7 The physical structure of organizations

The very physicality of built space gives organizations objective characteristics that can be measured and correlated with outcomes such as efficiency and performance. This gives the topic great appeal among some modernists, while others think using abstract concepts and theories to explain anything as objective as a building is overkill. However, just because physical structures are tangible does not mean they are not also symbolic, and, even though you can demolish physical structures with a wrecking ball, you can also deconstruct their powerful influences using postmodernism. Physical structure and the space it surrounds are suitable for theorizing from all perspectives.

The interest of organization theorists in physical structure can generally be traced to empirical research carried out at the Hawthorne Works of Western Electric in the late 1920s and early 1930s.[1] Led by Harvard University professor Elton Mayo, the Hawthorne researchers performed a series of field observations and experiments focused, among other things, on learning how changes in the physical environment of work affect worker productivity. In a key experiment subjects were moved into an enclosed workroom where they performed their normal tasks under various manipulated conditions.

For one of the conditions of the field experiment conducted in the special room, researchers systematically increased the amount of available light while measuring the workers' output. As was anticipated, worker productivity increased along with illumination levels. But, to make certain that their experimental manipulation was causing the productivity gains, the researchers systematically reduced illumination levels again. To their surprise, productivity levels continued to rise, even when the workers were operating in near darkness.[2]

The Hawthorne researchers concluded that the workers believed the special room, and the attentions lavished upon them, meant *they* were special, and it was this social effect—later called the Hawthorne Effect—that motivated them. Because these empirical studies made social influences on worker productivity seem more potent than the effects of physical structure, the Hawthorne Studies deflected research interest away from physical structure for quite a long time.

Disinterest in physical structure in organization theory continued even after, in 1950, the influential American sociologist George Homans pointed out that the Hawthorne Effect was triggered by changes to the physical environment of work after all—the famous effect was the result of moving workers to a new room![3] In spite of Homan's efforts to reclaim it, the topic of physical structure remained a theoretical backwater until the 1970s and 1980s when

environmental psychologists and human factors engineers revived this line of research; a small group of organization theorists followed their lead.[4]

This chapter departs from modernist definitions of basic elements of physical structure: geography, layout, landscaping, exterior design, and décor. But as you will soon see, the theories and concepts informed by these elements nearly always invite symbolic understanding. For this reason the path this chapter follows wends from mostly modern to increasingly symbolic ideas, never quite being able to draw a clear line between them. Linking the materiality of physical structure to identity will show that it is just as hard to limit the symbolic uses and effects of physical structure to one level of analysis, as it is to contain it in a single perspective. A postmodern figure ground reversal will then turn our attention from physical structures to the spaces they leave empty, pulling into our path concepts of spatiality and embodiment. The chapter ends by overturning the critical postmodern assumption that all buildings breed control, thereby suggesting a possible post-postmodern future.

Organization as arrangement in space and time

American organization theorist Jeffrey Pfeffer, a major proponent of the modern perspective, observed about physical structure that, since humans cannot walk through walls or see through floors, their behavior is shaped by the physical structures they occupy.[5] When you look at walls and floors, and other material components of organizations, from a strictly modern perspective, you see that physical structure both enables and constrains behavior. This section explores the most widely studied of its components: organizational geography, layout, landscaping, architectural features, and décor.

Organizational geographies: Space, time, and place

An organization has a physical presence that extends in space and time. Its **physical geography** contains all those points in space where the organization conducts its business, including not only the locations of facilities owned or operated by the organization, but also locations in which they carry out their business, such as the facilities of partners, customers, suppliers, or other stakeholders.

If you superimpose the physical reach of an organization's activities on a map of the world, like airlines do with their route maps (see Figure 7.1), it will reveal a rough approximation of the **territorial extent** of that organization's physical geography. Of course if the organization you are interested in is NASA, or the China National Space Administration, you will need a bigger map!

Mapping an organization's territorial extent raises the question of **scale**.[6] NASA and the China National Space Administration deal with their physical organizations on an interplanetary and sometimes an intergalactic scale, while most other organizations operate only on a local, regional, national, or global scale. Cities, neighborhoods, buildings, offices, and human bodies offer other scales on which you can imagine and describe the physical structure of organization, each bringing particular concerns into view. For example, if you are interested in geography at the scale of office buildings, office layout will become important.
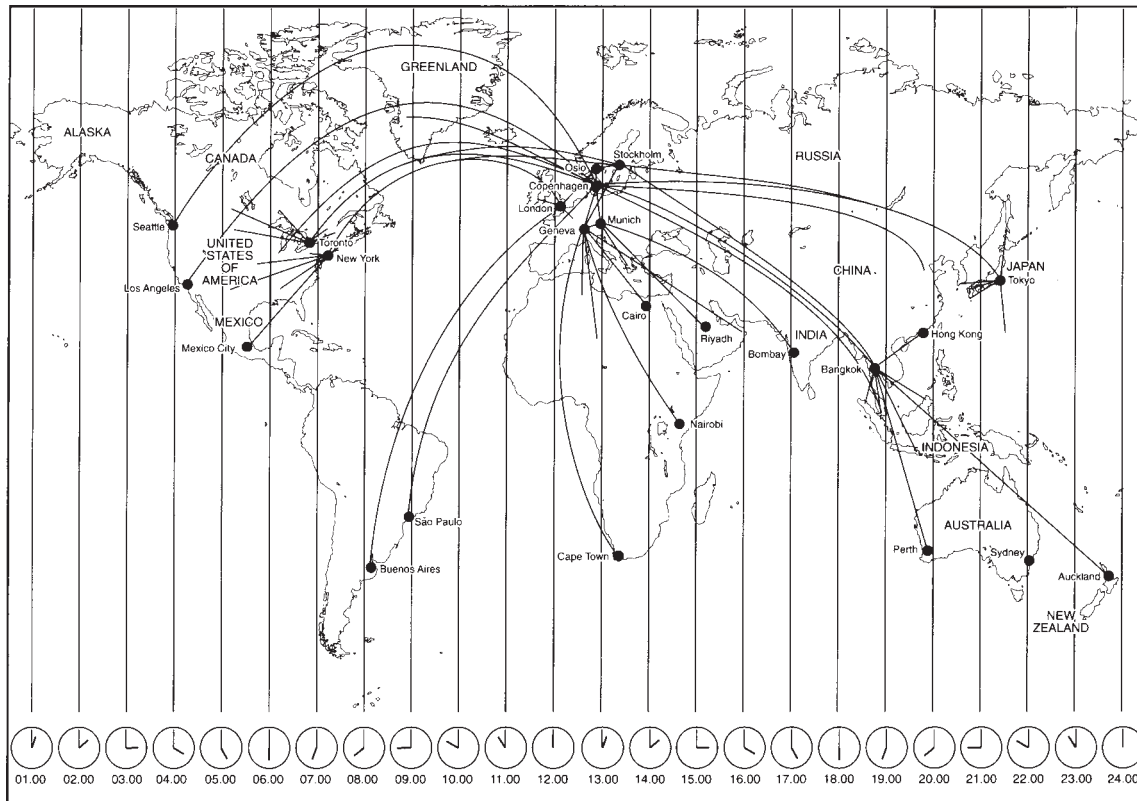
Figure 7.1 Route map showing the territorial extent of the organizational activities of an airline

By measuring territorial extent on any scale, you can examine relationships between physical structure and other aspects of organizing. For example, you will quickly confirm Einstein's theory that space and time are interrelated. Holding all else constant, the more widely an organization's activities are distributed in space, the more time organizational members will devote to travel. The challenges of communicating and coordinating across time zones, providing support during a crisis, exposure to different cultural influences, and disorientation are but a few socio-cultural effects organizations experience with expansive geographies. However, bear in mind that relationships between space and time can be altered by technology; **time-space compression** has followed innovations in electronic communication and improvements in transportation.[7]

Issues of **logistics** related to territorial extent are of particular concern for organizations that deal in physical materials and products. These concerns include: access to various modes of transportation (domestic and international airports, waterways, etc.), distance to markets (including labor, supply, and consumer markets), and the speed and costs of communication, coordination, transportation, and travel. You will want to analyze the logistical implications of an organization's territorial extent in relation to all the connections you identify in a resource dependence analysis, and think about how geographical **location** can be used strategically to manage them. For example, locating near influential stakeholders like customers, regulatory agencies, funding institutions, or universities engaged in relevant basic research offers organizations advantages in terms of managing critical dependencies.

In addition to mapping and analyzing the numerous implications of an organization's geographic distribution you will want to consider pertinent **geographic features** of its locations. In Figure 3.4 we referred to these as the physical sector of the environment. Be sure to consider the features of both physical geography—climate, terrain, and natural resources—and human geography, such as population density, industrialization, urbanization, and the presence (or absence) of different races or ethnic minorities. Features of geography can affect many aspects of organizing.

Take employee recruiting as just one example. Proximity to lakes, mountains, or an ocean, or to the varied attractions of a large urban center, influences the lifestyles of organizational members so the attractiveness of an organization's location will help or hinder it in hiring the employees it most desires. Compare the lifestyles of employees living in Madrid, Johannesburg, Moscow, São Paulo, San Francisco, and Beijing, or compare any of these to what rural locations far from any large metropolitan or industrialized area have to offer. As you can see with recruiting, the effects of organizational geography percolate throughout organizations. For marketing and corporate communication, the features of an organization's geography can affect corporate image, reputation, and organizational identity. For instance, consider the importance of a Wall Street address for an investment firm operating in New York, or a City address for one in London.

That geography combines instrumental and symbolic effects offers just one of many points of contact between the modern and symbolic perspectives as they mingle within the conceptual domain of physical structure. Geographers distinguish these perspectives by differentiating **space and place**. The more instrumental concerns of space (e.g., distances and their logistical effects) contrast with those of place, which involve experiences of and interpretations given to regions of space.[8] You can use the theater metaphor to think of place as

a stage on which life's drama unfolds; like the theatrical stage, place provides more than a spatial backdrop for action, it becomes a character in the play.[9]

Most people have strong reactions to familiar place images. To feel this effect watch a film that shows a place where you have lived or visited. Emotional and aesthetic associations with physical spaces or locations produce the symbolic sense of place that makes them meaningful. Combining the physicality of space with the meaning of place makes physical structures and their prominent features into symbols in the same way that other artifacts infused with meaning become symbols.

From the symbolic perspective the artifactual aspects of physical structure become hard to distinguish from culture, while the modern perspective implicates physical structure in social structure and technology. You can see all of these connecting points in layout and landscaping, where you will also find a link to power and the postmodern perspective.

Layout and landscaping

Layout refers to the spatial arrangements of buildings and grounds. Within buildings, it carves up and helps to define interior spaces by determining the placement of objects, especially walls, furnishings, equipment, and employees. When a site has multiple buildings, their **orientation** to one another, including the **landscaping** that physically and aesthetically links them with walkways and vegetation, is another aspect of layout to consider.

When multiple buildings on a site are deliberately arranged to look like a college campus, like Google's Googleplex in Mountain View, California, the symbolic aspects of layout come into view.[10] For example, campus style layouts are typically designed with the intention to offer employees intellectual, emotional, and aesthetic inspiration by referencing university life. In the most effective applications they invite a highly educated workforce to see the organization as a seamless continuation of their earlier learning experiences, and offer nostalgic references to the past that invite them to continue learning. Of course such elegiac sentiments invite critical postmodern deconstruction, pointing out, for example, how references to student life lower employee expectations for power, pay, and privilege.

Office and workstation arrangements and locations of shared facilities such as cafeterias, drinking fountains, restrooms, and meeting rooms, all contribute to internal layout, as does the assignment of people to specific locations, and activities to particular spatial regions. For example, Figure 7.2 illustrates the co-location of similar forms of work activity common in many organizations.

That layout affects coordination can be seen easily in the automated assembly line where individuals and their tools are located at fixed positions along a moving line of partly assembled products. Finding an effective layout involves matching locations with task requirements. Conversely, many inefficiencies and inconveniences will be introduced into a work process if layout is poorly conceived. Whenever workers perform sequential or reciprocally interdependent tasks, their ability to coordinate their activities will be affected by the layout of the workspaces they occupy and the proximity of equipment and co-workers.

All but the smallest organizations face another dilemma of layout—choosing whether to locate managers' offices close to their subordinates, or to group them in one place for ease
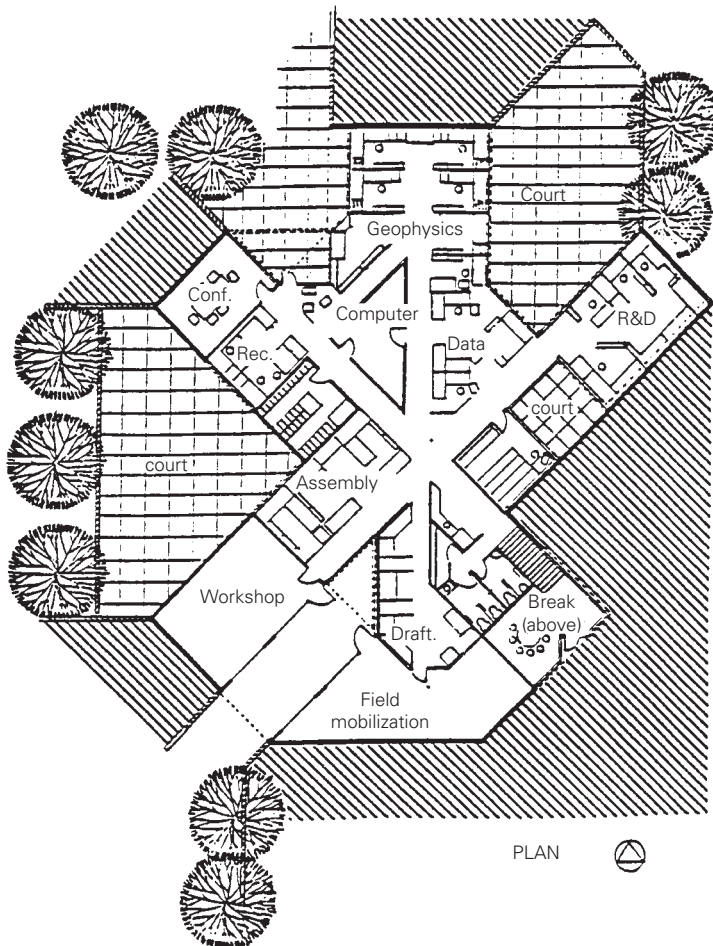
Figure 7.2 Layout of activity regions in a geophysics firm
Source: Doxtater (1990: 121, Fig. 2). By permission of Walter de Gruyter.

of coordination between departments or divisions. The typical choice is to co-locate top executives along with key staff personnel, and then locate other managers' offices close to those they manage. This means that executives must either travel to their subordinates whenever they require face-to-face contact or ask their subordinates to come to them. Such choices involve numerous symbolic implications, such as signaling either the privileges of power or an egalitarian culture, as well as contributing to technical considerations including efficiency and cost effectiveness.

Postmodernists say that physical structure encodes power in a spatial language that speaks unobtrusively. Try making the following conceptual experiment: contrast a large classroom, where you and fellow students are forced to face the teacher because your chairs are bolted to the floor, with a small seminar style classroom where everyone sits around a circular conference table, or with a room that allows the teacher sometimes to arrange the chairs into a

circle with no table separating you. Reflect on how you feel in these differently arranged classrooms, but think about others' responses as well; some people thrive on structure, while others thrive without it. If spatial arrangements are objectifications of power relations, as postmodernism suggests, then layout can serve domination and control or reinforce liberty and democracy.

One effect of layout is **proximity**. Defined as nearness in space, proximity has both temporal and social effects. In general the more distance separating people the fewer will be the opportunities for spontaneous interaction and the more time and effort such activities will consume. When locations are proximate and/or equipment is shared, relationships often form through spontaneous interactions, for instance, in the hallway, in a restroom, around the coffee machine, or in areas designated for relaxing.

American management scholar John Kotter observed that top executives and office workers interacted spontaneously with those whose offices were close to theirs, something they were much less likely to do with those whose offices were distant from their own.[11] And, in a ten-year long study of R&D organizations, American researcher Thomas Allen found that performance was increased by chance encounters between members of different project teams who shared washrooms, libraries, coffee machines, or photocopy equipment.[12] Other research has shown a positive correlation between proximity and the likelihood that two employees will engage in interaction, especially interaction involving face-to-face encounters, which most people prefer to all other forms of communication.[13]

The obverse of proximity is distance or separation and research also reveals the influence of these dimensions of layout on behavior. For example, all other factors being equal, the more distance between the workstations of two individuals, the less likely they are to share information or to interact regularly enough to form a relationship. Separation by assignment to different floors or to different buildings decreases the likelihood of interaction even further.[14] Other studies suggest that office location affects the amount and type of information employees process, and is related to the development and use of informal channels of communication such as grapevines and rumor mills.[15]

Task interdependence comes into play in explaining the effects of physical structure on behavior and performance.[16] The need for proximity created by task interdependence places demands on spatial configuration whose physicality constrains how far an organization can go to accommodate task interdependence. This is because there are physical limits as to how many people can be located close together, and no office can have more than two adjacent workspaces along the same hallway.[17]

Proximity, distance, and separation are not the only dimensions of physical structure to interest modernist organization theorists. Openness, visibility, accessibility, and privacy provide another interrelated set. **Openness** and **visibility** come from the lack of physical boundaries such as walls and partitions, and/or their transparency. Locating workstations at fixed points along a factory assembly line, for example, permits easy surveillance of workers by management—it is easy to spot an empty station or someone goofing off.

In offices, typically, openness, visibility, and accessibility are all positively related to each other and negatively related to privacy. **Accessibility** is a measure of how easy it is for others to interact with a person in their assigned work area, while **privacy** offers the ability to

regulate interaction with others. A common way of explaining the effects of these variables on office workers involves contrasting open with private office environments.

Open offices have either glass walls, partitions with no doors, or use such things as file cabinets, bookcases, or living plants to visually separate work areas. The openness these office spaces provide their occupants affords limited privacy and enhances accessibility to co-workers and visibility to supervisors. **Private offices** have floor-to-ceiling walls that restrict their visibility to others, usually with a door allowing their occupants full enclosure and the ability to control their accessibility and privacy as they see fit, unless their organization adopts an open door policy!

As the open door policy illustrates, it is important to recognize the limits of design to determine outcomes associated with proximity, openness, visibility, accessibility, and privacy. Physical structures enhance the likelihood of various outcomes rather than determine them. Some of these limitations arise from interpretations embedded in the symbolism of physical space, and others from the influences coming from social structure or technology. For example, regardless of the configuration of their physical spaces, secretaries and other assistants typically experience many interruptions to their work due to the demands of high task interdependence and their relatively low position in most hierarchies. Their service-oriented tasks and relatively low position in the hierarchy combine to make them accessible to co-workers in ways that overwhelm some effects of physical structure.

Physical barriers, such as movable partitions and fixed walls, support, enable, or enhance at least some forms of interaction. In particular, meetings, brief interruptions, confidential conversations, and teamwork have all been shown to occur significantly more often, and for longer periods of time, when co-workers occupy spaces enclosed by walls.[18] However, even though modernist studies show that these forms of interaction are more likely to occur in closed than in open offices, many people continue to believe that open office settings with few or no physical barriers encourage interaction and communication.

One explanation for the belief that open offices encourage communication stays well within the modern perspective. Some groups, especially innovative design teams, claim that the intimate sharing of their workspaces stimulates creativity and supports teamwork. However, enclosure rather than openness seems the most likely explanation here, since the groups in question generally had some sort of physical barrier separating them from the rest of the organization. A second explanation relies upon the symbolic perspective: some people, through symbolic association, conflate the openness of offices and open communication. My study contrasting the effects of open and closed offices sheds some light on this matter.[19]

While my study of knowledge workers in high technology companies in Silicon Valley confirmed that those in open plan offices spent less time interacting with others than did those in closed offices, it also allowed me to observe people at close range and talk to them about why this was so. For instance, in some open offices the occupants created cultural norms prohibiting interference with others' ability to get their work done, sometimes using headphones or traffic lights rigged to glow red to communicate their desire not to be disturbed.

In other open plan offices I studied visibility produced communication efficiencies, for instance, I saw people climb up on their desks to peer out over the vast sea of partitions, which enabled them to ascertain whether potential interaction partners were available. If they were not, the employee would sit back down at the desk to continue what they were doing with minimal interruption to their own or anyone else's work. In contrast, I observed many occupants of closed offices taking a walk to look for desired interaction partners, sometimes bumping into others and conducting spontaneous interactions in the process.

The more or less instrumental explanations my observations offer do not preclude there also being symbolic influences on behavior. Even after being presented with the findings of my study as encouragement to accept management's offer of private offices so as to enhance their communication, the open office inhabitants in my study continued to insist they benefited from the greater communication they enjoyed in their open offices and voted to stay put. I concluded that both instrumental and symbolic influences of physical space were in operation and, in this case, conflicted with rather than supported one another.

The demands of near continuous travel by some executives as well as many other professionals who routinely visit sites away from their home offices have led to an innovation in layout design known as **hot desking**. The practice of hot desking optimizes the use of space by taking advantage of away time and may have been inspired by 'hot racking' of sailors at sea, a reference to sharing bunks. At any given time part of a naval crew is on duty, and as space is severely limited on board any vessel, hot racking provides obvious advantages. Hot desking in organizations, where permanent offices are assigned on an as-needed basis, similarly produces flexibility as well as considerable cost savings.

Hot desking requires many adjustments to work practices. For example, employees must store essential work items in locked trollies they can roll to their assigned workspace, and it helps if they use online storage for documents that can be accessed from anywhere. In an elaboration of hot desking, known as **hoteling**, companies operate a reception desk to handle office allocations and meeting room schedules, and to arrange for secretarial, concierge, and computer support services.

Cost savings accrue to hot desking and hoteling through the minimization of expenses associated with building, supporting, and maintaining office space. The possibility to temporarily co-locate entire groups of employees working together on a temporary project is another advantage. A major disadvantage is that employees lose the symbolic resource of an office to communicate their identity and status. Another is the incessant need for reorientation to find one's way around new spaces, and consequently a certain amount of disorientation. Disorientation can destroy organizational culture and increase stress, when employees find it difficult to relate to others similarly disoriented by not being able to expect anyone to be anywhere.

The converse of disorientation, familiarity is promoted by layouts that encourage repeated face-to-face contact, which can also support subculture formation. Be sure to notice how the socio-cultural effects of physical structure that arise from separating people combine with those that bring them together. This is how physical structures can lend support to silos or subcultural differences even as they enable communication and coordination between different groups of people. The effects of physical structure are rarely as simple as their objectivity can make them seem.

Design features, décor, and dress

Façade, focal points, furnishings, lighting fixtures, ceiling and wall treatments, windows and floor coverings, use of color and form, and displays of anything from tropical foliage and art to advertising, products, and technology, are just some of the features of architectural design and décor found in organizations. They combine to give the sensory environment of an organization's physical structure an aesthetic ambiance, while at the same time providing material objects to be arranged in physical space and symbolic objects with which to forge meaning.

Because design features color and texture experiences in and of spaces, they provoke aesthetic judgments ranging from ugly to nondescript, tolerable, pleasing, beautiful, and inspiring. Of course design features affect more mundane sensory experiences as well, including temperature, air quality, illumination, noise levels, and smells, all of which produce various human physiological responses that can affect performance and attitudes as well as aesthetic judgments. Aesthetic and physiological experiences have entered into theories of how physical structure affects an organization and its inhabitants.

Be aware that aesthetic judgments are heavily influenced by personal taste. For the purposes of organizational analysis your personal preferences are less important than your sensitivity to the fact that organizations evoke aesthetic responses that color the interpretations of employees and other members of the organizational community. Remember that it is their interpretations and reactions that matter when you want to uncover the aesthetic effects of physical structure on organization. But be sure to note how physical structure is affecting you so that you can separate out your reactions from those of others.

The reactions that architectural features of buildings are known or believed to provoke can be used symbolically to express and represent organizational ideas like culture, identity, or strategy. Conversely, knowing that architectural design is used in these symbolic ways means that careful readings of physical structure can reveal an organization's culture, strategy, and so on. Either way you look at it, taking account of the symbolism of physical structure means incorporating interpretation into your concepts and theories, with all the multiplicity of meaning this entails.

Take the simple example of an organization that occupies low-rent facilities and furnishes its offices minimally and inexpensively. Such an organization may be communicating its commitment to a low-cost strategy or telling you that the organization is unconcerned about its physical appearance, or something else entirely, and maybe all this and more. Bear in mind that the meanings of a physical structure, like any other artifact or symbol, are distributed among those whose interpretations construct social reality.

Multiplicity of meaning limits the amount of symbolic control that can be exercised through design, but so too do unintended meanings. Unplanned and emergent aspects of architectural design can impinge on behavioral control. I once toured a newly opened office building with its architect and a corporate executive. As we moved through the space we came upon an oversized golf umbrella hung at a precarious but alluring angle in the large atrium designed as the building's interior focal point and a source of natural light to illuminate workspaces. The umbrella was both a practical means of blocking an unforeseen beam of sunlight that hit a worker's desktop every afternoon, and a colorful addition to an otherwise bland interior.

Buildings are never perfectly designed, and once constructed, do not long remain the same. Seen in this light the umbrella was an emergent feature of living architecture, a spontaneous response to the unplanned effect of the light beam. Knowing this, the architect greeted the umbrella with delight that the occupants of the building were beginning to 'own their space.' Meanwhile the executive bemoaned the loss of the pristine look of the building, and presumably his control over it.

An example of an unintended interpretation of built space comes from the University of Notre Dame in South Bend, Indiana, where I grew up. Notre Dame is famous for the many championship football teams it has contributed to college athletics in the United States. Some years ago this Roman Catholic institution built a large new library building as an architectural focal point for the entire campus, adorning its façade with a beautiful mosaic featuring Jesus Christ (see Figure 7.3). To understand the rest of this story you need to know that, in American style football, when one team scores a goal or 'touchdown' the official in charge indicates the accomplishment by raising his outstretched arms in a gesture similar to that of Jesus as depicted in the mosaic. What apparently no one foresaw when choosing the image is the connection between Christ and football, the two most important symbols of campus culture. It was this connection that produced the mosaic's unintended but nonetheless widely adopted name: Touchdown Jesus.

That décor in building design can both express and reveal a great deal about an organization has been established, but how does décor operate? Scottish architecture critic and

Figure 7.3 Notre Dame library mosaic
Photograph by Joseph C. Fross.

professor of urbanism Witold Rybczynski likened organizational décor to dress in order to explain its technical, social, and perceptual mechanisms:

> The first is technical. Décor, like dress, incorporates fabrics . . . [and] . . . architecture sometimes directly mimics dress. The garlands in eighteenth-century buildings are sculpted or painted versions of the sashes and flowered ornaments worn by men and women. The ancient Greeks incorporated elements of dress in temple architecture. . . . Ancient authors likened the vertical flutes [of Greek colonnades] to the folds in a chiton, or tunic.
>
> The second connection between dress and décor is social. . . . Since homes and clothes are timeworn ways in which to convey status, there is a conformity in the types of materials and symbols used to convey social standing. If family coats of arms are displayed, they will be seen on wall medallions as well as on blazer buttons. If gold is treasured, the wealthy will wear gold braid and surround themselves with gilt moldings. If this is considered too flashy, other materials can convey status: stainless steel kitchen appliances and stainless steel watch bracelets. . . . In a more general sense—and this has nothing to do with conspicuous consumption—both homes and clothes convey values.
>
> The third connection between dress and décor concerns perception. Architecture, interior decorations, and fashion design are three distinct fields, yet we experience them with the same eye. Whether we look at dress or décor, we bring the same visual bias, the same sensibility, the same taste. This sensibility is not constant. Sometimes we appreciate simplicity, sometimes complexity.[20]

Of course dress becomes indistinguishable from décor when formal dress codes or an informally adopted style of dress join other features of organizational décor to give an organization a particular look and feel. IBM professionals used to be known for their dark suits and white shirts, UPS insists that all delivery personnel wear the same brown uniforms, and costumes are a time-honored feature at Disneyland parks. Although not formally prescribed, the casual attire adopted by those who work in Silicon Valley communicates organizational style through dress, too. Organizational modes of attire, whether voluntary or imposed, formal or informal, communicate organizational, group, and/or individual identities.[21]

Physical structure and organizational identity

Because the physical appearance of an organization is a potent medium in which to create a lasting sense of place, some modernist managers attempt to influence organizational identity, image, and reputation by focusing on their organization's appearance. And just as components of physical structure provide organizational identity markers, so too do they provide employees with symbolic material with which to construct and embellish their individual and group identities.

Symbolic expressions of organizational identity

Wally Olins, globally recognized British co-founder of corporate identity consultants Wolff-Olins and Chairman of Saffron Brand Consultants, has long promoted architecture as a form of corporate communication.[22] For example, he suggested that specific messages can be

communicated via architectural design: a very tall building might be used to symbolize an intention to push the organization to higher levels of performance or, in the case of an aerospace engineering firm, to reach for the stars.

You need to recognize, of course, that in some cultures different interpretations hold. For example, American public administration theorist Dvora Yanow described how, in India, executive offices are more likely to be located on lower rather than upper floors of office buildings. She noted as one possible explanation that problems with electricity and unpredictable or nonexistent elevators make accessibility by foot an attractive feature of lower floor locations, another being that, in Hindu traditions, the soul sits in the center of the body (rather than in the head).[23]

You have met the trouble with cross-cultural interpretations many times already: symbols carry multiple meanings. Knowing this, Olins took a further step claiming that, when they are carefully designed to complement each other, dramatic architectural features (façade, roofline, lighting effects, office interiors, decorating themes), product design, company logos, corporate literature (e.g., annual reports, brochures), and styles of dress (uniforms, dress codes) can influence impressions of organizational credibility and character that symbolically reinforce strategic vision as well as corporate identity. Olins's theory is that, when a multiplicity of coherent symbols meets a multiplicity of meaning, architects, designers, and managers have a better chance to shape organizational identity, image, and reputation. His solution is a symbolic extension of the principle of requisite variety from systems theory.

Let's try to combine some theories here. Olins's idea of a brand as packaging for an organization's identity resonates with Rybczynski's theory about architectural décor as dress. If corporate brands are to organizational identity what dress is to décor, then Rybczynski's theory suggests that corporate brands use a combination of technical, social, and perceptual mechanisms to make organizational identities into tactile and fashionable status symbols. Just imagine the field day postmodernists can have with that idea!

Before we get too carried away, let's consider some other symbolic components of physical structure to see how they relate to organizational identity. When people imbue the buildings and grounds of an organization with a sense of place their place associations can contribute to organizational identity.[24] Places can be made memorable with a dramatic building façade, an extraordinary piece of sculpture, a landscaping feature made into a focal point, or some other eye-catching element that becomes associated with the organization. For example, every time I walk into the main courtyard of my publishers at Oxford University Press (OUP), I see the enormous old tree that has been standing there for donkey's years. The notion of 'the tree of knowledge' leaps involuntarily into my mind combining in my imagination with the organization's main product—academic books.

My image of OUP in response to the tree-dominated courtyard is a powerful and highly personal effect of the combined forces of organizational identity and architecture. It contributes both to my sense of OUP as a place, and to my identity as an OUP author. My experience is but one distributed and momentary occurrence within the entire symbolic constellation of OUP identity/image/brand/reputation, a constellation that shifts and changes every time someone encounters and reacts to some part of the whole. From the symbolic perspective, the accumulation of distributed organizational identity/image/brand/reputation components, and the arc of their ever-changing trajectory, produces the social construction we call OUP.

If you feel enthusiasm to harness organizational symbols, as Olins suggested is possible, please remember that interpretations such as those evoked by physical structure can be, not only numerous, but contradictory and surprising. For example, an exquisite new corporate head-quarters building may favorably impress investors ('they must be generating great wealth to afford such a wonderful facility'), customers ('this kind of opulence indicates real staying power'), and community leaders ('what a marvelous aesthetic complement to the community'), while simultaneously being viewed as irresponsible by union leaders ('that money could have gone into better wage packets'), and environmentalists ('a little less squandering on executive perks and more environmental projects might have been possible'). Never assume that the intended meaning designers and executives use to create their architectural designs are the only mean-ings their designs allow. And bear in mind that insofar as it is a distributed phenomenon, identity, like the effects of physical structure that support it, can never be completely controlled.

Claiming of group identity using territorial boundaries

Shared workspaces define territories that become physically and symbolically associated with the people and processes that inhabit them. As is true among other animal species, humans will mark their territory and defend it. When organizations are divided into multiple territories to accommodate the different activities carried out within them (e.g., marketing, accounting, finance, human resources), their occupants are likely to become territorial about their space, with implications for subcultures and silos.

Groups will physically mark their organizational territories with signs, a particular decora-tive style, or other visual expressions of ownership. These practices provide signals that can be read by others concerning inclusion and exclusion (i.e., who can enter freely and who cannot), what the group wants to be known for (e.g., look at what is hung on walls or other-wise displayed, the style of furnishings and the décor), and where its boundaries lie.

Although there has not been much empirical investigation of the phenomenon, the avail-able evidence suggests that the physical marking of group boundaries is associated with strong group identity in organizations.[25] J.D. Wineman found evidence that the presence of physical barriers around groups (e.g., walls, partitions, furniture) influenced group cohesive-ness and interpersonal relationships.[26] He also found that prior cohesiveness compensated for the negative effects of an inadequate physical environment, underscoring the intercon-nection of the physical and social dimensions of organization structures.

In *Street Corner Society* William Foote Whyte noted that the emergence of street gang subcultures coincided with the marking of territories.[27] What is not known is whether bound-aries give groups their strong sense of identity or whether groups in the process of forming a strong identity tend to mark their boundaries. It is possible, of course, these happen simulta-neously. Remember too that strong group identity can interfere with inter-group coopera-tion, which is why silos and subcultural differences can become problematic.

Individual identity markers and personalization

A large office in a privileged location displaying high quality furnishings and fine art is consistently associated with high status for employees of many organizations around the world.[28] Thus, managers of organizations can represent hierarchy and communicate their

power and social status using the language of physical geography, layout, and design features. You can reverse engineer some of this meaning back out of physical structure if you want to read individual status or position in the organizational hierarchy. For example, access to more important figures communicates higher status than does access to less important people, the latter being the case for middle managers located close to their subordinates and away from their superiors. Proximity to conveniences like parking spaces or having one's own restroom, coffee machine, or dining area indicates a position at the top of the hierarchy.

Be alert to status markers that may not match your preconceived expectations. In the absence of traditional status indicators, individuals from high power distance culture may improvise symbols of distinction. In one such case the location of cheap coat racks, initially purchased because building designers neglected to install closets in the organization's new building, served to identify the most powerful members of the organization. When the coat racks were first introduced they were made available to anyone who wanted them on a first come, first served basis. Over the course of only a few weeks, however, they migrated into the cubicles of those with the greatest status. In another case, the purchase of work group coffee pots became an informal indicator of status; however, this time the migration was to the offices of lower status employees who were expected to make coffee for their bosses and co-workers.

In organizations with low power distance cultures, high-ranking individuals may choose to personally and symbolically underscore the value for equality by foregoing status markers and other privileges. In organizations you always have to be sensitive to the absence of things as well as to what you see, for example, that a company has no reserved parking spaces.

Another issue involving individual identity expression through physical structure arises in the **personalization of space**. Individuals will sometimes tell you a great deal about their identity through office decoration. Unless prohibited, many will display personal artifacts ranging from family photos, to collections of objects or cartoons, memorabilia, and so on. It can be hard to know what these mean without interviewing those involved, though some postmodernists interpret the personalization of workspaces generically as indicating employee efforts to regain lost control over their self-identity, usurped by their organizations.

Physical structure in theories of organization and organizing

The examples provided in this chapter indicate some of the ways that the interests of the modern, symbolic, and postmodern perspectives intermingle in the study of physical structure. They also show that various components of physical structure straddle the boundaries between, participate in, and extend into technology, social structure, culture, and power. This section presents organization theories explaining how physical structure relates to these other basic concepts of organization theory.

Physical structure and culture: Symbolic conditioning

Think about how you instantly know by your physical surroundings whether you are at home or at work, in your own office, or in someone else's, and how this knowledge triggers various rituals and routines. Or consider the employee who works at home but finds it necessary to dress in a suit and say goodbye to family members before going to work in the next room, all

in order to overcome the institutionalized meaning staying at home normally conveys and signal to family members that they are not to interrupt.

These examples illustrate the power of built spaces to symbolically condition expectations and behavior.[29] Such responses can become so automatic that, in the case of practitioners of the Catholic faith, the mere sight of an altar provokes behaviors such as genuflection and making the sign of the cross, often ushering in memories of past religious experiences and the emotions associated with them. Because the stimulus to which such responses have been conditioned is a symbol (the suit and tie or the crucifix on the alter), this sort of conditioning has been called **symbolic conditioning**.

Symbolic conditioning extends to all sorts of organizational behavior. For example, the counter of a McDonald's restaurant indicates that customers should queue up to receive service from employees also conditioned to stand behind the counter and wait on customers in the order in which they present themselves (see Figure 7.4). Other places to look for symbolically conditioned behavior include outside closed office doors, and in and around reception desks, libraries, and meeting rooms.

Symbolic conditioning depends on the formation of unconscious links between physical structure and the normal routines that make up much of daily life both in and out of organizations. For instance the habit of responding to others in an impersonal way is typical of many business cultures and can become symbolically conditioned to the physical surroundings of the workplace. As a result it is not uncommon to find people who want to interact with each other in more personal ways meeting outside their office settings.

Then again, so-called symbolic conditioning may not be purely symbolic, it can be physiological as well. French anthropologist Claude Levi-Strauss discovered that the Bororo tribe in the Amazon built their village along both a north–south axis and an east–west axis that paralleled a river. The tribe used the axes to divide individuals into groups that were expected to follow rules governing such things as who could marry whom (e.g., marriage partners
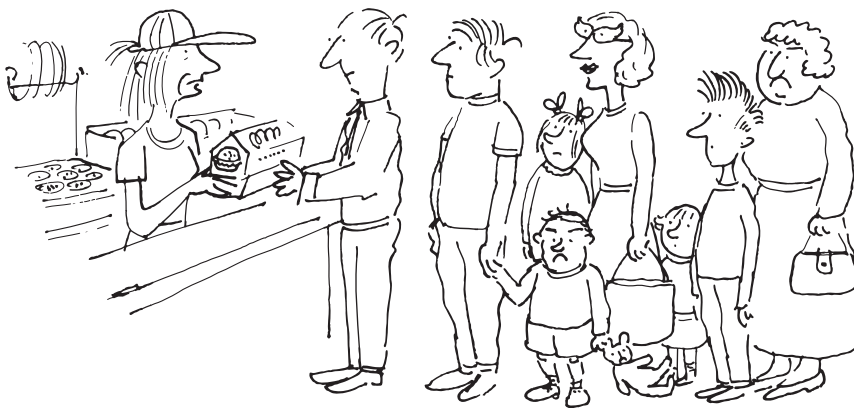

Figure 7.4 Fast food restaurants symbolically condition customers to line up for service in front of the counter

Notice how when you enter fast food restaurants like McDonald's you automatically engage in the desired behavior of queuing. The appropriate response may be triggered by other customers lining up to be served, however over time the counter alone will prompt the response without your awareness or anyone else's presence.

needed to be from different groups), and where people could reside (e.g., the married couple were to live in the group of the male partner). When missionaries arrived they moved the villagers to another place where the houses were built in rows that did not conform to the axes of the former village. According to Levi-Strauss:

> Disoriented with regard to the cardinal points, deprived of a disposition that gave meaning to their knowledge, the natives rapidly [lost] their sense of traditions as though their social and religious systems were too complex to function without the design made obvious by the disposition of the village.[30]

In organizations that undergo merger or acquisition it is not uncommon for the expected economic benefits of the partnership to go unrealized. Many explain this unfortunate outcome as cultural incompatibility; however, the study of the Bororo suggests that spatial disorientation may be operating, too. Consider that, as companies merge, members of one or both organizations are likely to change their physical locations and surroundings as well as important self-identifying cues in their physical environment. Without familiar physiological and sociological cues to orient them, organizational cultures do not function as expected and, to the extent that this creates stress, it affects productive behavior in ways that can destroy economic value and create conditions ripe for cultural collapse.

Embodied organization theory: Reuniting social and physical structure

That the physiological aspects of spatial orientation affect how and what we know is a central premise of **embodiment theory**, which explains how having a human body influences epistemology.[31] Evidence for physio-spatial knowledge can be found in navigation habits that allow you to drive to work or school by the same route every day without any conscious awareness of your actions, and your ability to pour a cup of coffee without lifting your eyes from your newspaper. It also appears in language when, through metaphor (e.g., happy is up, depressed is down). Humans spatialize their physiological experiences.[32]

Embodied organization theory proposes that, much as human bodies do, the physical structures of organizations embody human experiences as they wrap themselves around and organize activity in the shapes of office buildings and factories. But organizations are also embodied in the sense of being formed from the bodies of employees and stakeholders. Consider, for example, how the Walt Disney Company uses the body types and appearances of its employees, not to mention the physiological responses of its customers, to construct the ride experiences that constitute the offer of Disneyland parks.[33] Those assigned to work as pirates in the *Pirates of the Caribbean* attraction must have pirate-like physiques.

Organizational embodiment theorists join critical postmodernists in seeking to reverse the effects of dichotomies hidden within disembodied modern theories, of which mind/body is but one. Other popular targets include thought/feeling (or cognition/emotion), action/reflection, authority/democracy, and object/subject. Sometimes all that is required is to note how a familiar theory already contains ideas about embodiment, as British organization theorists John Hassard, Ruth Holliday, and Hugh Willmott do when they point out: 'there can be no enactment without embodiment.'[34]

Researchers interested in organizational embodiment complain that organization theory has become too focused on social influences to notice that physiological and spatial components affect organizations, which is what Homans claimed in reference to the Hawthorne Studies all those years ago. But rather than ignoring the social, embodied organization theorists place physical structure—defined as the material embodiment of organizational practices and action—on an equal footing with social structure. Thus one intriguing implication of organizational embodiment theory is that, just as structuration theory reunites social structure with agency, embodiment theory reunites physical structure with organizational action, suggesting an analogy: as agency is to action, so social structure is to physical structure.

Structuration theory's evolution in space and time

Over time, as buildings come to be identified with their inhabitants, they help people construct what they think and feel.[35] In this respect, French sociologist Pierre Bourdieu theorized that buildings are objectified histories in the sense of being 'systems of classifications, hierarchies and oppositions inscribed in the durability of wood, mud and brick.'[36] In the course of his study of the African Berber tribe known as the Kabyle, Bourdieu came to believe that the structure of social relations between the men and women of this society was built into their houses.

For example, Bourdieu described how the Kabyle divided their residences into two sections separated only by a 'small openwork wall half as high as the house.' One section was larger and higher than the other and paved with clay and cow dung that the women polished to a high sheen. This space, regarded as male, was used for human activities like eating and entertaining guests. The smaller space, where animals were kept, was regarded as female. It had a loft where the women and children slept and where tools and animal fodder were stored. According to Bourdieu the Kabyle associated the male space with concepts such as high, light, cooked, dry culture, whereas they associated female space with low, dark, raw, wet nature.

Bourdieu's study clearly evidenced a strong link between social and physical structures, but before buildings can construct what their inhabitants think and feel, they have to be built, for, as British Prime Minister Winston Churchill once famously observed, 'We shape our buildings and afterward our buildings shape us.' American sociologist Thomas Gieryn expanded on the idea that both buildings and meanings evolve in a process that begins with their design. His study of a newly constructed biotechnology research building located on the Cornell University campus in Ithaca, New York provided empirical grounding for his theory:

> The social structure of biotechnology [at Cornell] is shaped by choices made during the design of the building—for example, what people and functional activities are included or excluded, and how are these allocated in architectural space. The finished and occupied building measures a reorganized set of institutional arrangements, interpersonal relations and research practices now routinized and normalized into a more stable, enduring and constraining form. Still, from the day its doors opened, Cornell's Biotechnology Building has become something other than what its designers envisaged and something more than what got built—as users and visitors see in those walls a diverse range of significations.[37]

In theorizing the relationship between buildings and social structure he recognized the link Giddens theorized between structure and agency. Gieryn then contrasted Giddens's agency-oriented view (social structure is produced, maintained, and changed by human interaction) with Bourdieu's theory that the social and physical structures surrounding us define who we are and organize our behavior.

To investigate *how* agency and structure impinge on one another, Gieryn analyzed the evolution of Cornell University's biotechnology building and its meanings. Gieryn defined three phases of this evolution—design, construction, and occupation—and described the relationships between agency and structure he observed in each:

> Design is both the planning of material things and the resolution of sometimes competing social interests . . . [wherein] . . . the interests of powerful voices in the design process are etched into the artifact itself . . . the enrollment of investors, patrons, consumers, managers, eager publics, regulators and vendors is accomplished through the design process [during which] an evolving artifact is shaped to fit the wants and needs of those who must be on board to move it off the drawing board.[38]

Following design, Gieryn explained:

> Some designs get built. What once was a malleable plan—an unsettled thing pushed in different directions by competing interests during negotiation and compromise—now attains stability.[39]

Then, during occupation:

> Once unleashed by designers and builders, artifacts become available for later reconfiguration as they are returned to the hands of human agents for more or less creative redefinition, reevaluation and even re-(or de-)construction.[40]

Gieryn concluded that agency played a predominant role in the design phase of his study, but that the building's physical structure became the dominant force once the building was completed and occupied, which was when the new occupants adapted their behavior to the building's rigid contours. However, at some point after occupation the dominance of physical structure gave way once more to the influence of human agency. As Gieryn put it: 'agency returns to people when the building is narrated and reinterpreted—discursively made anew.'[41]

Although structuration theory suggests that the interplay of structure and agency occurs moment-to-moment (thereby becoming instantiated), Gieryn looked at how structure and agency intermingled over the course of the two years covered by his study. Contrasting Gieryn's theory to those of Giddens and Bourdieu, you begin to suspect that their different understandings of structuration processes are embedded in different **temporal orders**. You see different elements and relationships when you pay attention to what happens over seconds, minutes, or hours, than you see if you attend to what happens weekly, monthly, or annually, and different again if you track events over decades or millennia.

When Giddens theorized structuration processes on the order of instants, he saw more agency than structure, whereas from Bourdieu's historically extended viewpoint structure

seemed to dominate agency. Gieryn's approach, midway between these two, was organized around events that transpired over weeks and months, permitting him to analyze (1) structure emerging from agency (design and construction of a building), (2) agents being constrained by their structures (the built space influencing the behavior of the building's occupants), and (3) agents (e.g., occupants, visitors, critics) reconfiguring those structures and their effects via subsequent interpretative activities.

The postmodernism perspective

In the conclusion of his study Gieryn commented on the human tendency to take the commonplace for granted:

> Buildings insist on particular paths that our bodies move along every day, and the predictable convergence or divergence of these paths with those of others is (in a sense) what we mean by *structured* social relations. If buildings silently steer us into associations or away from them, we hardly notice how (or question the rightness of it all).[42]

Gieryn's point resonates with critical postmodern claims that existing physical arrangements make it difficult to imagine other arrangements—we just start taking for granted that things like privacy or accessibility are determined by built spaces and unconsciously deal with their implications. Silence may help to make the associations of certain experiences with particular places meaningful, but it also renders them potentially sinister.

The potential of physical structure to communicate meaning gives designers and the managers who hire them access to symbolic power, for, if physical structures communicate meaning then careful design should be able to suggest, if not outright control, the meanings associated with it. According to advocates of the modern perspective, like Olins, this belief gives architects and designers a strategic role in organizations. For postmodernists, however, it makes them targets for criticism. As British critical postmodernists Gibson Burrell and Karen Dale put it, 'buildings are all about control;' one of their key achievements is to obscure the power they express and maintain.[43]

Reading built spaces like texts and deconstructing them to reveal the power relations they materialize is how many critical postmodernists deal with the topic of physical structures in organization theory. Their methods are similar to those of symbolic theorists who also read built spaces as texts, one clear difference being the focus on power that consumes most critical postmodern readings. But another difference comes through invocations of spatiality.

Postmodern geographers, for example, have accused the vast majority of organization theorists of promoting a-spatial explanations that are both disembodied and disembedded.[44] French postmodern geographer Henri Lefebvre was among the first to accuse Durkheim, Marx, Weber, and their followers of ignoring space to the detriment of their theorizing.[45] Such critiques open social theory for spatial reconstruction, as when British postmodern geographer Derek Gregory claimed that: 'social structures cannot be practiced without spatial structures, and vice versa.'[46]

A similar postmodern critique has been directed at the ways technological control disappears behind the benign appearance of physical structure. The assembly line invented by

Henry Ford is a favorite technological target of deconstruction, which typically begins with the assertion that belief in the factory owners' right to control how work is done, and thereafter the right to control labor, is built right into material aspects of technology that forces workers to perform actions defined by managers at a pace the managers regulate. Thus, postmodernists argue, the assembly line has ideological content that privileges owners and managers over workers, and hides their conflicted interests within the machinery of capitalism.

Repression of conflict occurs, they further argue, because once it is installed the physical presence of line machinery precludes discussion of the right of management to organize work as they have. The choice has already been made and disappears into the machinery. As American economist Richard Edwards described the situation:

> Struggle between workers and bosses over the transformation of labor power into labor was no longer a simple and direct *personal* confrontation; now the conflict was mediated by the production technology itself. Workers had to oppose the pace of the *line*, not the (direct) tyranny of their bosses. The line thus established a technically based and technologically repressive mechanism that kept workers at their tasks.[47]

At the point at which workers accept the mechanized assembly line, the physical structure of the production process organizes social relations of dominance and submission within the hierarchy of owners and workers. Each time the machinery is turned on it both reconstitutes the status quo and suppresses resistance to it.

By seeming innocuous or by being difficult to change, physical structures normalize power relations by fixing them in stone, so to speak. This material fixation parallels the symbolic fixation that occurs through institutionalization. As Burrell and Dale note, the isomorphism and institutional mimesis between organizations and the architectural practices that serve them, forms an alliance that helps to ensure continuity of power and domination through built space. They give the stunning example of the global influence during the first three decades of the twentieth century of German-born American architect Albert Kahn.

Kahn designed factories for the mass-production of automobiles for Packard, Ford, and General Motors in the US, and, under Stalin's auspices, was responsible for all industrial building in Russia until the mid-1930s. Little wonder that his single storied mass production facilities covering acres of land, with their trademark saw-tooth roofs providing daylight on the shop floor, became a defining symbol of the industrial age. As a major instrument of social order and control, Burrell and Dale claim, the Kahn style industrial factory helped to create the identities of workers newly arrived from the farm and thereby forged social changes that would one day resolve into modern capitalism:

> it is important to realize that many of the new entrants to the plants of Detroit and Stalingrad came straight from agrarian roots, may not have spoken the language of the metropolis and were unused to the rhythms of the factory day. The control of their work-space allowed the efficient socialization of the worker in programmes of re-education: they were constructed as a new category of industrial employee.[48]

The alignment of interests between architects and their clients observed in the construction of factories, occurs again in the development of the modern office tower a few years after this. Burrell and Dale reveal how Chicago architects Skidmore, Owings, and Merrill (SOM)

exercised a far reaching influence similar to Kahn's through their design of the skyscraper that dominates and defines the skylines of all modern cities today, a particularly influential example of which was the Lever Building SOM designed and built in New York City in 1952. According to Burrell and Dale:

> The success of SOM rests not only on the brilliant projection of corporate capitalism, but also its mimicry of these forces in its own methods and organization. As a house style the model of the Lever Building came cheap . . . Walter Gropius (1955) said that the Lever Building relied upon prefabrication so that 85–90 per cent 'of the whole building was component parts ready-made in a factory, brought to the site and assembled there.' It used mass production methods and components. What also went down well with clients was the opposition in SOM to union or craft power. SOM followed this logic of efficiency and cost-consciousness through into the organization of their own business . . . SOM might be seen as an expression of unalloyed corporate growth: the reflection of the vertical integration of large multinational companies. It embodies a large bureaucratic structure based on hierarchy and a division of labour . . . It did not attack the status quo but reinforced it.[49]

Other postmodernists go beyond deconstructions of power and dominance as naturalized and hidden expressions of physical structures to demand that we learn to control or resist these influences and thereby free ourselves of unwanted influence and avoid abuse. To develop the means to do this they turn to Lefebvre's theory of how the powerful appropriate space to maintain their superiority over others.

Lefebvre argued that, starting with art in the Renaissance, modern thought came under the influence of perspectivalism, a way of situating the viewer spatially to give them a vantage point from above. This spatial orientation, Lefebvre claimed, naturalizes hierarchy and other hegemonic practices. You can experience this effect for yourself by looking at an 'upside down' map of the world.[50] Such reorientations give most people an unsettled feeling because their naturalized expectations are undermined.

Postmodernists believe that the very notion of space, which always presents a center and its margins, orients us to domination. At the same time it perpetrates this orienting function, it hides the linguistic tricks it uses in the spatially inflected notions that abound in language—interior/exterior, private/public, local/global, top/bottom, and exclusion/inclusion—and that all intertwine in complex mutually supportive ways to convince us they are true when we see them every day in the way space presents itself.

For example, exclusion/inclusion is built into gated communities that place a society's upper reaches at the center of desire and ambition, while at the other end of the socio-economic spectrum ghettos, slums, and favelas marginalize its bottom rungs. Or consider how, in many organizations, executives commission office buildings that provide them with exclusive executive suites they then use to symbolically reinforce their inclusion within the dominant upper levels of the hierarchy. These examples illustrate the postmodern point that, while built space is socially produced through relations of power, social power is practiced and reproduced through uses of space.[51]

Offering the shopping mall as another example of power embodied by contemporary architecture, organization theorists Martin Kornberger, an Austrian, and Stewart Clegg, from Australia, claimed that: 'Architecture is a powerful means of directing and redirecting our attention, feelings, and thoughts to certain points through the organization of spatial

structures,' such as when all pathways in a mall converge on big anchor stores, or how bright lights and big windows direct your view towards whatever is on display.[52]

Kornberger and Clegg claim that this modernist architectural trend toward hyper-control culminates in the bunker, a structure designed to protect its occupants from all harm, but which also imprisons them. Bunker mentality architecture is called terminal building because it marks the logical and physiological extremes to which control through building is taken. As an alternative, Kornberger and Clegg offer the **generative building**.

Generative building denies the architecture-as-control thesis of modern architecture, instead departing from the belief that 'architecture is always ambiguous: it can neither ensure nor hinder freedom.' It encourages 'illegal architects' who 'utilize established power and its architectural manifestations, opening up closed spaces and temporarily closing open spaces, and hijacking designs.' Citing De Certeau, they claim, generative buildings are: 'planned anonymously, emerging spontaneously, changing unpredictably, shaped by the creativity of the users and developed just-in-time.'[53] Instead of territorializing society, generative architecture has the power to re-socialize space in ways that encourage freedom:

> The generative building distinguishes itself from a terminal building in five respects: (dis)order, flexibility, problem generation, movement, and design. The architectural design of a generative building offers a way out of power premised on control into more positive power, away from the panic rooms of terminal architecture towards the design of spaces where surprising things may happen.[54]

Kornberger and Clegg further note that the illegal architects of generative building employ a 'strategy of the void,' an idea presented by Dutch architect Rem Koolhaas who claimed that: 'the most important parts of the building consist of an absence of building.'[55] In Koolhaas's architecture buildings remain deliberately unfinished. Kornberger and Clegg claim that surprise, liberty, and creativity, are harbored in the empty spaces of generative design.

Kornberger and Clegg reveal how the postmodern critique of architecture can itself be overturned by denial of *its* central premise (architecture is control), thereby liberating architecture for further creative development. Could this be one way that reading hegemony in architecture liberates us from its power and domination? Kornberger and Clegg believe we can construct our freedom in the same empty spaces from which post-postmodern generative architecture emerges.

Heinrich Klotz, former director of the German Architecture Museum in Frankfurt similarly described new possibilities of architectural symbolisation' by contrasting postmodern architecture to its modern precursors. But Klotz dealt more explicitly with the symbolics of space and design:

> Whether architects like it or not, a building acts as a vehicle of meaning even if it is supposed to be meaningless. One way or another, it presents a visual aspect. Even the vulgar postwar functionalism that cut the characteristic features of a building to a minimum produced buildings that, as they entered one's visual field, acquired a meaning: An apparently neutral and monotonous uniformity . . . In contrast to the kind of architecture that consciously renounced any symbolic effect since by its own definition in terms of functional efficiency any consideration of meaning was too much, the new trends in architecture are predominantly marked by attempts to draw attention to other contents besides the functional qualities of a building—to contents referring to nonarchitectural as well as architectural contexts.[56]

Postmodern architectural theory points to the possibility of using built space to make symbolic references to organizational meaning per se, and allows doing so in humorous ways that invite paradoxical readings to undermine hierarchical authority at the same time they support it. This is not to say that these possibilities did not exist before postmodernists came along, it is only to say that modernists ignored these possibilities. Of course there is a contributing factor; some of the effects postmodern architects employ are dependent upon construction methods and materials that have evolved with modern technology to make their elaborate structures possible, another irony.

To give just one example of what postmodernism unleashed in architecture, take a look at the Disney Team Building in Burbank, California, designed by American architect Michael Graves.[57] On the façade of this structure, which houses Disney's top executives, stand the Seven Dwarfs frozen into columns supporting the roof. Are they there to cartoonishly invite us to think that Disney employees whistle while they work? Do they in fact encourage employees to whistle on their way in the door? Or is the façade a comment on how Disney's treatment of workers freezes them into statues that support an enormous profit-driven enterprise? Is Disney the self-proclaimed 'Happiest place on Earth,' or is it the Smile Factory Van Maanen described?[58]

Summary

An organization is, in part, a physical entity possessing territorial extent on multiple geographic and temporal scales, comprising a layout of workstations, furniture, equipment, and the human bodies of employees who design and decorate their workspaces with their artifacts and their persons, and produce endless interpretations of what it all means. Physical structure is complexly intertwined with social structure, interwoven with culture and technology, and implicated in outcomes like communication and performance. It is therefore meaningfully material and symbolic in its materiality. Its symbolism carries a multiplicity of meanings that can give the powerful access to meaningful self-expressions of organization through the concrete forms and shapes that built space provides. At the same time it silently shuttles us along pathways designed and built by the powerful. As both physical containers directing human movements, and symbolic resources for the expression of meaning and enactments of power, built spaces invite contention and contestation.

The impressions an organization makes on employees and stakeholders as they respond to and interpret buildings and grounds, particularly when these are architecturally designed to produce a profound visual statement, can reinforce corporate vision and strategy, and signify corporate pride, hegemonic ambition, and a variety of other ideas, both intended and unintended. But the images this impression work leaves on inhabitants may stand in stark contrast to interpretations they form for reasons other than those architectural designers or managers may attempt to impose.

While from the symbolic perspective physical structures of organizations are social constructions open to constantly new meaning making, modernists tend to see them either as meaningless containers with the power to control behavior or, if meaningful, filled with the potential to direct that meaning through carefully controlled design. The postmodern

perspective, all the while, treats space as a text to be deciphered and deconstructed, and maybe one day replaced by the freedom it hopes to underwrite and maintain with vigilant deconstruction.

Key terms

spatiality

organizational geography

   geographic distribution

   territorial extent

   scale

   time–space compression

   logistics

   geographic features

   space and place

layout

   orientation

   landscaping

   proximity

   openness/visibility

   accessibility

   privacy

open vs. private offices

hot desking and hoteling

design features

   planned

   unplanned and emergent

décor and dress

symbolic meaning

   intended vs. unintended

   multiplicity of meaning

identity, image, and reputation

   organizational identity expression

   group territorial boundaries

   individual identity markers

   personalization of space

symbolic conditioning

embodiment theory

temporal orders

spatiality

generative building

Endnotes

1. Roethlisberger and Dickson (1939); Mayo (1945).

2. Since the 1970s many social psychologists have disputed the findings of the Hawthorne experiments based on criticisms of the experimental design and of the interpretations given the findings, particularly of the Hawthorne Effect. A useful summary of the criticisms offered by Berkeley Rice (1982) can be found at http://www.cs.unc.edu/~stotts/204/nohawth.html (accessed February 24, 2012).

3. Homans (1950).

4. Elsbach and Pratt (2008) review much of this literature.

5. Pfeffer (1982), who was an early proponent of the inclusion of physical structure studies in organization theory.

6. Taylor and Spicer (2007).

7. Harvey (1990).

8. See Casey (1993, 2002).

9. Godkin (1980).

10. Aerial views of the Googleplex can be seen at (last accessed February 25, 2012): http://network.nature.com/system/photo/000/002/751/googleplex.jpg?1218645567 or http://raymondpirouz.tumblr.com/post/385130526/googleplex-solar

11. Kotter (1983).

12. Allen (1977).

13. Gullahorn (1952); Wells (1965); Gerstberger and Allen (1968); Allen and Gerstberger (1973); Conrath (1973); Szilagyi and Holland (1980).

14. Festinger, Schacter, and Back (1950); Estabrook and Sommer (1972); Parsons (1976).

15. Allen (1977); Davis (1984).

16. Conrath (1973).

17. Daft and Lengel (1984).

18. Oldham and Brass (1979); BOSTI (1981); Oldham and Rotchford (1983); Hatch (1987).

19. Hatch (1990).

20. Rybczynski (2001: 21–25).

21. Rafaeli and Pratt (1993); Rafaeli et al. (1997).

22. Olins (1989, 2003).

23. Yanow (1993).

24. Steele (1981).

25. Richards and Dobyns (1957); Wells (1965).

26. Wineman (1982).

27. Whyte (1943).

28. Konar et al. (1982); Baldry (1999).

29. Berg and Kreiner (1990).

30. Levi-Strauss (1955), cited in Fischer (1997: 24–5).

31. Seamon (1980).

32. Lakoff and Johnson (1980).

33. Van Maanen (1991).

34. Hassard, Holliday, and Willmott (2000: 3).

35. Urry (1991), Yanow (1993).

36. Bourdieu (1981: 305–6), cited in Gieryn (2002: 39).

37. Gieryn (2002: 36).

38. Gieryn (2002: 42).

39. Gieryn (2002: 43).

40. Gieryn (2002: 44).

41. Gieryn (2002: 53).

42. Gieryn (2002: 61).

43. Burrell and Dale (2009: 178).

44. See Yanow (2006) for a thorough discussion of how built spaces mean and a nice summary of Casey's work on the relations between human embodiment and spatial orientation.

45. Lefebvre (1991); see also Soja (1989); Harvey (1990).

46. Gregory (1978: 121).

47. Edwards (1979: 118).

48. Burrell and Dale (2009: 187).

49. Burrell and Dale (2009: 190). For reference to Gropius, see J. Peter (2000) *An Oral History of Modern Architecture.* New York: H.N. Abrams.

50. Find an image of such a map at http://flourish.org/upsidedownmap/

51. Lefebvre (1991).

52. Kornberger and Clegg (2004: 1104).

53. De Certeau (1984); Kornberger and Clegg (2004: 1107–8).

54. Kornberger and Clegg (2004: 1107).

55. Koolhaas (1995: 603).

56. Klotz (1992: 235–6).

57. See http://www.utexas.edu/courses/ancientfilmCC304/lecture1/disney.html for an image of the Disney headquarters building (accessed February 25, 2012).

58. Van Maanen (1991).

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