on enhancing individual expertise for external labour markets because employers are more inhibited from adopting very short-term labour management strategies. Coordinated market economies with these kinds of institutions, coupled with credit-based financial systems that encourage close ties between capital providers and users as well as supportive state policies, therefore tend to develop collaborative types of large firms that have strong coordinating and learning capabilities. Such firms are likely to be quite effective in sectors where the precise coordination of complementary activities and the continuous improvement of production and development processes are crucial to their competitive success, as in the car assembly industry.

Firms in these sorts of societies, however, are less likely to be effective where technical and market uncertainty are high, so that neither the outcomes of development projects, nor the nature of skills required to undertake them, can be reliably predicted in advance, because their ability to reconfigure their skills radically is restricted. As a result, many companies in countries such as Germany focus on developing incremental, cumulative innovations that depend on employee commitment and firm-specific knowledge in new industries such as biotechnology and internet software (Casper, 2000; Casper and Glimstedt, 2001). In contrast, UK and US companies in the same sectors often pursue more radical innovation strategies (Casper and Whitley, 2002).

Conclusions

This analysis suggests a number of points that might be useful in considering the future direction of organization studies. First, organizations as authoritative coordinators of economic activities are key mediating actors between institutional frameworks and economic development. They are central components of the mechanisms through which differently organized market economies develop contrasting industrial structures and competitive competences. By focusing on how the different groups that direct firms and contribute to their organizational capabilities cooperate and compete in variously structured capital and labour markets, researchers in organization studies add to our understanding of how and why different forms of economic organization have developed and are changing.

Second, it is important to note that firms, as relatively autonomous economic actors, are able to influence the nature of their institutional environments as well as being constituted by them. Just as professional associations, trade unions, employers' associations and other interest groups develop particular powers and resources in different institutional settings that enable them to contest as well as reproduce dominant institutions to different degrees, so too firms can affect the rules of the competitive game at regional, national and international levels. While institutions and social structures enable particular kinds of corporate agents to develop in distinctly different circumstances, then, norms, market rules and regulatory systems can also become the object of these agents' influence.

As Archer (1995: 276–81) emphasized, social agents are constituted with certain powers and capabilities in distinctive ways in particular institutional environments. These powers enable agents to struggle in specific ways to gain autonomy and influence, as the result of which some features of these environments may change—although in path-dependent ways. Thus, institutions and structures neither impose their logics and standards on all agents and actors mechanically and isomorphically but, equally, nor are those agents themselves discrete and external entities endowed with universal and asocial preferences and powers.

Rather, their vested interests, learned identities, and capabilities result from their positions in the social structure and the associated institutions that differentially develop particular powers and make available particular social roles. The formation of corporate agents of different kinds pursuing distinctive interests therefore reflects the nature of the institutional stratification systems and the distribution of cultural resources for articulating agents' social interests and organizing around these. As these vary, so too does the nature of corporate agents, including firms, their powers and objectives.

Third, it may also be worth pointing out that the extent to which companies do, in fact, follow similar kinds of product market and employment strategies across sectors and regions is strongly affected by the standardization and complementarity of key institutions within particular territorial units such as the nation state (Amable, 2001). The degree of institutional standardization at the national level depends, *inter alia*, on the nature of the state and the economic policies followed by its elites.

In particular, the more active and cohesive is the state in organizing and mobilizing major interest groups in the formulation and implementation of economic policies, the more likely that forms of representation and political-economic bargaining processes will become relatively standardized, especially the ways in which owners, managers and employees compete and cooperate. In general, then, corporatist states encourage and legitimate certain kinds of group formation and collective action to a greater extent than do regulatory ones, and so build more stable and common patterns of interaction between major economic actors (Hart, 1992; Katzenstein, 1985; Streeck and Schmitter, 1985).

Fourth, while the growing internationalization of investment and managerial coordination may weaken the national standardization of institutions in such countries, especially institutional constraints on opportunism, its consequences are greatly affected by different kinds of institutional frameworks. Given the weakly institutionalized nature of the international business environment, the organization of most cross-border transactions is more likely to be influenced by home and host economy institutions than by international ones (Whitley, 2003a), as well as by the individual characteristics of the companies concerned that can often pursue more idiosyncratic strategies internationally than they could at home. Foreign investors in the arm's length economies typical of Anglo-Saxon societies, for example, have few host economy or international institutional supports for developing strong long-term commitments with managers and employees there, should they wish to do so, and are unlikely to alter prevailing employment practices.

On the other hand, growing cross-national investment in the more coordinated market economies of continental Europe and Japan may well attenuate the interdependence of owners, managers and employees there, and perhaps reduce their mutual commitment, but where corporatist institutions are strongly entrenched such changes are likely to be limited. This is especially so for labour relations, which remain largely governed by local and national institutions in most of the OECD countries.

The limited internationalization of investment as a proportion of total world investment that has taken place in the last few decades of the 20th century (Held et al., 1999; Hirst and Thompson, 1996) could also reduce owner-manager commitment in many countries and increase strategic managers' independence from national connections. However, they seem more likely to enable large companies to develop a variety of commitments and capabilities across differently organized economies than to herald a radical transformation of governance and strategies (Whitley, 2001).

Finally, the approach to the study of economic organization and variously organized socio-economic actors outlined here complements some recent developments in evolutionary and institutional economics, particularly those concerned with the role of knowledge in economic affairs and the nature and role of firms in generating new technologies and structuring markets (see for example Langlois and Robertson, 1995; Loasby, 1999; Teece, 2001; Teece and Pisano, 1994). It therefore provides an opportunity for integrating organization studies with other fields in the social sciences.

Once firms become seen as strategic actors in market economies whose actions make a difference to economic outcomes, and the generation, combination and use of knowledge are construed as crucial endogenous processes of market development, the ways in which different kinds of firms develop knowledge and competences become a significant concern for the understanding of economic change, as is illustrated by the expanding field of innovation studies. Although differences in intellectual style and modes of reasoning remain between economists and sociologists concerned with economic organization, they seem much more able to communicate and work productively together on topics of common concern in the early 21st century than during the heyday of neo-classical economics and organization contingency theory.

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Richard Whitley is Professor of Organizational Sociology at Manchester Business School, University of Manchester and is also Visiting Professor in Comparative Business Systems at the Erasmus University of Rotterdam. Recent books include: *The Multinational Firm: Organizing Across Institutional and National Divides*, *Divergent Capitalisms: The Social Structuring and Change of Business Systems* and the second edition of *The Intellectual and Social Organisation of the Sciences* (all published by Oxford University Press), and *Competing Capitalisms* (Edward Elgar). In 1998–99 he served as the Chair of the European Group for Organizational Studies, and in 1999–2000 was the President of the Society for the Advancement of Socio-Economics. Current research interests include the institutional structuring of innovation patterns and competence development in multinational firms. **Address:** Manchester Business School, Booth Street West, Manchester M15 6PB, UK. [email: rwhitley@man.mbs.ac.uk]