CHAPTER ONE

Perspectives on Corporate Co-evolution

Introduction

This book presents a detailed account of how one company, Telemig, evolved over its 27-year life history symbiotically with its environment. Telemig was the provider of telecommunications services for the state of Minas Gerais in Brazil. It was established in 1973 as a state enterprise by Brazil's military government. Telemig began operations under military control and management, with a mission oriented towards the economic and social development of Minas Gerais. It ceased to exist in 2000 when it was absorbed into the Telemar Group. The company was privatized in 1998, and its primary goal had by that time become the creation of shareholder value.

Over its lifetime, Telemig experienced a wholesale transformation of its mission, identity, culture and practices. This transformation passed through several stages of evolution. As a state-owned enterprise for all but two years of its existence, and a provider of infrastructural services, the path of Telemig's development was heavily informed by politics – both the policies of different Brazilian governments and political movements in Brazilian society. Its founding corporate ethos and organization were military, technocratic and paternalistic in character, and this was reflected in appointments to its senior positions. Following a strike in 1979 and the growth of public opposition to Brazil's military government, the company's policies softened to the extent of granting independence to its labour union and a measure of participation to middle management. After the country's return to civilian rule in 1985, a pluralist ethos prevailed, which introduced the criterion of political interest into the company's senior appointments and policy priorities. Subsequently, with the adoption of a neoliberal reform agenda by Brazil's government in the early 1990s, the country's telecommunications market was liberalized. Telemig was exposed for the first time to serious competition and obliged to stand on its own feet as a prelude to privatization. New leaders were appointed to carry out the wholesale changes in the company's culture and practices that the new prevailing ideology required. They introduced an ethos that granted primacy to the delivery of value to shareholders and restructured the company accordingly.

Towards the end of the twentieth century many companies underwent profound changes associated with the liberalization of markets and privatization. Why, then, does a study of Telemig warrant a full-length book? The reason is not that Telemig is particularly exceptional. Indeed, its experience probably has much in common with that of many state companies which have been subject to significant institutional and political influence. Quite a few of these companies have also experienced a transition to private ownership. However, companies like Telemig, operating within a heavily institutionalized context, have received less attention from students of organizational evolution than have companies that do not face such constraints. With the exception of anti-competition legislation, political and regulatory forces may well touch many companies only lightly, and studies of how companies evolve therefore tend to give primacy to their own autonomous strategic initiatives rather than to institutional factors. Burgelman's investigation of how strategy and environment co-evolved in the case of Intel is one such example (Burgelman, 2002a, b). The relative paucity of research into the evolution of institutionally embedded companies like Telemig is therefore a justification for investigating them when the opportunity arises.

There is, however, an even more important consideration. A study of how any corporation has evolved requires the collection of information on an extensive span of its history, information that is also comprehensive enough to permit the various strands in its development to be understood so as to provide a balanced and holistic picture. The opportunity to do this occurs only rarely in business and organizational research. Indeed, one can virtually count the number of such studies on the fingers of one hand: Jacques (1951), Chandler (1962), Pettigrew (1985), Johnson (1987) and Burgelman (2002a), and not many more. By contrast, there are many business histories and biographies of entrepreneurs. Valuable though these are, they do not normally devote much attention to issues of management or organization or offer a contribution to theory. The chief reason, therefore, why the study of Telemig presented in this book is of unusual interest lies in the unique opportunity the authors had to examine the process of the company's evolution comprehensively, in detail and over its total lifespan.

We undertook three rounds of empirical research to build up an understanding of Telemig's evolution. Altogether, these three rounds add up to twelve years of fieldwork, which furnished information on the whole lifespan of the company. We utilized a wide range of sources, including over 200 documents on company policies, practices and organization structure; biographical essays on 25 of the company's founders and leaders in the Brazilian telecommunications sector; every issue of the newspaper produced by Telemig's labour union from its launch in 1980; documents issued by the telecommunications regulatory authority; and 192 interviews at different levels inside and outside the company.

The scope of this investigation enables the present book to contribute in several unusual ways to the understanding of corporate co-evolution with the environment. First, its longitudinal span permits an insight into the dynamics of long-term organizational change and how these pervade different levels of the organization. Second, its comprehensive coverage allows us to examine the interplay of different organizational dimensions that enter into these dynamics – for example, the relation between organizational culture, identity and competencies. Previous studies of organization have generally looked at only one dimension at a time. Third, the book adopts a contextual and historical perspective. Analysis at macro (economy and society), meso (sector) and micro (company) levels provides for a contextual perspective, and the longitudinal time frame enables this perspective to be treated historically. Fourth, and most important of all, we take account of the interest group politics that played such a significant role in the company's co-evolution and in so doing are able to advance co-evolutionary thinking by incorporating a political perspective that has so far been relatively neglected.

As Andrew Pettigrew (1985) argued some time ago in his seminal study of continuity and change in ICI, *The Awakening Giant*, the lack of a holistic approach, sensitive to both context and history, has seriously limited our understanding of organizations. He subsequently elaborated a theory of method for conducting longitudinal field research on change, which we noted carefully in conducting the research reported in this book (Pettigrew, 1990). We have strived as far as possible to overcome some of the limitations of previous work, especially in the way we consciously examine co-evolving and interacting phenomena. Thus we are sensitive to context in regarding corporate evolution as a product of the dynamic arising from the interaction over time of external agencies and events with managerial policies and actions. Networks of power are seen to play an active role in these processes: networks that link individuals and groups within the organization to those holding influential external positions.

Choice of Perspective

The problem that immediately confronts any attempt to marshal information on multiple dimensions of organizational life over a long time span is the lack of a well developed theoretical perspective to guide such an endeavour. Some perspectives offer potential insights into the drivers of corporate evolution, while others are concerned with the evolutionary process itself. As we note later in this chapter, the most satisfactory available perspective, which endeavours to take account of both drivers and processes, is that of co-evolution between organizations and their environments. While this is a new perspective still in its early days of development, it offers the significant advantage of drawing attention to the dynamic confluence and interaction over time of forces stemming from an organization's environment and the capacity of its management, for its part, to respond to these forces and indeed in some measure to shape that environment. In the influential statements of the co-evolutionary perspective offered by Lewin and Volberda (1999) and Lewin et al. (1999), its scope is defined to embrace most of the theories that have hitherto contributed partial insights into corporate evolution. The main distinguishing characteristics of such theories are:

1 The level of analysis on which they focus for purposes of explanation. For example, do they focus on the environment as the main determinant of firm behaviour and performance, or do they focus on attributes of firms themselves as playing a significant determining role? Environmental factors may include the competitive structure and attractiveness of an industry, and the regime of institutional regulation. Attributes of firms themselves may include their corporate governance, their idiosyncratic resources and their dynamic capabilities including the ability to learn and adapt.
2 Related to the first distinction is the contrast among different theories in the level of freedom they allow to the actors in firms to shape events, including environmental conditions. Some theories regard the survival of organizations as depending primarily on the extent to which they are able or willing to adopt industry or other externally specified norms. Other theories allow scope for organizational personnel to negotiate or influence such norms, including the extent to which they should apply to a given organization, through social interaction or networking with persons in the environment.
3 There is a contrast also in the role that different theories ascribe to ideational as opposed to material forces as drivers of corporate evolution. Ideational forces include the influence of political ideology, societal culture and ideas concerning appropriate practices. They consist of values, norms and knowledge. Material forces, by contrast, are seen to act primarily through the resources of finance, technology and human competence that firms require for survival (Child, 2000). They may be secured from markets based on ability to pay or to promise future returns, or from public sources such as subsidies or economic rent obtained through governmental protection. At the macro level ideational forces are most evident in the form of prevailing ideologies, while at the micro level (i.e. the firm) they are evident as corporate cultures and practices. Material forces at a macro level are evident in a country's level of economic growth and health (as indicated, for instance, by its rate of inflation), while at the micro level they take the form of revenues, costs and assets.
4 A fourth distinction is between perspectives that focus on initial conditions for corporate evolution, such as the ownership of a firm or the sector in which it is located, and those that take account of dynamic properties that affect the course of evolution itself, such as organizational learning and the management of organizational change. Doz (1996) was one of the first analysts to incorporate this distinction into his research. Initial conditions shape the ideational and material foundations of a company and may therefore have a residual impact through several subsequent stages in its development (Stinchcombe, 1965).

These distinguishing characteristics point to the different, and potentially complementary, insights that different theoretical perspectives can offer to a study of corporate evolution. All of them can therefore provide analytical guidance and insight, and the challenge is how to apply these in a manner that is sufficiently comprehensive and integrated. With this in mind, the present chapter now reviews major contributing perspectives before proceeding to the more overarching and integrative framework offered by the co-evolutionary approach. The review is organized as follows. We start with perspectives that draw attention to potential drivers for corporate change and evolution. Within this broad category, we first consider approaches that focus on the firm's environment, then those that draw attention to its scope for exercising strategic choice, and then discuss the contrast between ideational and material perspectives. Subsequently, we move on to consider the evolutionary perspective itself.

Potential Drivers for Corporate Evolution

1 Natural selection

The natural selection perspective grants primacy to the environment in which a firm is located as the determinant of its performance and hence its capacity to evolve. While firms have the possibility of moving from one economic environment to another, this is regarded as a costly, difficult to achieve and long-term move. Essentially, firms are seen to be situated in a given environment, which determines their action possibilities and to which they have to accommodate in order to survive. At the same time, a favourable environment can provide a basis for a firm to prosper. Thus the rapid growth of telecommunications markets around the world has provided a favourable basis for telecommunications companies to prosper, though the extent to which they can reap good returns from this environment is tempered by the degree of competition in the sector and the ease of entry to it.

Within the natural selection perspective, industrial organization theory (IO) and population ecology (PE) have been two of the most thoroughly researched approaches (Scherer, 1980; Hannan and Freeman, 1989). According to the structure–conduct–performance paradigm in IO (Bain, 1956), industry conditions, namely market concentration, entry barriers and product differentiation, determine market power and hence both the policy options open to firms and their potential performance. PE also assigns primacy to the environment, asserting that resource scarcity and competition select the organizations that survive ('retention'), leaving little scope for managerial action to affect outcomes. The process of selecting the organizations that are 'fittest' in the sense of best coping with environmental conditions is seen to reduce the variety of organizational strategies and forms that can survive within a given environment. Both IO and PE approaches therefore assign causal primacy to the environment, so that corporate evolution is seen to be a product of environmental evolution rather than allowing for any of the reverse process.

Porter (1990) built on the IO approach to extend the range of environmental influences bearing on a firm by adding the quality of resource provision, the presence of supporting industries and the institutional context. The last of these is particularly important in emerging and transition economies (Peng, 2000). It is also of greater significance to firms that are in public ownership and/or subject to direct regulation, as are many firms offering public services or health-related products.

2 *The institutional perspective*

The institutional perspective is particularly concerned with the ways in which institutions confer, or withhold, legitimacy on organizations and their actions. Institutions are defined here as collective and regulatory complexes consisting of political and social agencies. Institutions potentially dominate other organizations through the enforcement of laws, rules and norms that constitute both 'formal rules' and 'informal constraints' (North, 1990; Powell and DiMaggio, 1991; Henrique and Sadorsky, 1996; Lu and Lake, 1997). Scott (1995) argues that there are three fundamental 'pillars' through which this process takes place. The regulative pillar entails formal systems of rules and enforcement mechanisms sanctioned by the state. The second normative pillar defines the legitimate means through which socially valued ends can be pursued. The cognitive pillar refers to embedded beliefs and values that are imposed upon, or internalized, by actors in society.

The implication is that governmental and social institutions offer normative guidelines for, and impose regulatory constraints upon, the policies of firms and hence the practices they can realistically espouse. Institutions can also bear upon the ability of different groups in society to mobilize opposition to corporate policies, through the laws and regulations that are enacted governing the rights to organize such opposition. If, for example, employees are protected from intimidation when they join a labour union, and if such unions are given the right to organize industrial action, this introduces an additional potential constraint upon corporate actions. Institutions can therefore impose limits on the policy choices available to firms (North, 1990). The institutional perspective perceives that isomorphism – a correspondence in policy and practice – with laws, courts, regulatory structures, educational systems, awards and certification and accreditation bodies offers a variety of advantages for organizational survival (Powell and DiMaggio, 1991).

Institutions are likely to have particular relevance for the corporate policies and forms adopted by publicly owned companies and how these features evolve over time. This is because the legitimacy enjoyed by such companies derives from their conformity to social expectations expressed as norms and laws. The institutional perspective is particularly concerned with the ways in which institutions confer, or withhold, legitimacy on organizations and their actions (Scott, 1995). This has several implications. One is that social and governmental institutions offer normative guidelines for, and impose regulatory constraints upon, the policies of public sector and public service firms and hence the missions they can realistically espouse (Powell and DiMaggio, 1991). Another is that institutions may further impact on a company by regulating the material resources that allow it to realize a preferred mission and distinctive competence (Parsons, 1956; Pfeffer and Salancik, 1978). Institutions can therefore impose limits on the choices available to corporate leaders (North, 1990).

An element in the successful evolution of any organization is that it develops a configuration of policies and practices, and in so doing establishes an identity, that is compatible with external requirements (Moingeon and Soenen, 2002). Firms that are embedded in an institutional context have to accommodate to political regimes (Clegg and Dunkerley, 1980; Granovetter, 1992; Simons and Paul, 1997). The level of this embeddedness is likely to be greater the more that firms depend on institutions because of public ownership, resource-provision and regulation. This will have consequences for the degree of autonomy they enjoy in the definition of their own policies and practices. Private organizations have more autonomy in defining their combination of mission and distinctive competence. They have more choice between alternatives, and greater freedom to pursue different strategies for securing appropriate resources from the marketplace and satisfying stakeholders. Neoclassical economists have for this reason argued that governmental institutions generate organizational traits that lead to inefficiencies (Friedman, 1962). This rationale implies that, under conditions of state ownership or heavy regulation, an organization's policies and practices could be ill suited to prevailing competitive pressures. It also implies that a transition from being a state-owned non-market organization to being a private market-competitive firm will give rise to a fundamental change of identity, as in the case to be studied (Foreman and Whetten, 2002).

Institutions are also socializing agents that transmit values and ideas to organization members (Hall and Soskice, 2001). They can filter political pressures from governmental or non-governmental agencies (such as NGOs and labour unions) by reconfiguring them in terms of ideology, vision or models of organizing. In so doing, institutions do not necessarily operate at arm's length from organizations. They can influence organizations through specific social arrangements or 'relational frameworks' (Meyer and Scott, 1983), such as joint business–governmental committees, which permit networks or coalitions to form. Such networks are institutionally sanctioned arrangements that connect actors through participation in a common discourse. They cross system levels by involving people who occupy strategic decision-making roles within both institutional agencies and organizations (Castilla et al., 2000). These links can be especially effective in conveying and articulating expectations about the identity of organizations that are highly dependent upon institutional approval and resource-provision because of a regulatory regime and public ownership (Gould, 1993; Mische, 2003).

Relational frameworks are also potentially relevant to the process of accommodation between institutional priorities and firms' preferred strategies. They provide channels through which institutional bodies can express approval or otherwise of particular corporate policies and practices. At the same time, they can also provide a conduit for corporate executives to express their point of view, and through which leading firms may have an opportunity to shape institutional regulations by offering relevant and scarce technical expertise.

Many writers within both the PE and institutional perspectives emphasize the ways in which institutions impose conformity to their norms and rules in a constraining and coercive manner (DiMaggio and Powell, 1991). However, the *interaction* between institutions and leading firms may also encourage normative and mimetic isomorphism on a more cooperative basis. This can be illustrated with reference to corporate policies towards the natural environment. The trend of green strategic change, which usually commences in a particular industrial sector such as chemicals and spreads first among competitors, is a form of normative conformity and mimicry. However, this conformity among firms does not simply arise from external institutional pressures. In the chemicals sector, governments and environmental professionals have long recognized DuPont as a leader, not only in industrial and occupational safety but also in greening – witness the Montreal ozone protocol and the company's new refrigerators. The company has often found itself in a position to establish industrial standards for others to follow, including its competitors. In extreme cases, securing the legitimacy to remain in business may largely depend upon a firm's ability to conform to the superior environmental standards implemented by such leading edge companies (Nehrt, 1998). In emerging economies, where environmental protection is still nascent, governments are known to utilize the environmental protection codes of large, reputable corporations such as Dow Chemical, DuPont and ICI as examples on which to base their regulations (Child and Tsai, 2005). This propagates mimicry and normative conformity even further. The environmental priorities expressed by governments are further expected to induce mimicry among the competitors of leading firms that are seeking to gain greater social legitimacy (Bansal and Roth, 2000). Once a firm conforms to higher environmental standards, it is motivated to support their general enforcement in order to bring its competitors' costs into line (Salop and Scheffman, 1993).

3 Managerial action and strategic choice

The institutional perspective, and the so-called 'new' institutionalism in particular (Powell and DiMaggio, 1991), argues for a deeper understanding of the interaction between institutions and organizations. However, as just illustrated, it tends to convey a sense of corporate passivity that can be quite misleading. Oliver (1991) therefore argued for a combination of the resource dependence and institutional perspectives. This is a significant departure from new institutional theory's failure to recognize proactive organizational behaviour, and from its emphasis on conformity, isomorphism and adherence to norms and values as a condition of organizational survival. For the main focus of the resource dependence perspective is a political one, namely on the power that the availability of key financial, technical and other resources gives either to the people who provide these to organizations or to the organizations themselves that possess such resources (Pfeffer and Salancik, 1978).

The institutional perspective assumes that in seeking social legitimacy, a corporation will abide by external regulations, be they formal such as enacted laws, or informal as in the case of pressures from NGOs' environmental protection demands. The resource dependence perspective, however, points out that organizations may be able to mobilize resources of finance, technology and expertise in order to establish a degree of independence from institutional demands. In emerging economies, leading firms will often be in a position to offer government inducements, such as support for educational and other social programmes, as a *quid pro quo* for negotiating some flexibility in the extent and manner to which regulations are applied to them. Even if institutional constraints are applied strictly, Porter and Linde (1995) note that companies may be able to take adaptive action by being more innovative in all aspects of their operations, including the pursuit of greater resource productivity, in order to reduce the burden of compliance.

Despite acknowledgement by resource dependence theorists that firms may mobilize resources to counteract institutional constraints, they join institutional theorists in tending to assume an asymmetry of power in favour of environmental bodies and against organizations. It is true that 'old' institutional theory did take account of political initiatives by organizational leaders, such as the successful lobbying and co-optation strategies of the Tennessee Valley Authority (Selznick, 1949). Pfeffer and Salancik (1978) also recognized there may be some scope for organizational managers to exercise a degree of strategic choice in negotiation with external resource providers, a possibility to which Pfeffer gives rather more attention in subsequent writing (Pfeffer, 1992). Nevertheless, the discussion of options for organizational leaders to take the initiative in their dealings with environmental bodies is generally underdeveloped within both institutional and resource dependence perspectives. A political perspective, which by definition is concerned with the mobilization and exercise of power, has the potential to make up for this shortfall by drawing attention to ways in which firms may be proactive in their strategic responses to institutional bodies.

Within the broad ambit of a political perspective, two specific theoretical focuses, on 'bargaining power' and 'strategic choice', explicitly draw attention to the need to take account of proactive as well as reactive strategic options. The 'bargaining power' perspective was advanced as a modification to resource dependence theory. It suggests that the bargaining powers and skills of an organization's management may mediate the control implications of resource dependence (Blodgett, 1991). Bargaining power can also be used as a strategic response to institutional pressure. A company may be able to negotiate a more favourable accommodation with institutional regulations through having the resources to exploit legal loopholes, or it may be able to negotiate favourable terms with regulators by offering other valued social benefits such as local employment creation (Leonard, 1988). Alternatively, it may have assets at its command, such as technical expertise, which it is prepared to devote to social improvement in return for securing favourable treatment in support of its own development concerning matters such as business licences, investment incentives or infrastructure provision. Hence, the bargaining power perspective warns against an assumption that the impact of resource dependence is entirely deterministic.

The strategic choice perspective reverses the assumption of environmental determinism by focusing on the role played by managers in shaping conditions and processes both outside and within the firm (Miles and Snow, 1978; Child, 1997). It draws upon the social action approach within sociology (Weber, 1978) and strategic management theory to advance the view that managerial action can impact upon how an organization evolves and even upon its environment. On the one hand, the strategic choice perspective accepts that environments have properties that cannot simply be enacted or negotiated by organizational actors (Child, 1972, 1997). It therefore attaches considerable importance to the question of whether they can select an attractive environment in which to operate. In recognizing this as a distinct possibility, the strategic choice perspective contrasts sharply with the IO approach. Organizational leaders may, for example, consider an attractive environment to be one in which social or political pressures are not as extreme as elsewhere. They may be in a position to threaten to move their capital away from an institutionally hostile environment, and this could cause embarrassment for a country seeking to attract foreign investment. On the other hand, strategic choice analysis also recognizes that it may be possible at least to moderate some external expectations through personal interaction between organizational actors and their external counterparts. Such interaction can include informal exchanges of views and information, lobbying and negotiation. There may even be opportunities for organizational leaders to go further and actually amend external conditions through negotiation and persuasion. In other words, the strategic choice view sees key organizational actors as seeking to realize their goals both through selection *between* environments, and through seeking accommodation with external parties *within* given environments.

Strategy analysts recognize that managers have a potentially wide range of actions available to them (Grant, 2005). Cooperation with other organizations, including institutional agencies, is one of the strategic options available to firms. The possibility of cooperation with external agencies is given rather little attention in the institutional and resource dependence perspectives. Both imply that the leaders of organizations come under pressure to comply with external demands, and hence that the relationship may be one of antagonism and even resentment rather than one of positive cooperation. Game theory (Axelrod, 1984) reminds us that two parties in a continuing relationship will usually in the long term secure their objectives better through cooperation than by attempting to maximize short-term gains at the expense of the other party. Thus the aspirations of governmental policy may be more effectively met through cooperation between regulatory agencies and companies, especially when the latter are, as a result, willing to contribute from their expertise and resources to the attainment of public goals. At the same time the companies are then better able to realize their business objectives in the absence of legal distractions or political pressures.

The theoretical perspectives just reviewed focus on the roles respectively of (a) constraints on firms emanating from the industrial and institutional contexts and (b) the managerial actions and initiatives taken by the leaders of firms. Whereas attention to external constraints lends itself to a view of environmental determinism, attention to managerial action lends itself to a recognition of strategic choice achieved through the negotiation and selection of preferred policies. A number of scholars, however, have argued that both sets of factors are likely to be operative, and that account has therefore to be taken of the relationship and interaction between the two. We shall return to this point when considering the co-evolutionary approach.

4 Material and ideational forces

Max Weber's framework for the analysis of socio-economic development (Schluchter, 1981; Mommsen, 1989) distinguished between the material and ideational forces driving social change. He used this framework to account for the emergence of the western capitalist system as well as its characteristic organizational forms (Gerth and Mills, 1946; Weber, 1964).

According to Weber, there are dynamic material forces of an economic and technological nature that give rise to efficiency-oriented rules and codified knowledge. These forces thus encourage the development of what Weber called 'formal rationality'. Formal rationality concerns literally the form of social arrangements in terms of routines, structures and so forth. As societies 'modernize' their economies and technologies, so they adopt a more complex division of labour and institutional arrangements. This increases their requirement for formal rationality. It is expressed both in legally sanctioned organizational innovations such as the joint-stock company and in more autonomous developments such as hierarchical corporate forms. Although countries vary in their level and form of economic development at any one point in time, an implication of the materialist dynamic is that the organizational structures and processes characterizing industrializing nations will become increasingly similar (Kerr et al., 1960). Such convergence is expected to accelerate as national economic systems become part of the same global economy and as cross-border multinational corporations account for increasing shares of activity in many sectors. It is assumed that the economic and technological material forces bound up with 'globalization' are obliging a convergence in corporations' policies and practices as a condition for their survival. This in turn offers an explanation for the wave of privatization and corporate restructuring in pursuit of shareholder-value that has characterized many previously state-owned and relatively protected companies such as Telemig. The material forces that are expected to impact upon a firm's actions and evolution concern the competitive pressures it faces, the quality of its resources, its form of ownership and the obligations resulting from this, and its distinctive technology.

Second, Weber noted that substantive values and idealism, as expressed for example in Confucianism, the Protestant Ethic or political ideologies, have exercised their own historical influence. They shape 'substantive rationality', which concerns the meaning that people give to social organization and to the processes that take place within it, such as the exercise of authority. Substantive rationality is rather more far-reaching than 'culture', at least in the sense accorded to the latter by organization theory. While it is expressed by cultures, it is also conveyed in ideologies and systems of knowledge that claim an ultimate validity. Various social institutions provide vehicles for the articulation and reproduction of substantive rationality: religions, governments and business schools are among these.

Substantive rationality can impact importantly on the identities and practices of organizations, as well as on how people behave and relate within them. One route, already noted, is through the isomorphic effects of institutions which articulate a society's substantive rationality. A recent example is the way that heightened public concern about the probity of business leaders has given rise to new regulations to enforce better corporate governance as well as professions of reform and a new sense of social responsibility from the leaders themselves. The increasingly popular and largely American-inspired international management education movement is another vehicle for convergence in the substantive rationality of firms, especially around ideas such as shareholder value (Locke, 1989). The substantive rationality informing the actions of a firm is manifest in its proclaimed mission, culture and identity (central and distinctive characteristics).

In Weber's analysis, ideational and material forces have the potential to impact on each other. On the one hand, the Protestant Ethic laid foundations for the spirit of western capitalism, and the Confucian ethic shaped the spirit of Chinese capitalism (Redding, 1990). On the other hand, the material conditions of a capitalist economy – especially its products and modes of employment – themselves have significant impacts on people's values and expectations in areas such as personal fulfilment and lifestyle.

Importantly, however, Weber did not adopt a wholly deterministic view of social development. He allowed for the role of 'social action', which is intentional action oriented towards others. The intention behind such action may be informed by economic calculation, values, emotion or tradition (Weber, 1978). In other words, action may be motivated and guided by material interests, ideals or a combination of both. It is not, however, necessarily a slave to the contextual forces that express materialism or idealism. There is always a possibility for initiative and innovation on the part of those who make or influence decisions on organization. As noted, this insight has more recently been adopted by those who seek to take our understanding of organizations beyond the narrow confines of environmental determinism, be this in the form of natural selection or institutional theory.

The integrative and comprehensive character of the Weberian framework can aid the analysis of corporate evolution in several respects (Child, 2000). First, it encourages a balanced appreciation of the contextual factors impacting upon organizations, balanced in the sense that these are not viewed narrowly within the confines of a single theoretical lens, be this cultural, idealist or materialist. The Weberian framework points to the importance of adopting a holistic perspective on co-evolution. Account needs to be taken of changes in the ideational realm (such as prevailing ideologies towards business and stakeholder expectations) as well as in material factors (such as competition, resources, technologies, practices and performance).

Second, the framework encourages us to take greater care in specifying the contextual location of any given organization with respect to the likely impact upon it of both material forces and the influence of ideas. For instance, the extent to which the policies and practices of a firm continue to be guided by its founding identity may depend on how far it can maintain its autonomy from both new external materialist forces (such as international competition) and new external values (such as those expressed by a new political regime). Third, Weber's recognition that organizational arrangements do not simply reflect the impact of external material or ideational forces, but are also the product of conscious, intentional action, allows us to incorporate strategic choice into the analysis (Child, 1997). His framework permits us to take into account the possibility that not only the contextual location of an organization but also the intentionality and sense-making of its actors will have a bearing on its structure, processes and policies (Weick, 1995; Biggart, 1997). In other words, both strategy and context are likely to shape corporate evolution.

5 Evolutionary and co-evolutionary perspectives

Evolution is a concept imported from biology, where it refers to the development of organisms and species over time from one state to another, usually along a path of increasing complexity and sophistication. The primary focus is on development over many generations, fostered by natural selection among the variety of living beings within a population. Evolution in this Darwinian sense can, of course, be used only as a metaphorical term in the study of management, since companies do not breed genetically. It has nevertheless been argued by population ecology theorists that a Darwinian process takes place in populations of companies (Hannan and Freeman, 1989), since those with the best fit to their environments survive in markets requiring companies with certain characteristics, and those without them go bankrupt. This posits a trend towards isomorphism among companies located in similar environments through a process of economic determinism.

The scientifically discredited Lamarckian variant of evolutionary theory, positing that members of a species can pass on their acquired knowledge to their offspring, actually provides a more useful analogy for the analysis of corporate evolution. For it is perfectly possible to conceive of firms learning, adapting, and then passing on their knowledge or know-how to future generations of managers and staff, thus giving those firms a competitive advantage. This implies that the nature of a firm at any one point in time will be a product of previously prevailing ideas and material factors, as well as of its present situation. It suggests that a firm will be conditioned by a degree of 'path-dependency', while at the same time being responsive to current internal and external circumstances. By allowing for the potential influence of both past and present forces, this perspective treats evolution as a dynamic rather than simply an additive process.

The conjunction of past and present informs the useful distinction between initial conditions and subsequent adaptation in the evolution of companies. Firms are created with a set of initial conditions. Initial conditions can be both ideational, such as a firm's founding corporate mission, and material, such as the competencies with which a firm is endowed. IO theorists, for instance, tend to give primacy to initial conditions by assuming that it is not easy for firms to escape the industries in which they were first established. Thus a firm's initial conditions may be expected to have a significant residual effect on its subsequent evolution. They create a 'heritage' in terms of corporate identity and culture, and a 'legacy' in terms of inherited structures, practices and endowments. A firm's initial conditions, along with its capacity to perform as expected, affect its subsequent evolution. Its capacity to perform well is likely to be affected by a combination of internal factors, such as the rate of organizational learning, and external factors such as the extent to which the firm enjoys autonomy or is subject to external regulation.

As Stinchcombe (1965) illustrated in his seminal essay, organizations can bear the marks of their initial founding conditions for a very long time over the years of their subsequent development. This suggests a number of possibilities. One is that the identity and public image attaching to an organization at its foundation, or formulated in its early stages of development, will continue to be meaningful for both their members and other stakeholders even if conditions subsequently change. Another possibility is that the subsequent success of an organization, including its ability to adapt through learning, will depend importantly on the quality of resources provided, and the appropriateness of the structure laid down for it, at its foundation. Thus initial conditions are likely to exert an influence on the subsequent evolution of an organization, including its ability to incorporate and adjust to learning, even though subsequent decisions and events will also play a part. Doz (1996) concluded from a close study of three international strategic alliances that a combination of initial conditions and subsequent learning produced an evolutionary process leading to success or failure of cooperation.

Insofar as established initial conditions may predispose to the retention of founding ideas and material provisions, whereas subsequent learning provides an impetus toward changing these, their conjunction implies that continuity and change will together characterize organizational evolution. Several previous studies have pointed to the existence of this paradox (e.g. Pettigrew, 1985; Child and Smith, 1987). They indicate that in a study of corporate evolution, it is necessary to be alert to instances of where continuity coexists together with change (discontinuity), and how this coexistence is accommodated. One may postulate that a balance needs to be struck between each aspect if corporate evolution is to be maintained over time. For if there is too much discontinuity, a firm may lose its distinctive competencies and the accumulated knowledge held by persons declared redundant or encapsulated in discarded routines. If there is too much continuity, a firm may fail to adapt to a changing environment.

An Overarching Perspective: Co-evolution

The theoretical perspectives considered thus far in this chapter offer a set of distinctive contributions. They distinguish between levels of analysis – economy and society (macro), sector (meso) and firm (micro). Some emphasize the determination of firm behaviour and change by higher-level variables, while others emphasize the ability of managers to negotiate external conditions. Some, like cultural theorists, concentrate on the relevance of ideas, while others like economists focus their analyses on material factors. Some adopt a relatively static view, emphasizing the power of initial conditions like industry membership, while others adopt a more evolutionary view stressing the role both of changing circumstances and of the ability of organizations to benefit from learning.

Certain of the perspectives we have reviewed, such as the Weberian, offer a quite broad and potentially dynamic approach to the analysis of corporate evolution. Nevertheless, despite their undoubted value, each one on its own contributes only a partial insight. There is a need to bring them together within an overarching perspective that more adequately addresses the dynamics of corporate evolution over time. This is the aim and claim of the so-called 'co-evolutionary' perspective developed in recent years. This perspective is briefly introduced here and then discussed at greater length in Chapter 11 with the benefit of insights from the Telemig case.

The co-evolutionary perspective regards environments and organizations as evolving in relation to each other. It 'considers organizations, their populations, and their environments as the interdependent outcome of managerial actions, institutional influences, and extra-institutional changes (technological, sociopolitical, and other environmental phenomena)' (Lewin et al., 1999, p. 535). It posits a framework of analysis, focusing on firms, in which there are ongoing recursive processes linking the evolution of institutional and extra-institutional environments with that of the firms themselves. These processes are mediated by managerial action, strategic intent, adaptation and performance achievement in each firm, as well as by the competitive dynamics established by the behaviour of all firms in a sector. It is important to note, however, that a co-evolutionary perspective is more encompassing than the focus on strategic evolution adopted by writers such as Burgelman (2002a) and Johnson (1987). Studies of strategic change do, of course, take the environment into account, but they tend to confine themselves to its economic and other material features. They have not generally considered the significance of institutional and political factors, including those that can be conveyed in influential ideas concerning the legitimacy of corporate management and its practices.

A co-evolutionary perspective has the potential to inform any research on organizations that spans levels of analysis and involves adaptation over time (Lewin and Volberda, 1999). By drawing attention to the continuing interdependence between context and organization, the co-evolutionary perspective offers a framework in which the development over time of firms and their populations can be

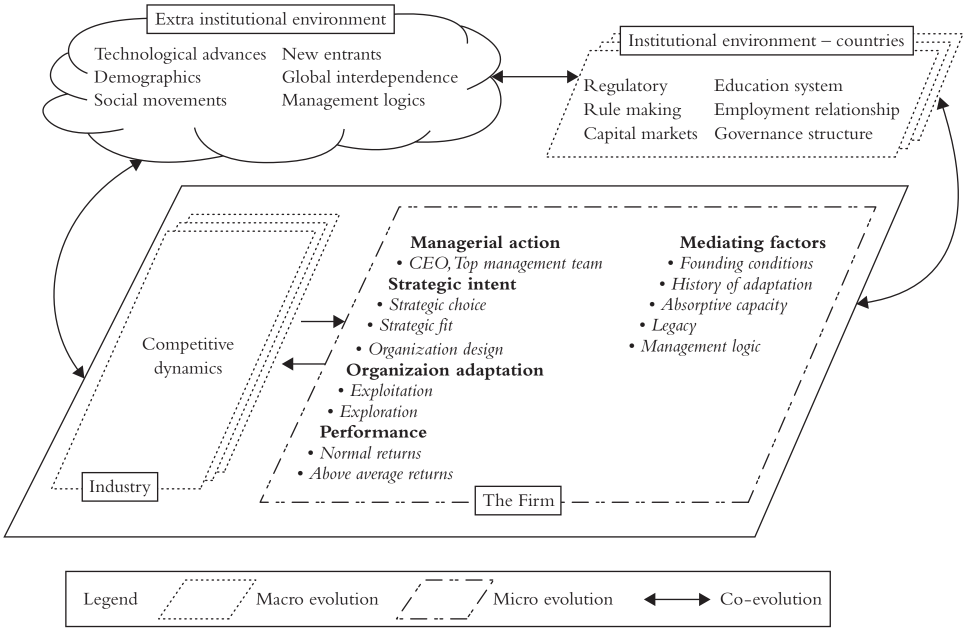

Figure 1.1 Co-evolution of a firm, its industry and its environment.

better understood. It is the framework within which the present study of Telemig will be located. A representation of this framework is given in figure 1.1 (from Lewin et al., 1999, Exhibit 1).

Co-evolution is the most satisfactory available perspective for addressing the question of corporate evolution. It endeavours to take account of both drivers and processes. It also has the significant advantage of drawing attention to the dynamic confluence and interaction over time of forces stemming from an organization's environment and the capacity of its management, for its part, to respond to these forces and indeed in some measure to shape that environment.

While the co-evolutionary perspective has only been developed in a comprehensive form since the mid-1990s, it was foreshadowed in the insights of several scholars who were concerned with the dynamics of organizations' relations with their environments. Selznick's (1949) study of how the Tennessee Valley Authority sought to overcome opposition to its plans under the New Deal was a pioneering analysis of how an organization contributed to the evolution of a community into which it was inserted. Another example is the model of context, structure and process that Pettigrew (1985) developed to interpret his detailed longitudinal study of ICI. Pettigrew was one of the first scholars to argue for longitudinal studies of organizational change within their environments that could advance theorizing on the interactions between context, structure and process. The strategic choice analysis offered by Child (1972) also presaged the co-evolutionary perspective in focusing on the potentially mutual impact that an organization's leading group and parties in the environment could have upon each other. In a later elaboration, Child (1997) distinguished two levels of dynamic interaction in the development of organizations and their environments, through the processes of what he termed inner and outer structuration. Nevertheless, more recent work has for the first time brought together the various theoretical strands informing co-evolution. What still remains as somewhat of a blind spot in co-evolutionary thinking, and provides the leitmotiv of this book, is an analysis of how political interests inform and condition the interplay between organizations and their external worlds.

Limitations of Current Co-evolutionary Theorizing

The co-evolutionary perspective at its current stage of development suffers from a number of limitations, which it is the intention of this book to address. One limitation stems from the infrequent attention that has been given to the evolution of organizations that are subject to a high level of institutional control, through public ownership or through regulation. Most research to date applying the co-evolutionary perspective has examined examples of competitive firms and industries that are not subject to high levels of direct institutional influence (e.g. *Organization Science*, 1999; *Organization Studies*, 2001; *Journal of Management Studies*, 2003). In such less-institutionalized environments, the strategic actions taken by firms themselves are expected to have a significant impact on their subsequent evolution and to some extent that of their environment as well. The co-evolutionary framework allows for the influence of institutional factors, and one of Telemig's key characteristics, as a state-owned telecommunications company for virtually all of its life, was its high embeddedness within an institutional environment. A study of Telemig therefore has the potential to offer a distinctive theoretical contribution within the ambit of co-evolutionary studies.

While the co-evolutionary perspective draws attention primarily to interdependencies between environments and organizations, it has so far had less to say about the processes occurring within each. We shall argue and demonstrate that there are interdependencies between different internal organizational processes and that these interactions are significant for an understanding of how firms evolve. Moreover, the environment may mediate these interactions. For example, the political norms that prevail in the wider society can bear upon the legitimacy of a particular basis for employee compliance with managerial authority (Etzioni, 1961). Early in Telemig's history, compliance was associated with the normative social approval of a military regime that led to acceptance of an authoritarian mode of management. Later on, with the return of democracy to Brazil, militarism lost legitimacy and the basis of compliance with authority became more utilitarian. Consequently, an authoriarian style of management was no longer acceptable. Thus if the social legitimacy enjoyed by a firm's managers declines, goodwill towards them, and even trust in them, may correspondingly reduce with the result that their ability to implement strategy through cooperation from employees is impaired.

The Telemig case leads us to develop a more political perspective on co-evolutionary dynamics than has hitherto typified co-evolutionary thinking. This perspective emerges during the following chapters and is set out more formally in Chapter 11. It regards organizations and their environments as comprising a number of interest groups and hence as arenas of competing interests. The collective expression of these interests may transcend the boundaries of a particular organization, as when the interests of its employees are expressed by a union that is affiliated to a national association and/or a national political party, or when the interests of employers are expressed nationally through an employers' confederation. A co-evolution of national politics and organizational politics can take place though these relational frameworks, which cross different system levels from macro to micro and vice versa. In this respect, organizations, especially those in the public domain, become subject to the evolution of societal politics, while at the same time their members have channels open to them to influence the evolution of policies at a higher level. In these political processes, what Redding (2005) has called ideational and material 'logics' can both play a major role in driving change. Ideational logics, when expressing group interests, take an ideological and normative form, such as the idea of neoliberalism at the societal level and the 'flexible firm' at the organizational level. Material logics typically are expressed with reference to the economic, technological and knowledge-related resources that are crucial for organizations to survive. They can become the vehicles for expressing and enforcing the interests of groups that provide such resources, especially those that are essential to the organization and for which alternative sources cannot readily be found (Hickson et al., 1971; Pfeffer and Salancik, 1978).

Ideas relating to organizations are expressed in discourse and narrative (Heracleous and Barrett, 2001; Chreim, 2005; Suddaby and Greenwood, 2005). Examination of the role played by ideas in the co-evolutionary process therefore requires an understanding of how actors engage in discourses and narratives politically so as to advocate or resist change. This ontological stance requires a hermeneutic approach. A hermeneutic approach is concerned not only with how people interpret discourses but also with situating those discourses in their social and temporal contexts, and understanding the way they form mind sets and shape reality (Heracleous and Barrett, 2001). Discourse will be seen to be important in the evolution of Telemig because it informed and justified political processes and behaviour in an ideological manner. In order to understand the dynamics of evolution, it is necessary to adopt a holistic approach that focuses on different dimensions of the ideational aspects of the evolutionary process, such as organizational culture, identity and strategy, and how they informed each other in the evolution of the whole (Barry and Elmes, 1997).

Hermeneutics on its own is, however, not sufficient for understanding the process of co-evolution. In this book we see co-evolutionary dynamics as resulting from a process in which actors engage in different discourses and narratives associated with political manoeuvres that have particular consequences for organizational constituents and organizational performance. These manoeuvres often related to material factors such as employment, where by the 1990s security versus flexibility (or what the French rightly call 'précarité') was at issue within Telemig. The discourse of flexibility was justified by reference to material changes in the company's environment. The political engagement of actors in particular discourses therefore needs to be understood by examining economic, political and technological changes in a company's context over time. This calls for a much more politically oriented approach to co-evolution than has hitherto be the norm.

Plan of the Book

This book is divided into four parts. Part I provides introductory and background material. The present chapter has introduced the theoretical background to the co-evolutionary perspective we adopt and develop in this book. Chapter 2 presents the economic and political context of the telecommunications sector in Brazil, and briefly the wider global context, within which Telemig's evolution took place. Chapter 3 describes the scope of the study presented in this book and the methodology through which information on the company's co-evolution was accessed and interpreted. The investigations on which this book draws commenced in 1986 and continued until 2006. They addressed circumstances pertaining both within this time period and also retrospectively to the company's foundation. In addition to key events and trends in the company's performance, insight was sought into how these were understood by management and employees, including Telemig's labour union.

Part II treats the historical co-evolution of Telemig and its environment through three principal phases. The first phase is the subject of chapter 4. This examines the formative years of the Telemig company, including the precursors to its formal establishment in 1973. The particular ideational and material characteristics that were laid down for the company in the 1970s provided it with a continuing distinctive competence, especially in technology, and they also persisted as components of the company's identity in the eyes of its members long after. Chapter 5 covers the middle period of Telemig's life from 1985 to 1993. This witnessed the return of Brazil to a civilian government and the intrusion of politics into the direction of state-owned companies such as Telemig. It was a period of economic difficulty and mounting industrial unrest in the country, and one of some turbulence and uncertain development for the company. Chapter 6 is concerned with the final phase of Telemig's evolution from 1993 to 2000. We now enter the period of Brazil's economic reform, which centred on curbing inflation, opening the economy to foreign investment and privatizing state-owned companies. The reform was guided by a neoliberal ideology that denigrated state control and emphasized instead the need for companies like Telemig to stand on their own feet and ultimately to be transferred from the mantle of state sponsorship over to private ownership.

The three chapters in part II treat the various aspects of Telemig's co-evolution together as they occurred historically. This permits an integrated view of how they changed over time and of how interactions between the organization and its environment proceeded. Part III, by contrast, examines four of these aspects as separate issues. Each of its constituent chapters discusses a particular issue within its context in the history of Telemig. These chapters are therefore to a large extent self-contained and they necessarily have to recall certain relevant historical features. Corporate evolution is in this way depicted by analysing different organizational dimensions considered of critical relevance in existing theory, and each of the chapters therefore offers a distinctive contribution to theoretical development. At the same time, we shall demonstrate that an understanding of each issue is enhanced by adopting a politically informed co-evolutionary perspective. Subsequently, in chapter 11, we return to how these issues relate to each other within the process of Telemig's co-evolution. Each chapter in part III therefore offers a theoretical contribution on its particular topic, while at the same time informing the political interest view of co-evolution that is presented at the close of the book in chapter 11.

Chapter 7 focuses on the evolution of Telemig's organizational culture. It analyses how this culture evolved from a condition of integration to one of fragmentation and then differentiation. The chapter identifies the sources of these changes in institutional and political factors, and it proposes a framework for analysing the dynamics of culture change in organizations.

The subject of chapter 8 is corporate identity, defined as the identity of an organization that is articulated and propagated by its leading (corporate) group. It examines how Telemig's corporate identity changed over time and how such change can be accounted for in terms of the legitimacy secured by a given corporate identity and the mobilization of support behind it. These empirical and theoretical foundations allow for a cyclical model of corporate identity construction and deconstruction to be developed.

Chapter 9 examines changes in the use of metaphors applied to management and organization by Telemig's employees and their labour union during the 20 years after 1979 when the union became independent of restrictive regulation. The concept of 'reflective imaging' provides a link between changes in the company's environment and the use of metaphor. Attention to reflective imaging is found to be instructive in revealing the meaning and status of metaphors in an evolving organizational context that presented employees with conditions that were at variance with their expectations and even threatening to their economic livelihood. The chapter indicates that when employees held sufficient collective power, the images of the company that their union formulated had an impact on managerial policy and practice. The chapter also contributes a methodology that permits the multidimensional aspects of metaphors to be demonstrated, and the incidence of different metaphors to be assessed both in a given period and over time.

Chapter 10 continues with an examination of the efforts to redefine the nature of employment and employability in Telemig through programmes of training and learning. These programmes were seen by top management to be a means of developing the competencies considered necessary to support the restructuring of Telemig that was initiated in the 1990s and implemented from 1994 onwards. The chapter indicates that learning within an organization is not necessarily the 'good thing' that it is normally assumed to be. For in the circumstances of Telemig's restructuring, learning could not be regarded simply as an enhancement of capabilities benefiting the collective as a whole. It also had a clearly political purpose as part of a major organizational change that was intended to serve the interests of the new post-privatization shareholders and that was actually very divisive. The chapter develops the perspective of organizational learning as a political initiative within corporate evolution, arguing that the notion of 'contested learning' therefore deserves greater attention.

Chapter 11, the single chapter in part IV, considers the theory development to which the Telemig case study can contribute. This chapter draws together the themes examined in previous chapters, especially chapters 7–10, to indicate their interdependence within the co-evolutionary process. It begins by rehearsing the strengths and limitations of contemporary co-evolutionary thinking, as a basis for indicating how the Telemig case study can inform its further development. It then suggests how the co-evolution of Telemig informs our appreciation of linked evolutionary cycles within the company and its macro and meso environments. The chapter presents a model of these cycles that indicates how co-evolution crosses different system levels – macro, meso and micro – and how its various ideational and material elements are co-related. The primary dynamic behind the process of co-evolution within a highly institutionalized environment is seen to be that between purposive actions taken by external actors and those within the company. This dynamic is evident in the analyses of organizational culture, corporate identity, reflective imaging and learning presented in the previous four chapters. We argue that these phenomena can only be understood if account is taken of the political interests that were at play. They speak for the incorporation of a political interest perspective as the next step forward in co-evolutionary analysis, and chapter 11 closes by outlining the theoretical dynamics this involves.

References

Axelrod, R. (1984) *The Evolution of Co-operation*. New York: Basic Books.

Bain, J. S. (1956) *Barriers to New Competition*. Cambridge, MA: Harvard University Press.

Bansal, P. and Roth, K. (2000) Why companies go green: a model of ecological responsiveness. *Academy of Management Journal*, 43, 717–36.

Barry, D. and Elmes, M. (1997) Strategy retold: toward a narrative view of strategic discourse. *Academy of Management Review*, 22, 429–52.

Biggart, N. W. (1997) Explaining Asian economic organization: toward a Weberian institutional perspective. In M. Orru, N.W. Biggart and G. G. Hamilton (eds), *The Economic Organization of East Asian Capitalism*. Thousand Oaks, CA: Sage, pp. 3–32.

Blodgett, L. L. (1991) Partner contributions as predictors of equity share in international joint ventures. *Journal of International Business Studies*, 22, 63–78.

Burgelman, R. A. (2002a) *Strategy is Destiny: How Strategy-making Shapes a Company's Future*. New York: Free Press.

Burgelman, R. A. (2002b) Strategy as vector and the inertia of coevolutionary lock-in. *Administrative Science Quarterly*, 47, 325–57.

Castilla E., Hwang, H., Granovetter, E. and Granovetter, M. (2000) Social networks in the Valley. In W. Miller, H. Rowen, C. Lee and M. Hancock (eds), *How Silicon Valley Works*. Stanford, CA: Stanford University Press, pp. 218–47.

Chandler, A. D. Jr (1962) *Strategy and Structure*. Cambridge, MA: MIT Press.

Child, J. (1972) Organizational structure, environment and performance: the role of strategic choice. *Sociology*, 6, 1–22.

Child, J. (1997) Strategic choice in the analysis of action, structure, organizations and environment: retrospect and prospect. *Organization Studies*, 18, 43–76.

Child, J. (2000) Theorizing about organization cross-nationally. *Advances in International Comparative Management*, 13, 27–76.

Child, J. and Smith, C. (1987) The context and process of organizational transformation: Cadbury Limited in its sector. *Journal of Management Studies*, 24, 565–93.

Child, J. and Tsai, T. (2005) The dynamic between firms' environmental strategies and institutional constraints in emerging economies: evidence from China and Taiwan. *Journal of Management Studies*, 42, 95–125.

Chreim, S. (2005) The continuity–change duality in narrative texts of organizational identity. *Journal of Management Studies*, 42, 566–93.

Clegg, S. R. and Dunkerley, D. (1980) *Organization Class and Control*. London: Routledge & Kegan Paul.

DiMaggio, P. J. and Powell, W. W. 1991. The iron cage revisited: institutional isomorphism and collective rationality. In W. W. Powell and P. J. DiMaggio (eds), *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press, pp. 63–82.

Doz, Y. L. (1996) The evolution of cooperation in strategic alliances: initial conditions or learning processes? *Strategic Management Journal*, 17, 55–83.

Etzioni, A. (1961) *A Comparative Analysis of Complex Organizations*. Glencoe, IL: Free Press.

Foreman, P. and Whetten, D. A. 2002. Members' identification with multiple-identity organizations. *Organization Science*, 13, 618–635.

Friedman, M. (1962) *Capitalism and Freedom*. Chicago: University of Chicago Press.

Gerth, H. H. and Mills, C. W. (eds) (1946) *From Max Weber: Essays in Sociology*. New York: Oxford University Press.

Gould, R. (1993) Collective action and network structure. *American Sociological Review*, 58, 182–96.

Granovetter, M. (1992) Economic action and social structure. In M. Granovetter and R. Swedberg (eds), *The Sociology of Economic Life*. Boulder, CO: Westview Press, pp. 53–84.

Grant, R. M. (2005) *Contemporary Strategy Analysis*, 5th edn. Malden, MA: Blackwell.

Hall, P. A. and Soskice, D. (2001) *Varieties of Capitalism*. New York: Oxford University Press.

Hannan, M. T. and Freeman, J. H. (1989) *Organizational Ecology*. Cambridge, MA: Harvard University Press.

Heracleous, L. and Barrett, M. (2001) Organizational change as discourse: communicative actions and deep structures in the context of information technology implementation. *Academy of Management Journal*, 44, 735–78.

Henrique, I. and Sadorsky, P. (1996). The determinants of an environmentally responsive firm: an empirical approach. *Journal of Environmental Economics and Management*, 30, 381–95.

Hickson, D. J., Hinings, C. R., Lee, C. A., Schneck, R. E. and Pennings, J. M. (1971) A strategic contingencies theory of intraorganizational power. *Administrative Science Quarterly*, 16, 216–29.

Jacques, E. (1951) *The Changing Culture of a Factory*. London: Routledge.

Johnson, G. (1987) *Strategic Change and the Management Process*. Oxford: Blackwell.

Journal of Management Studies (2003). Special research symposium. Beyond adaptation vs selection research: organizing self-renewal in co-evolving environments. *Journal of Management Studies*, 40(8).

Kerr, C., Dunlop, J. T., Harbison, F. and Myers, C. A. (1960) *Industrialism and Industrial Man*. Cambridge, MA: Harvard University Press.

Leonard, H. J. (1988) *Pollution and the Struggle for World Product*. Cambridge: Cambridge University Press.

Lewin, A. Y., Long, C. P. and Carroll, T. N. (1999) The coevolution of new organizational forms. *Organization Science*, 10, 535–50.

Lewin, A. Y. and Volberda, H. (1999) Prolegomena on coevolution: a framework for research on strategy and new organizational forms. *Organization Science*, 10, 519–34.

Locke, R. R. (1989) *Management and Higher Education since 1940: The Influence of America and Japan on West Germany, Great Britain and France*. Cambridge: Cambridge University Press.

Lu, Y. and Lake, D. (1997) Managing international joint ventures: an institutional approach. In P. W. Beamish and J. P. Killing (eds), *Corporate Strategies: European Perspectives*. San Francisco: The New Lexington Press, pp. 74–99.

Meyer, J. W. and Scott, W. R. (1983) *Organizational Environments: Ritual and Rationality*. Beverly Hills, CA: Sage.

Miles, R. E. and Snow, C. C. (1978) *Organizational Strategy, Structure and Process*. New York: McGraw-Hill.

Mische, A. (2003) Cross-talk in movements: rethinking the culture–network link. In M. Diani and D. McAdam (eds), *Social Movements and Networks: Relational Approaches to Collective Action*. New York: Oxford University Press, pp. 258–80.

Moingeon, B. and Soenen, G. (eds) (2002) *Corporate and Organizational Identities*. London: Routledge.

Mommsen, W. J. (1989) The two dimensions of social change in Max Weber's sociological theory. In W. J. Mommsen, *The Political and Social Theory of Max Weber: Collected Essays*. Cambridge: Polity Press, pp. 145−65.

Nehrt, C. (1998) Maintainability of first mover advantages when environmental regulations differ between countries. *Academy of Management Review*, 23, 77−97.

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

Oliver, C. (1991) Strategic responses to institutional processes. *Academy of Management Review*, 16, 145–79.

Organization Science (1999) Focused issue on 'Coevolution of strategy and new organizational forms'. *Organization Science*, 10(5).

Organization Studies (2001) Special issue on 'Multi-level analysis and co-evolution'. *Organization Studies*, 22(6).

Parsons, T. (1956) Suggestions for a sociological approach to the theory of organizations – I. *Administrative Science Quarterly*, 1, 63−85.

Peng, M. W. (2000) *Business Strategies in Transition Economies*. Thousand Oaks, CA: Sage.

Pettigrew, A. M. (1985) *The Awakening Giant*. Oxford: Blackwell.

Pettigrew, A. M. (1990) Longitudinal field research on change: theory and practice. *Organization Science*, 1, 267–92.

Pfeffer, J. (1992) *Managing with Power*. Boston, MA: Harvard Business School Press.

Pfeffer, J. and Salancik, G. R. (1978) *The External Control of Organizations: A Resource Dependence Perspectiv*e. New York: Harper and Row.

Porter, M. E. (1990) *The Competitive Advantage of Nations*. New York: Free Press.

Porter, M. and Linde, C. (1995) Green and competitive: ending the stalemate. *Harvard Business Review*, September/October, 120–34.

Powell, W. W. and DiMaggio, P. J. (eds) (1991) *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press.

Redding, S. G. (1990) *The Spirit of Chinese Capitalism*. Berlin: De Gruyter.

Redding, S. G. (2005) The thick description and comparison of societal systems of capitalism. *Journal of International Business Studies*, 36, 123–55.

Salop, S. C. and Scheffman, D. T. (1993) Raising rival's cost. Papers and proceedings of the ninety-fifth annual meeting of the American Economic Association. *American Economic Review*, 73, 267–71.

Scherer, F. M. (1980). *Industrial Market Structure and Economic Performance*. Chicago: Rand McNally, 2nd edn.

Schluchter, W. (1981). *The Rise of Western Rationalism: Max Weber's Developmental History*. Berkeley: University of California Press.

Scott, W. R. (1995) *Institutions and Organizations*. Thousand Oaks, CA: Sage.

Selznick, P. (1949) *TVA and the Grass Roots*. Berkeley: University of California Press.

Simons, T. and Paul, I. (1997) Organization and ideology: kibbutzim and hired labor, 1951–1965. *Administrative Science Quarterly*, 42, 784–814.

Stinchcombe, A. L. (1965) Social structure and organizations. In J. G. March (ed.), *Handbook of Organizations*. Chicago: Rand McNally, pp. 142–93.

Suddaby, R. and Greenwood, R. (2005) Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, 50, 35–67.

Weber, M. (1964) *The Theory of Social and Economic Organization* (trans. A. M. Henderson and T. Parsons). New York: Free Press.

Weber, M. (1978) *Economy and Society* (ed. and trans. G. Roth and C. Wittich). Berkeley: University of California Press.

Weick, K. E. (1995) *Sensemaking in Organizations*. Thousand Oaks, CA: Sage.