

Time for space: A narrative review of research on organizational spaces

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This paper presents an integrated framework for studying organizational spaces. It suggests that existing research can be classed into three categories: studies of space as distance; studies of space as the materialization of power relations; and studies of space as experience. These approaches are drawn together using Henri Lefebvre's theory of spatial production to argue that an adequate understanding of organizational spaces would investigate how they are practised, planned and imagined. Moreover, an adequate theory of space would account for multiple spatial levels, or scales. To illustrate the potential of the synthetic framework, a reading of three exemplary studies of multiple organizational spaces, from social anthropology and economic geography, is presented. The paper concludes by presenting a research agenda that indicates how data collection and analysis in established fields such as employee relations and international business might become more 'space sensitive' by integrating such theorized cross-scale analysis.

Introduction

Space was treated as the dead, the fixed, the undialectical, the immobile. Time, on the contrary, was richness, fecundity, life, dialectic. (Foucault 1980, 70)

Time and space are closely linked in areas of scientific research such as physics, in everyday life and in workplaces. In the social sciences, however, it has been common practice to privilege the analysis of time. This is reflected in organization and management research; books, journal papers and edited collections provide analyses of time in the workplace, extending our understanding of temporal dynamics in

management and the contestation of time codes. In contrast, until recently the spaces and places that management happens in and through have been portrayed as neutral settings; in Foucault's terms, fixed, dead and immobile containers or settings. In this paper, we argue that this situation has begun to change, and review published work in order to establish an integrated framework for future work on space in organization and management studies. Our argument is founded on the contention that established sub-fields of management research tend to 'see' spaces as specific common-sense categories that can be separated out from each other empirically and analytically. This is in

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part a result of the lack of conceptualization of space and place, and especially a lack of engagement with the increasing interest in space and spatiality in the social sciences (Soja 1989; Wilton and Cranford 2002).

We suggest that an increasing number of organizational scholars take space and place as a central analytical theme (e.g. Dale and Burrell 2007; Clegg and Kornberger 2006; Hernes 2004a; Kornberger and Clegg 2004); others use spaces as an analytical lever to understand established sub-fields such as employee relations or international business. The study of organizational spaces is an area characterized by fragmented contributions. Competing understandings of space and place mean that analysis tends to be atomized. We suggest that, while this disintegration has produced a rich variation of understandings of spatiality, it is problematic in developing an understanding of management and organization as fundamentally spatial activities. Our review is therefore retrospective, providing a summary of work published. It is also a prospective step towards defining 'organizational spaces' for future conceptual development. We pursue these twin aims through a narrative approach to review (Hammersley 2001), in which the studies reviewed are seen as contributing towards the development of theory. We do not seek to synthesize evidence in an additive way. Rather we attempt to draw out the contributions of a range of studies towards a cumulative understanding of organizational spaces as a theoretical area. Throughout, we aim to illustrate two proposals: first, that the field of organizational spaces is approaching maturity and hence in need of a review paper to summarize previous work and indicate future directions in developing theory; and second, that stronger links between this emerging field and other social science analyses notionally 'outside' the field of business and management need to be made. This leads us to suggest ways in which researchers might work with organizational spaces by drawing on social anthropology and economic geography in particular, areas in which spaces have long been recognized as crucial to under-

standing the social activities of organizing and managing work. Ultimately, we intend to contribute towards recognizing the 'multiplicity of the objective qualities which space and time can express, and the role of human practices in their construction' (Harvey 1990, 203).

Three Forms of Organizational Space

Research into spaces in organization and management studies is difficult to aggregate. This is partly because of the significant variety in vocabulary used to describe the object of analysis. Terms in use include: space, place, region, surroundings, locale, built environment, workspace, 'environments' (fixed, semi-fixed, ambient), private/public space, building, territory and proximate space. In particular, there is an ongoing controversy around differentiating the concepts of space and place (Casey 2003). We use the term organizational spaces as an 'umbrella construct' (Hirsch and Levin 1999) to refer to the various locations that organization and management can be analysed through. We use this term as it allows us to include a greater variety of contexts than just the notion of place, which is developing into a highly specific term. Making use of the term spaces also allows us to understand how scholars have understood organizing and managing in relation to places, and to analyse the various notional spaces that production happens in. For example, we suggest that one means of analysing organizational space is through national or supra-national institutions that condition agentic action (Spicer 2006). These are implaced in organizational praxis, yet spatially located at a level that is in principle abstracted from local practice or emplacement. We believe that there is a need for abstracted categories of spatiality to indicate the levels at which implacement can happen; this allows us to introduce the notion of spatial scales. For this reason above all, we suggest the term organizational spaces as an umbrella construct, under which organizations can be understood as spatially embedded at various levels.

Within the literature on organizational spaces, we identify three different conceptions of space.

The first conception treats space as distance between two points. The second conception treats space as materialized power relations. The final conception treats space as the manifestation of our imagination. Each of these three different conceptions involves different methodological preconceptions that shape key analytical concepts and protocols of data collection (see Table 1). In the next sections, we work through each of these different approaches to analysing the spatiality of organization and management. We then move on to propose a means of synthesizing the analysis of organizational spaces, by drawing on Lefebvre (1991). Use of Lefebvre's theoretical approach enables us both to explore in more depth the materiality of organizational spaces and also to emphasize the power relations inherent to managing and organizing.

Space as Distance

Perhaps the most widespread approach to understanding space in organization and management studies treats it as physical distance. This approach draws on Euclidian geometry, which suggests space is the distance between two or more points. These points can be anything from buildings to resources to customers to competitors. It also implies that spatial distances can be objectively measured and represented. For instance, we might measure the distance of firms from their key resources in order to show that companies will cluster around critical resources (Lörsch 1954). The focus of analysis is sites where distance and proximity can be readily measured. The result is usually detailed measurement of distances. These data might then be aggregated into diagrams or maps. The approach underpins a range of different studies of organizational spaces including studies of workplace layout, firm agglomeration and clustering dynamics.

Perhaps the largest body of research on organizational space, certainly the most commonly explored, focuses on the question of workplace layout. This examines the measurable relationship between furniture,

Table 1. Formations of space

Definition of space	Key analytical concepts	Approaches	Dominant data collection methods	Key studies
Space as distance	Measurable relations between points	Ergonomics; Office design; Population ecology; Social ecology; Network analysis	Measured distances, diagrams	Baum and Mezias 1992; Brookes and Kaplan 1972; Bitner 1992; Greenhut 1956; Hatch 1987
Space as materialized power relations	Relations of domination made material	Employee relations; Labour Process; Theory; Foucauldian organization studies	Interviews, participant observation	Collinson and Collinson 1997; Sewell & Wilkinson 1992
Space as experience	Understanding and interpretation of space	work divide Symbolism; Aesthetics; Actors; Interpretation; Discourses	Non-participant observation, interviews; Visual data	Berg and Kreiner 1990; Cairns 2002; Ford and Harding 2004; Yanow 1998

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machines, architectural objects (doors and windows, for example) and those who occupy the workplace. Research in this tradition details how the layout of the workplace encourages certain patterns of behaviour and interaction (e.g. Arge 2000; Becker 1981; Bitner 1992; Brookes and Kaplan 1972; Duffy 1997; Grajewski 1993; Hatch 1987; Parsons 1972; Sundstrom and Sundstrom 1986). An issue of particular interest is the consequences of 'open plan' style offices. Some architectural writers argue that creating more flexible spaces through the use of open plan space, hot-desking and bright and airy design facilitates information sharing and creativity (Duffy 1997; Meyerson and Ross 2003). In contrast, in-depth studies of the organizational dynamics of de-personalizing work space in these ways suggest that the absence of physical barriers between employees can decrease satisfaction with the workspace and the job (Sundstrom *et al.* 1980), decrease the amount of interaction within a firm (Hatch 1987), and decrease employee motivation (Oldham and Brass 1979). Recent work further suggests that the multiple meanings attributed to workspace are central to employee resistance of managerial initiatives such as hot-desking (Halford 2004). Others have investigated the effect of constructing virtual organizational spaces, inhabited by remote employees or virtual teams (Cascio 2000; Maznevski and Chudoba 2000; Shin 2004). Despite the prominence of virtual working in the popular imagination it is still relatively rare, unpopular with both managers (Halford 2005; Perin 1991) and employees (Felstead *et al.* 2002; Surman 2002; Whittle 2005; Wiesenfeld *et al.* 2001) and highly problematic to implement (Cascio 2000). Organizing and managing appear to be activities that are extremely difficult to displace. In this respect, distance and proximity remain central to practice.

Conceptions of organizational space as physical distance that extend beyond the workplace are also prominent. An extensive body of work examines spatial dynamics at the level of industries. This work explores how

physical distance and transportation costs can explain the agglomeration of firms in particular regions (Greenhut 1956; Isard 1956). A related strand of research examines how space is made up of distances scattered with resources. Organizational location decisions are charted as rational economic choices shaped by the desire to be positioned close to critical resources such as fuel or input materials (Lörsch 1954; Weber 1909). Research here demonstrates that firms will tend to cluster around large pools of critical human resources, such as 'star scientists' in the biotechnology industry (Zucker *et al.* 1998) or knowledge amongst engineers (Almeida and Kogut 1999). Others demonstrate that clustering dynamics in the financial services industry are driven by attempts to access the reputation of already existing firms in a geographic location as well as access sophisticated consumers (Pandit and Cooke 2003).

Alongside this work, population ecologists seek to account for how competitive dynamics can explain the agglomeration of firms. According to this approach, geographic positioning of firms is not just shaped by proximity to resources but also to competitors within any given space (Baum and Mezias 1992; Carroll and Wade 1991; Lomi and Larsen 1996; Sorenson and Audia 2000). The geographic proximate of competition is used to explain location decisions by entrepreneurs (Lomi 1995; Sorenson and Audia 2000; Stuart and Sorenson 2003), firm morality rates (Baum and Mezias 1992; Ingram and Innam 1996; Lomi 1995; Wade *et al.* 1998), and the concentration of firms close to competitors rather than customers (Greve 2000).

In addition to competitors, resource spaces are also conceptualized as containing networks of organizations and individuals. This human ecology approach argues that geographical proximity gives rise to strong social networks that then determine important outcomes in social life (Hawley 1950). Early work traced how geographic co-location could increase the likelihood of marriage (Bossard 1932), friendship (Festinger *et al.* 1950), or the adoption of agricultural innovations (Hägerstrand

1953). These network-based models of physical proximity were then put to use to explain the regional agglomeration of firms; thus it is suggested that firms tend to concentrate because co-location gives rise to knowledge spillovers which are then put to use by other economic actors (Jaffe 1986). The geographic concentration of high-technology industries in different regions is attributed to social networks that allow transmission of knowledge across organizational boundaries (Jaffe *et al.* 1993). Other studies emphasize inter-personal relationships and inter-organizational relations (Almeida and Kogut 1999), and professional relations such as directorate interlocks (Kono *et al.* 1998).

Studies of the physical set-up of the workplace, clustering dynamics around resources or competitors, and networks are certainly diverse. They are targeted at different levels of analysis, they seek to explain different dependent variables, and they draw on different theoretical frameworks. However, they are held together by a common understanding of space as a pattern of distance and proximity which can be manipulated. Those studying the workplace examine the physical distance between workers, objects or architectural features; those studying clustering investigate the physical distance between resources and competitors; while those studying networks investigate the physical distance between co-operating organizations. This focus on patterns of distance and proximity has some important advantages. First, it should be credited with bringing the importance of the most elemental spatial dynamics to the attention of those studying organizations. By focusing on the importance of distance and proximity, researchers convincingly demonstrate how space makes a difference to importance issues such as workplace behaviour, competitive dynamics and uptake of innovation. Second, a clear focus on issues of distance and proximity makes spatiality a relatively easy construct to measure. This means those interested in the role of spaces simply need to attend to the physical distance between points (be they people, resources, or companies). Finally,

researchers make an important practical contribution in calling attention to the role of distance and proximity on organizational activity. They show how by changing the arrangement of distance and proximity, it is possible to influence workplace efficiency, health and safety, employee satisfaction, firm competitiveness and innovation. Each of these is an important achievement.

Despite these significant advantages, studies of organizational space which are based on this understanding as distance and proximity have some significant shortcomings. The first criticism to consider is that they are unable to account for the ways in which actors attribute meaning and significance to a space (Halford 2004). This means that these studies are not able to explain the role which perceptions or experiences of distance and proximity play (Merleau-Ponty 1962). These may be far more important in shaping organizational processes than distance-as-measured. This may then lead to a lack of understanding between those concerned with the technical manipulation of organizational spaces (architects, operations managers and builders), and those living out the social organization of the space such as employees, managers or customers (Becker 1981). The result can be conflict between designers and inhabitants, lower performance, and the development of neglected, run-down, even soul-destroying spaces (Blau 1984; Knowles and Leslie 2001).

The second potential criticism of this approach is that it disregards how patterns of power and resistance may shape manifestations of distance and proximity. Charting distance or proximity of workers and competing firms can provide us with a description of the configuration of space. In many cases, it cannot provide an adequate explanation for such a configuration of space or how spatiality is practised. By focusing only on spatial outcomes, we remain blind to deeper causes. In particular, we ignore how spatial configurations of distance and proximity are the surface manifestation of deeper level relations of power (Harvey 1973). As Harvey (1990, 205) also notes, 'beneath the

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veneer of common-sense and seemingly “natural” ideas about space and time, there lie hidden terrains of ambiguity, contradiction, and struggle’. In order to address these, we find that researchers have developed a second approach that examines how configurations of space are underpinned by deeply rooted power relations. It is to this approach we now turn.

Space as Materialization of Power Relations

We have argued that studies of organizational space as distance reveal the most ‘visible’ aspects of space in and around organizations. However, they do not provide a cogent explanation of what produces one set of patterns of distance and proximity rather than another. In order to address this question, some researchers move from analysing organizational spaces as distance to focusing on organizational space as the materialization of power relations (Allen 1977) – an approach often informed by Marxian analytical categories. While there have been extensive questioning and criticism of Marx’s work and its variants as a political movement or explanatory framework (Kolakowski 2005), nonetheless it inspired a series of influential accounts of economic space (e.g. Harvey 1973). Marx’s own work examines a variety of organizational spaces as he develops a political economy of the UK in the mid-19th century, observing regions, cities, neighbourhoods and factories transformed by industrial capitalism. For Marx, these newly formulated spaces were materializations of changing relations of power at play in capitalism. Most obviously factories are considered to be spaces where industrial workers are concentrated to ensure better surveillance and control by entrepreneurs. This desire to control the workforce is given its most potent expression in company towns, such as Port Sunlight, Saltaire and Bournville in the UK, or Pullman, Hershey or Gary in the US (Andrews 1999; Carstens 2001; Jeremy 1991). Study of these towns is rewarding in part as the social and economic conditions of production are inscribed into every

aspect of their spatial arrangements (Veninga 2004). Scholars have consistently argued that the construction of housing around factories is an attempt to create communities that come under the absolute rule of the industrialist. Employees and their dependents are encouraged to become dependent, subject to social and cultural discipline. Residential streets are planned and built to enable surveillance during what is notionally employees’ free time (Burrell 1997), to complement the control sought within the walls of the workplace. The notion is proving remarkably resilient; English-Lueck (2000) argues that Silicon Valley can be viewed as a 21st-century version of the original 19th-century ideal, where organizational norms leak into non-work space and the sociocultural order of the region is conditioned by work organizations. Similarly Kooijman (2000) argues that in business parks we see a re-interpretation of the company town that allows managers in smaller organizations to mobilize spatial dynamics for purposes of control.

Within the organizational walls, the most commonly cited way that power relations are materialized is through the disciplinary gaze. Foucault (1991) for example argues that modern institutions, including the prison, hospital, school and factory, all use the Benthamite blueprint of the panopticon in order to materialize relations of power. He suggested that:

It is spaces that provide fixed positions and permit circulation; they carve out individual segments and establish operational links; they mark place and indicate values; they guarantee the obedience of individuals, but also a better economy of time and gesture. They are mixed spaces: real because they govern the disposition of buildings, rooms, furniture, but also ideal, because they are projected over this arrangement of characterizations, assessments, hierarchies. (Foucault 1991, 148)

Organizing workspace thus brings together the material and ideal. In the early stages of industrial development, supervisors and overseers were expected to maintain visual surveillance of production and behaviour in

order to ensure employees not only carried out tasks but behaved in an appropriately disciplined way (Jacques 1996; Markus 1993; Rofel 1997). Constituting *l'employé* in the 19th century relied on the ability to locate workers spatially, in workplaces and beyond (Jacques 1996). As part of this, rational rules and norms replaced spontaneity or unpredictability (Bauman 1997). In the early industrial 'empire of the gaze' (Jay 1985) attempts were made to produce a labour process that could be overseen (literally), streamlined and managed through strict spatial and temporal discipline (Thompson 1967). Architects and interior designers were (and are) employed with the aim of constituting a 'powerscape' (Henley 1977) to enable this. 'Empty' space was manipulated to produce both functional buildings and environments that enable easy visual surveillance and control. The cost of maintaining such all-encompassing surveillance, however, rapidly becomes untenable as workplaces and supervisory cadres grow; this realization combines with managerial awareness that visual techniques of control are relatively easily resisted (Collinson and Collinson 1997). Scholars suggest that the result is that less visually reliant techniques are developed which involve the internalization of discipline (Sewell and Wilkinson 1992). The maintenance of managerial control still requires some degree of observation, however, or at least perceptions of the potential for observation. Hence the development of managerial systems implies an abstracted presence of disciplinary authority and control (Rose 1990; Townley 1994).

Following this approach, architecture (Guillén 1998), workplace layout (Sewell and Wilkinson 1992), and working environment (Baldry 1999) are thought to be central in establishing and maintaining relations of power. However, inhabitants often do not conform to the rational plans of organizational space; rather, they use and experience these controlled spaces in 'deviant' ways. Liminal spaces such as toilets can be used in creative ways, office furniture can be rearranged, and

people move around in ways that do not follow prescribed paths. Practised space can be quite different from planned space (De Certeau 1984).

A third important aspect of analysing organizational spaces as materialized power relations considers the relationship between work and non-work. The move towards company towns was in part a response to widespread industrial and social unrest during industrialization; employers sought to separate workplaces from existing local communities. However, the investment required to build and maintain one-company towns was also questioned as paternalist approaches to production were challenged by more rational economic approaches. Thus, as the 20th century began, a spatial division between organizational and non-organizational also began. While pre-modern work organization did not require a separation between home and workplace (Pollard 1965), modern industry involved a profound spatial re-ordering whereby the workplace and the domestic sphere began to be rigorously separated (Marglin 1974). This involved introducing and materializing the spatial fissure between the public space of the workplace and the private space of the domestic context (Weber 1922). This split also involved an important gendered dimension whereby men were assigned to the public space of paid work, whereas women were marginalized in the private sphere of unpaid work in the home (Ferguson 1984). This is something that many commentators argue continues as workplaces remain predominantly masculine spaces (McDowell 1997).

However, the two places of work and home have rarely been entirely separate (Collinson 1998; Nippert-Eng 1995); the work-home divide has always been at least permeable (Fleming and Spicer 2004; Grey 1994; Reveley *et al.* 2004). The advent of new managerial technologies such as culture management and advances in information technologies together bring significant blurring of boundaries between the public space of paid work and the private space of the home (Perlow 1998). This involves

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a dual movement, pushing the organization out and pulling the home into organizations (Fleming and Spicer 2004). As organizational boundaries are extended, activities associated with the workplace are incorporated into home and leisure life; as non-organizational life is pulled into the organizational building, workers are asked to experience sentiments more usually associated with private life (Bell and Taylor 2004).

Related to this is the suggestion that organizations have become 'boundaryless' (Ashkenas *et al.* 1995). Materially, we would suggest that, despite reports of increased homeworking and the development of virtual organizations, there is considerable contemporary evidence that managers continue to require physical presence in the workplace and that performance is often judged on the amount of time spent 'at work' (Collinson and Collinson 1997; Ezzamel *et al.* 2001; Perin 1991). This is despite repeated demonstrations of the individual (Baruch 2000; Felstead *et al.* 2002; Hamblin 1999) and organizational (Huws 1993) benefits of homeworking. This indicates again that power relations are central to understanding why organizations are spatially configured in certain ways.

As well as materializing relations of power within the workplace, between home and work, and in the immediate surroundings of the workplace, researchers have also argued that large-scale spaces may be seen as materializations of power relations. For instance, analysis in social geography suggests that the city is a materialization of organizational power relations, and that capital encourages appropriate infrastructure to be constructed in order to gain a sizable and disciplined labour force and ensure the successful circulation of goods (Harvey 1973, 1990). This includes neighbourhoods for employees to live in, transport infrastructure to circulate goods, malls and shopping streets to facilitate consumption, and inner-city 'office districts' to allow the management and co-ordination of this system. This entire infrastructure provides capitalism with a 'spatial fix' that materializes the con-

tinuous drive of capital to increase (Harvey 1973). This framework has also been used to study the creation of new 'spaces of accumulation' such as urban agglomerations (Brenner 1999), regions (Swyngedouw 1996), and cross-border regions (Perkmann and Sum 2002). While these studies differ in terms of the spatial scale addressed, they are all founded on the argument that a space of accumulation such as an industrial region develops not merely owing to convenient location near resources, but that it is a materialization of certain relations of power that ensure the circulation and reproduction of capital.

In sum, studies of space as a materialization of power relations are a valuable challenge to work that focuses on distance and proximity as objective measures of organizational practice. The major contribution of this thread of analysis is to move from a focus on *how* surface manifestations of organized spaces operate, to the reasons *why* spaces are configured as they are. These studies remind us how spatial configuration can be underpinned by a desire for worker surveillance, to create or dissolve a split between home and work, or to facilitate capital accumulation in the process of production and consumption. Ultimately, it draws our attention to the possibility that organizational spaces may be important mechanisms of control which can be used by managers, designers and other planners of space. However, while this approach has notable strengths, it is also open to critique. The first issue is whether all spaces are necessarily manifestations of power. Researchers argue that any spatial arrangement, no matter how apparently innocuous, is a materialization of deeper structures of power and domination, with a 'hidden logic of control' which underlies it. This means that other processes that might generate the configuration of organizational space are neglected, resulting in a rather impoverished analytical tool box in the attempt to explain spatial phenomena. The second question relates to the presence of autonomy and resistance. By focusing on how people are controlled through the configuration of

organizational spaces, it is a short step to the assumption that inhabitants' actions are circumscribed by the intentions of managers or capital holders. This introduces the obvious danger of overlooking the various strategies and tactics through which inhabitants not only resist regimes of power and domination, but in some cases actively seek to reconstruct spaces. Moreover, by focusing on space as a materialization of power relations, there is the potential for a systematic disregard of the ways that space may actually be the product of inhabitants' ongoing experience and understandings. This means that the rich lexicon that inhabitants use to understand the spaces in which they dwell may be lost in favour of the analytically derived categories of the researcher. The task of recovering this rich life-world of space is one which researchers investigating the lived experience of spaces have taken up. It is to this work we shall now turn.

Space as Lived Experience

A third approach to understanding organized spaces involves less concern for distance/proximity and relations of power, and instead a focus on how spaces are produced and manifest in the experiences of those who inhabit them. This approach moves even further from the assumption that organizational spaces are physical manifestations such as distance from resources or a partition between two desks. Rather, space is understood as our experience and understanding of distance and the meaning which we give to walls. Indeed, it is our perception and experiences of a space that give it life, animation, and make it occupied (Tuan 1977). From this it follows that different experiences of space give rise to radically different spaces. For instance, the way a waiter experiences a restaurant and the way a customer experiences the same space are quite different. In order to understand these different experiences, researchers in organization and management studies have drawn on the resources generated by the linguistic and cultural turns in social science. This has

enabled an examination of the symbolic orderings that surround and infuse organizing and managing. The minutiae of organizational life come to the fore as the everyday is made strange in order to untangle its meaning: decoration (both organizational and personal), furniture, clothing, artefacts of all shapes and sizes, are all opened up for analysis. The approaches known as organizational symbolism (Gagliardi 1990) and organizational aesthetics (Strati 1999) seek to make us aware of how we experience the spaces of organization through the cultural and sensory apparatus that we all carry to work with us. In particular, the univocal relation between objects, language and an objective reality is questioned. For both approaches, artefacts and spaces have been central.

However, legitimacy has been hard-won for both symbolic and aesthetic analysis (Taylor and Hansen 2005). A number of aspects are seen as unconventional or 'unscientific'; critics object to research methods, mode of representation, subject matter and lack of relevance. Notwithstanding, the symbolic and aesthetic dimensions of inhabitants' experiences of organizational spaces are increasingly recognized as central to understanding them. Internal office design is deeply invested with symbolism, with open plan offices symbolizing 'openness' and 'accountability', but also perhaps 'exposure' and control (Hatch 1990). The buildings themselves are also rich repositories of symbolic and aesthetic aspects of organizations, telling stories about the organization's culture and identity (Berg and Kreiner 1990) and narratives of struggle over time (Yanow 1995, 1998). This aspect of organizational space has received considerable attention recently (Galison and Thompson 1999; Knowles and Leslie 2001), particularly in terms of expressing how an organization perceives itself (cf. Goodsell 1988). The majority of analyses in this field follow interpretive methods, seeking the stories that spaces tell (Gieryn 2000, 2002; Yanow 1995, 1998). More recent analysis makes clear how occupants and users may 'rescript' organizational spaces through the deliberate misappropriation and

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misuse of organizational spaces (Cairns *et al.* 2003). Examples of this include turning serious and rule bound organizational spaces into 'spaces of play' where liberatory ideas can be explored (Hjorth 2005).

Studies in this tradition also remind us that our aesthetic experiences of space are shaped by ascribed meaning embedded in cultural frames at a variety of levels. We are reminded how rooms are imbued with poetic and literary imagery that shape the way we experience them, and how landscape is shaped by the concepts, words and stories that haunt it (Bachelard 1958). Although understanding space as experience makes some significant contributions, it is also characterized by two important shortcomings. First, researchers focusing on aesthetic dimensions of organizational spaces, in particular, can lose sight of the embedded power relations that condition which symbols appear in the first place (Cairns 2002). The different experiences which two people have of an organizational space may be more convincingly explained by their structural position in relations of power rather than their embodied experience of the spaces. For instance, a waiter's experience of the restaurant as 'a factory' and a customer's experience of the restaurant as a 'space of relaxation' may be shaped by differential positions within the powerscape (Henley 1977) of the organization. The second criticism, often levelled at cultural and symbolic approaches more generally, is that they disregard the material aspects of organizing and managing (Willmott 1993) which are so demonstrably central to organizational space. In focusing on actors' experiences and various symbolic vestments, researchers are led away from the very physical and corporal aspects of space such as distance and the brute physicality of buildings, as well as the material effects of working in them. By disregarding these elements of organizational spaces, the focus shifts too far into the realm of perception and cultural studies of the aesthetic. The result is that basic material realities of geography may be forgotten.

Towards an Integrated Theory of Organizational Spaces: Production and Scale

So far, we have argued primarily that there is a diverse range of organizational spaces and a variety of approaches are available to research them. Each is founded upon radically different assumptions about the nature of space and tends to emphasize very different dimensions. Studies of space as distance tend to emphasize the physicality of organizational spaces, with a focus on the most obvious empirically observable aspects of space such as where people sit, where businesses are located, and how resources are distributed around a building. Studies of space as the materialization of power relations draw our attention to the structural conditions which shape certain spatial dynamics. At the centre of such analyses are systems of planning and domination which underlie and co-ordinate any given space. Studies of space as lived experience emphasize the symbolic and imaginary dimensions. Underlying this work is a clear focus on how people imagine and experience the spaces in which they dwell. We have also argued that, while each of these approaches highlights important issues, they also tend to have significant shortcomings. Rather than seek to champion one approach above others, we suggest that these approaches can all contribute to a more integrated theory of organizational spaces. Following our review, such an integrated theory of space would emphasize the physical manifestations and uses of space, the power relations and dynamics of planning that space, and the way in which actors experience and imagine that space. In order to draw these three dimensions together, we shall draw on Lefebvre's (1991) influential account of the production of space, combining it with an understanding of the various scales that organizational spaces can occupy.

Producing Spaces

Lefebvre's theory of space is a response to received understandings of space as a neutral

container or medium. Rejecting this approach, Lefebvre argues that space is first and foremost a social product. He suggests that spatiality is produced through three processes: (1) practices such as walking, occupying and meeting; (2) planning, in the form of architecture, regional and city planning, ergonomics and office landscaping; and (3) imagining, manifest in representations such as literature, promotion and art, or through interpretive studies of phenomenological experiences of space. These processes of producing space correspond to the three approaches to space we have worked through in our literature review. The first set of work which treated space as distance and proximity tends to emphasize the physicality of how people, materials and products move through spaces. The material practices of how spaces are used dominate. Lefebvre's first dimension of space as practice certainly captures the materiality of where people are positioned, where tools or resources are distributed, and how they are used. The second set of work reviewed, on organizational space as a manifestation of power and control, emphasizes the planned nature of the organizational space. This work calls attention to how spaces such as the factory, the office and the company town are designed and managed to reinforce relations of power, and captures the dynamics of planning which underpin most organizational spaces. The third set of work we examined focused on organizational space as the product of occupants' experiences. This broadly fits with Lefebvre's third dimension of space as something which is imagined through various forms of symbolism, including language. In bringing these three ways of understanding organizational space together with Lefebvre's theoretical frames, we can suggest that a definition of organizational spaces as practices of distance and proximity which are ordered through planning and interpreted through the ongoing experience of actors begins to acknowledge both the complexity of the area, and to provide a means of exploring it empirically.

The definition of organizational spaces we are proposing enables us to identify three

clear dimensions of organizational space: the practices of distance and proximity; the planning of spatialized power relations; and the imagined experiences. A number of researchers working on organizational space have already found Lefebvre's frame a useful analytic distinction to make (e.g. Ford & Harding 2004; Hernes 2004a). However, interpretations of Lefebvre's theory of spatial production emphasize that each of the three dimensions cannot be analytically separated, but must be treated holistically. Spatial practice, spatial planning and spatial imagination all come together into a single moment of social space. That said, it may be useful to distinguish between practised, planned and imagined space for two reasons. First, it is important to disaggregate more dominated space associated with spatial planning and potential spaces of freedom and play which are opened up in everyday spatial practices and spatial imaginaries. Doing so allows us to acknowledge that a workspace has a greater degree of permanence and materiality than the day-to-day actions of an employee taking clandestine actions. Second, it is important to distinguish between these different spaces for hermeneutic reasons. By using the categories of practised, planned and imagined, our attention is drawn to significantly different dynamics. This provides us with a much richer vocabulary through which to interpret and understand spatial dynamics within and around organizations. At the same time as it is crucial to make a distinction between practised, planned and imagined spaces, it is however vital that we are constantly mindful that there is a consistent dialectical or trialectical (Soja 1996) interplay between each of the factors. This means that analysis of organizational spaces must not only distinguish between each dimension, but also consider their consistent and dynamic inter-relations.

Working with Scales

Perhaps the most striking way that processes of spatial production come together is in the production and reproduction of spatial scales.

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The most elementary elaboration of this notion tells us that spatial scales are different 'levels' of space, a 'graduated series, usually a nested hierarchy of bundled spaces of different sizes, such as the local, regional, national and supranational', 'each with a distinct geographic scope, that is, territorial extent' (Leitner 1997, 124–125). Building on this basic definition, a scale may be further defined as the spatial level at which social activity takes place. Within organizational analysis, we might include the globe, the nation, the region, the city, the neighbourhood, the building, the office or the body. We are able to extend scales in this way, as they are not only the level we choose as the focus of our analysis (Klein and Koslowski 2000), but also the most salient level at which actors position their social action. To put this another way, a scale is not just the level of analysis that the researcher brings to bear, it is the level of analysis and action which the actors themselves use (Spicer 2006).

We would suggest that Lefebvre's concepts of socially produced space and spatial scales in combination provide us with a rich theoretical framework through which we might examine how spatial practices, planning and imaginaries come together to form a social space which is then positioned with a spatial scale. Thus, to study organizational spaces might involve tracing spatial practices through

observation and interviews, mapping spatial planning through plans, charts, maps and spatial features such as buildings, and understanding spatial imaginaries through textual analysis and interviews. The space thus formed can then be compared against other social spaces at different spatial scales (see Table 2). The scales therefore enable us to organize analysis of various spaces, as we outline next.

Micro scales. These will tend to be within the organization. They may include a workspace which bounds the territory of an individual. This could be expressed through a complex interaction of 'top-down' spatial planning that assigns individuals to particular desks and work areas, as well as 'bottom up' spatial practices such as the rearrangement and personalization of workstation and spatial imaginaries (e.g. Warren 2002). This scale would establish a boundary between individual areas of influence (Brown *et al.* 2005). A micro scale might also involve the shared office space that marks off divisions between different groups. Examples here include the ubiquitous division between different workgroups within an organization (Hernes 2004b), between shop floor workers and management (e.g. Collinson 1992), or divisions between organizational spaces produced according to gender (Ram 1994). The workplace is brought into being through

Table 2. Spatial scales and organizational levels (adapted from Lefebvre 1991)

	Definition	Analytical setting	Examples in organizational space	Level of agency in spatial consumption
Macro	Level of space with broadest extension Space considered as public arena	Public space: administrative buildings, palaces	External environment such global or national economy, state, or region; Natural environment	Low
Meso	Intermediate level of space Space considered as local environment; semi-open	Semi-public space: streets, neighbourhoods	Inter-organizational relations; Home–work relations	Low
Micro	Narrowest level of space Space considered as privately held built environment; closed	Private spaces: homes, cars	Material and social practices within organizations; Employee relations policies, physical organization of work	Variable

patterns of spatial practice such as social interaction and the improvised layout of movable items, spatial planning such as layout, informal norms and formal rules about who is allowed to use spaces, and spatial imaginaries such as symbols which mark off territories and informal stories which help us to imagine zones in the office.

Meso scales. These will tend to be scales that shape the boundary between what is defined as the inside and the outside of the organization. They may include the scale of 'the organization' itself which marks the boundary of when one enters and becomes subject to rules and norms of behaviour (Dale 2005). This scale will be constructed by spatial planning in particular forms of architecture that clearly mark out a line between the organizational and non-organizational world in points of entry and exit, and spaces of transition such as car parks and lobbies policed by security personnel. The 'internal' design of the workplace emphasizing utility, efficiency and rationality may also contrast significantly with extra-organizational spaces (Guillén 1997). These spaces would also have formal rules and informal rules not experienced in spaces either 'inside' or 'outside' the workplace. This scale of the organization will also be produced through particular spatial practices such as the way in which workers act within and actually use the building. It would also incorporate spatial imaginaries that are propagated by managers (the company being an 'innovation space' for instance) and those circulated by employees (comparing the company to totalitarian regimes for instance).

This strict division between the organizational and non-organizational has clearly been blurred recently. This may result in a change in the scale of the organization produced by shifts in spatial practice, planning and imagination. With the discursive move towards boundaryless organizations, we are experiencing a shift in practices whereby activities normally associated with the non-organizational sphere such as consumption, sexuality and

emotion have been encouraged in the workplace, while activities commonly associated with the workplace are actively encouraged 'outside' the organization (Fleming and Spicer 2004). We have also seen a profound transformation of workplace architecture, whereby the 'new office' purposely blurs the boundaries between inside and outside, and makes workspaces resemble consumption spaces such as malls and cafés (Duffy 1997). Finally, the spatial imaginary mobilized in the new workplace emphasizes 'openness', 'creativity' and 'fluidity'. This can be clearly seen in adverts such as that showing a 'mobile knowledge worker' capturing a moment of inspiration on a laptop while lounging on a beach. These clearly create a more blurred scale between the organizational and non-organizational worlds.

Macro scales. These are scales within which the organization is positioned. They usually involve broader geopolitical spaces and therefore extend beyond the organization and its immediate 'outside'. They might include the city, the region, the nation state, transnational agglomerations such as the European Union, and the global economy. The role of organizations in the construction and re-construction of these macro scales has been extensively documented by recent work in social geography (Brenner 2001a). Examples of this include studies of how a German pharmaceutical company sought to re-position its operations from the national scale to the global scale (Zeller 2000). This involved spatial practices such as employment, planning the location of manufacturing and research and development facilities, as well as introducing spatial imaginaries such as 'the global economy'. A second example of rescaling involves economic activity in a former coal-producing region in Belgium, re-positioning from the national scale to the European Union scale (Swyngedouw 1996). This involved spatial practices such as protest, spatial planning such as regional development and planning a shopping and leisure complex to replace the coal-mines, and spatial imaginaries associated with 'Europe'.

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Nested and Fragmented Scales

The way we have presented scales thus far suggests that they nest in a neat vertical structure like Russian *matryoshka* dolls. Such vertical nesting could, in principle, run from the workstation all the way up to the macro-economy; the nested levels would each be relatively exclusive and each would also have a separate series of issues and actors engaged in a struggle around it. While this model may be attractive for purposes of analytical clarity, the empirical reality is that scales tend to be relational rather than hierarchical (Brenner 2001b). That is, there is no necessary hierarchy between 'higher order' spaces such as the nation or the global economy and 'lower order' spaces such as the region or neighbourhood. Rather, these scales gain relative importance and salience as they are 'sorted' and reshuffled during processes of restructuring (Brenner 2001b). For instance, Brenner's (1999) work on restructuring the European political economy shows how following the decline of the Fordist–Keynesian state in the 1970s, the relative importance of national scale declined, and the apparently 'lower level' urban scale became increasingly important. Further, he argues that the rise of the urban scale was accompanied by the increasing importance of the global scale. This meant that economic policy and governance increasingly took place in a multi-scalar context of global and urban scales. Brenner and others remind us that scales gain or lose relative importance through an ongoing process of sorting rather through the 'absolute' position at a 'higher' geographic level. It also reminds us that the contemporary economy is often characterized by combinations of important scales such as the urban and the global. More recent work has even suggested the appearance of a whole series of hybrid scales such as the 'cross border' scale within which economic activity and organizations are positioned (Jessop 2002). Ultimately, this work draws our attention to not just the various processes through which space is produced, but the scale of space

which is produced and how scales relate to each other.

The final point to note here is that we are not suggesting a process of spatial production will only give rise to a single space allocated to a single spatial scale. Because there are a range of actors with different interests seeking to position themselves within different relations of power, and a diversity of mechanisms of spatial production, then we are likely to see a multiplicity of social spaces coming into being. Those social spaces that involve the simultaneous mobilization and co-ordination of spatial practice, spatial planning and spatial imaginaries would result in the construction of more durable spaces (Spicer 2006). If actors are only able to mobilize one or two of these mechanisms, they may only be able to construct relatively weak spaces that might perhaps persist, but will certainly not be the ground upon which the majority of an organization acts.

The Production of Space across Scales

Having outlined an integrated theory of organizational space, we now provide some indication of how this framework can be applied to illuminate empirical data. We do this through readings of three pieces of research that we believe explore the dynamics of organizational spatiality across scales. As noted at the outset of this paper, we are purposefully presenting a wide-ranging argument relating to a nascent area of organization and management theory. This is emphasized when we examine previously published work for analyses that link the production and consumption of space across scales. While there has undoubtedly been a slight spatial turn in our understandings of management and organization, there is as yet very little work that crosses the boundaries between analysis of individual workplaces to the regional or national setting. However, we believe that such a spatial analysis is possible, as in the work of three authors from anthropology and geography (Kondo 1990; Ong 1987; Schoenberger 1997).

Aihwa Ong's work begins by posing a series of questions that relate to tensions experienced by women making the transition from traditional agricultural work to industrial production (Ong 1987). The author spent more than a year living in post-colonial Malaysia exploring how women made (and resisted) the transition from working according to the rhythms of local community to more rigidly disciplined factory work. Although Ong had been brought up in the archipelago, her family background was ethnic Chinese; the region she chose to research was populated by indigenous Malays, and hence simultaneously familiar and strange.

Ong demonstrates above all the ways in which village life in Malaysia has been 'woven into the broader cloth of national society and capitalist economy' (p. 37; cf. Dicken and Hassler 2000). She suggests that economic and cultural relations among villages no longer form the foundation on which society is built. Instead, state regulation, national politics and multinational firms overlay social and cultural norms on pre-existing ways of doing or understanding. Ong argues that the socio-economic changes in Malay society exemplified in her study have placed villagers under significant pressure to conform to non-local modes of thinking. In addition, the shape of the physical landscape has changed, as oil palm and rubber plantations grow in size, taking over smallholdings as production becomes industrialized. Although Malays occasionally contest European control over land through squatting on it, there is little structural protection or support available to them from state bureaucracies.

Ong's analysis also illustrates how state and corporate policies operate at the level of the individual body. She suggests that the implementation of health, education, family and religious policies can be understood as a process of ordering by bio-politics. The state becomes intelligible and unquestionable as problems are defined, opportunities proposed and normative discourses communicated. Education and development is particularly important

in defining 'correct' behaviour and attitudes, at work, in all aspects of home life and in social spaces. It is above all through her engagement with the embodied experience of state, region, education and workspaces, that Ong's account illuminates the multiple spatial scales that organization and management can intervene in and be analysed across.

Our second example of analysis of organizational spaces across scales also begins with an account of selfhood. Dorinne Kondo conducted her ethnography of a small Japanese baker-confectioner as an exercise in exploring the strange-familiar (Kondo 1990). Born and brought up in the US within a family of Japanese origins, Kondo recounts the confusion caused by her 'native' Japanese appearance and non-native command of Japanese as a language (and culture). In addition to this, Kondo also had to deal with the specific industry context of her empirical setting, in particular the effects of working in an industry that is populated by small family-owned organizations; the interplay of household and work organization and the effects this has on power relations; and the culturally embedded interplay of religion and work, leading to specific attitudinal expectations that would be familiar to employees working in a Methodist-owned firm in 18th-century England (cf. Langton 1984).

Kondo's account is particularly strong in representing the shifting and multiple fields of power and meaning that people inhabit in working and everyday life. Identity is the thread that connects workspace, local and national contexts, and the domestic setting. She provides a strong sense of the breadth and variety of social relationships that Kondo and her colleagues are engaged in as they shape their lives and are shaped by the conditions they live and work in. Throughout, however, we are continually reminded that social and economic status are fundamental to our experiences of spaces.

Kondo's representation of her fieldwork also contributes to the sense that organizational spaces overlap and affect each other. She weaves theory, vignettes and critical methodological

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reflection into a narrative that gives a sense of spatial richness, remaining highly specific yet meaningful beyond the empirical locale. Through an account of organization based on experiences that it is impossible to imagine happening anywhere other than Japan, she paradoxically demonstrates the dangers of characterizing people or activities according to cultural stereotypes and draws conclusions about ways in which selves are crafted in any society. It is a remarkable illustration of how analysis of organization and management across spatial scales can both be implaced and universal.

Our third example, from geography rather than anthropology, explores ways in which the intersection of corporate cultures and managerial identities structured the possibilities for change in US industry towards the end of American industrial hegemony in the period 1965–1975 (Schoenberger 1997). Schoenberger's core question is why companies found it so difficult to react to changing competitive conditions. In a complex, detailed, multi-level analysis, she suggests that the analytically separated categories of time, space and competition are, in fact, inter-related strategic issues for corporate managers. The outcomes from attempts to manage the temporal and spatial dimensions of industry are indeterminate and hence potentially strategizable. How firms choose to deal with these conditions is, however, historically and culturally specific, and has repercussions for the character of production and consumption. This direction of thought indicates the importance that Schoenberger places on processes of the interplay of production and consumption; she suggests it is vital that analysis acknowledges the recursiveness of the two processes, that each feeds into and affects the other. Schoenberger thereby differentiates her approach to analysing spatial and temporal dynamics from, for example, labour process analysis, which generally neglects anything other than production. Importantly, Schoenberger notes that the issue of time is often an issue of space, and vice versa; they are inseparable in

seeking to understand the dynamics of management, organization, production and consumption.

Schoenberger's main empirical base is in analysis of car production. She suggests that US car makers built their strategies on the close management of time, spatial flexibility, and competition. The arrival of Japanese carmakers in the US market, however, challenged this, provoking doubts over the strategic meaning of spatial control and re-calibration of the relationship between time and space. The existing temporal–spatial strategy became obsolete and uncompetitive within a matter of years. Shifts of understanding of this sort are not, however, simply a series of managerial decisions that affect only factory life. Schoenberger argues that the spatial changes observed in the US car industry, from the organization of tools on shopfloors to dealership locations, reflected transformations of temporal and spatial experiences and meanings at societal levels. Such transformations, as seen for example in the time–space compression of post-industrial economies (Harvey 1990), generate social and cultural turmoil as concepts deeply embedded or naturalized in daily life are challenged. Material practices, social relations, and understandings are all affected.

Schoenberger's observations and arguments therefore range across all three scales, and incorporate analysis of practice, planning and imagination. We suggest that this is true of the work of all three of these scholars. Through their analyses, they achieve something that we have argued is rare in management or organizational research: they present an understanding of work, management and organization that treats space as a social product, located across multiple spatial scales. They demonstrate that organizational spaces are inter-connected both analytically and empirically. The Japanese, Malay, North American and indeed global experiences of organizational spaces are strikingly similar, despite superficial geographical or cultural differences. In each book, there are structural conditions that affect the range of

agentic actions available; yet in each, the inhabitants of workspaces manage to act and resist by drawing on local cultural repertoires, manifest in a variety of different ways. Built forms, rules, norms, actions, experiences and discourses are all present in the three analyses; practice, planning and imagination can all be seen in the descriptions of people, built forms and texts as they interact. In addition, local configurations, boundaries and locations are all three central to understanding the workplaces studied, whether in Japan, Malaysia or the US.

We are not suggesting that all organizational and management research take such an approach; we are, however, arguing that as a community we could benefit from taking more account of developments in social science to construct a fuller understanding of organizing and managing spaces. As we have noted, a number of scholars have argued that modernist social science prioritized time, relegating space to a supporting role resulting in a theoretically 'atopic' understanding of social life (Casey 1993). We believe that we have demonstrated that researchers in management and organization studies are far from empirically atopic; there are many pieces of work that acknowledge our habitation of a concrete world in which natural, constructed or architectural places are significant. What is missing, however, is a sense of the multiplicity of spatial scales that organizing and managing take place within, and a means of theorizing the interplay of those scales. Conceptualizing organizational spaces as socially produced in patterns of distance and proximity, interpreted through the ongoing experience of actors that materialize relations of power, provides an empirically comprehensive and theoretically robust means of 'bringing space back in' (Kornberger and Clegg 2004).

Conclusions

The primary aim of this paper is to introduce the 'spatial turn' in social sciences further into management and organization research (cf.

Halford 2004). In exploring the published literature, we find considerable evidence that organizational spaces have long been present both empirically and analytically, perhaps since the development of Scientific Management and the Hawthorne studies (Baldry 1999; Chanlat 2006). There has undoubtedly been a surge in interest in recent years, particularly as scholars draw on post-structural and post-modern analytical frameworks (Dale and Burrell 2007; Hernes 2003, 2004a), and at least one previous call to 'bring space back in' to organizational analysis (Kornberger and Clegg 2004). It seems that it is now more than ever time for space to be acknowledged as a key dynamic in understanding management and organizations. Through a narrative review, we have traced three approaches to understanding organizational spaces: space as distance, space as materialization of power relations and space as experience. Each of these approaches has a contribution to make towards the broad-church project of understanding management and organization in contemporary society; yet each has significant blind spots that lead us to conclude that, as currently applied, none can provide the necessary scope of data or analysis to root the study of organizational spaces.

As a possible alternative to this atomized approach, we have suggested bringing insights from these three approaches together. Drawing inspiration from the work of Lefebvre, we have offered an integrated conception of organizational space as patterns of distance which are interpreted by actors within materialized relations of power. Moreover, we have sought to show that there are multiple spatial scales which are worthy of analysis in and around organizations. Finally, through a reading of three studies of organizations we have provided some indication of how such an approach might proceed. Ultimately, we hope that this paper provides a way for those working in organization and management studies to register how organizational spaces are inhabited, contested, differentiated, experienced, regulated and resisted.

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