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9. *Putting Situations in Their Place**

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A ROLE FOR THE PHYSICAL CONTEXT

We take for granted in our daily lives that human beings have a physical existence and require such environmental resources as space, heat, and light for their social interactions and individual activities. The scale of resources society assigns to the physical environment is illustrated, for example, by the fact that in most countries the building industry, which provides these facilities, is usually a major industry. Furthermore, we expect any account of the social activities in a little-known culture, either a popular account through the media or a learned one from an anthropologist, to provide some information on the physical environment, architecture, and objects of that culture.

The well-established discipline of archaeology, which studies social processes, is heavily based on a culture's physical artifacts—its deserted monuments, pottery shards, ground plans, and the like. Yet it would be hard to demonstrate that archaeology is less scientific than psychology or that its insights into the human condition are less valid. History books and museums, weekly magazines and daily papers, novels and films all describe and explain the physical context in which human activities occur. For example, in the opening paragraph of *Time Regained*, Proust (1957) describes in detail the curtains in the room in which his central character finds himself, contrasting them with the decorations in other rooms he has known. Yet Proust's interests and purposes in writing are as abstract as those of any psychologist. He is not concerned simply with external objectivity, but with human experience and the social interactions of which it is composed.

The reasons for changing and developing the physical surroundings, as well as for describing the physical context of human activities, go beyond the merely functional. In other words, the role the physical environment plays in human experience, how it contributes to social interactions and ways of life, is a dominant reason for popular concern

with it. To survive, human beings must be warm and dry and have a place to sleep; it is also clear that for at least the last 10,000 years, and possibly longer (Preziosi 1979), these minimum functional requirements have been overlaid by many other roles, both psychological and social, for the physical surroundings.

As part of the attempt to understand the role physical environment plays in social behavior the cross-disciplinary subdiscipline of environmental psychology has, in recent years, brought together psychologists, geographers, sociologists, architects, planners, and others (see Canter and Craik 1981 and Russell and Ward 1982 for recent reviews). It is surprising that the emergence of environmental psychology is such a recent development but possibly more surprising that its links to activities in other areas of social psychology have been so tenuous (as Spencer 1981a discussed). The time is ripe for developing more effective links between the social and the environmental perspectives within psychology, so both can benefit from, as well as contribute to, understanding the significance of our physical surroundings. Thus, this chapter explores some bridges made possible by recent developments in both social and environmental psychology.

Until recently, despite the high probability of the social psychological significance of the physical surroundings, as revealed by both popular accounts and other social sciences (see, for example, Michelson 1970; Knox 1975; Jackle et al. 1976; Rapoport 1977), neither social psychology nor most other areas of psychology successfully accommodated what Margulis (1980) called "the objective physical environment" into their theoretical formulation. Margulis argued, for example, in reviewing learning theory, personality theory, social psychological theory, and perceptual theory, that "in general the objective environment in psychological theory has a null status." He argued that until recently, even perceptual theory presented a view of perception that "mirrored the internal world of values." So that "psychologists, as a rule, have favoured points of view that stress what is inside the head, not what the head is inside of."

Even within environmental psychology, authors noted that the physical surroundings are often given only a minimal role in the issues studied. The symposium at the APA convention from which Margulis is quoted explored this weakness in environmental psychology. Archea (1977), in discussing privacy studies, made the same point: "The environment presented in this literature tends to lack enduring properties which set it apart from the behaviour to which it is presumably related" (117). It is against this background that social psychologists have directed little attention to the role of the physical surroundings (Spencer 1981b).

The Sins of the Forefathers

How, then, did social scientists get into this situation in which many around us appear to notice a physical environment but we have difficulty talking about it? Can the emerging situational approach help us out of this situation?

One answer suggests that, almost like the biblical curse, the sins of the forefathers are being visited on their grandchildren. This curse, stemming from the laboratory tradition, has been transmitted to many environmental psychologists who have tried to shake off that tradition; there is a danger that it is finding its way into studies of situations.

When psychologists in general, and social psychologists in particular, embraced the experimental laboratory approach, they also adopted the view that the laboratory is a neutral setting, playing no part in the processes to be studied. Within the laboratory framework, the actual laboratory itself—its size, shape, color, location, and so on—is deemed to play no role in the experimental processes. Thus, the literature of laboratory psychology did not develop a language for describing (or a set of ways of thinking about) the physical setting's role in the processes being studied.

By the time psychologists concerned with the environment dragged their studies out of the laboratory (if not into the open air, at least to the office down the corridor), a set of problems and a language of study had been developed for discussing psychological issues. The new breed were stuck with attitudes, personalities, perceptions and the like, both literally and conceptually. They were stuck with thinking of the environment as another set of variables to be manipulated or controlled, variables they thought happened to be difficult to deal with in the laboratory.

There thus first emerged ecological psychologists, led by Barker (1968). Environmental psychologists such as Craik (1970) and Proshansky (1970) then tried to understand human activities in their naturally occurring contexts and the role the environment might play in those activities; but they had to draw heavily on conceptual tools from the disciplines from which they were trying to break away.

Barker (1965) observed children's behavior, profoundly aware of the artificiality of the operant traditions then current. Within the accepted behavorist perspective on the nature of scientific psychology, he studied what children did in their natural habitats. The experimenter thus had a minimal effect on what was being studied. Barker believed any overt interaction between psychologist and subject, such as asking questions, would contaminate results. Barker and his colleagues (1978), as a consequence, restricted their activities to observing behavior in situ. Yet they were apparently unaware that this fear of contamination from unwanted interactions had driven psychologists into the laboratory in the first place. Thus, Barker, his associates, and students shared with laboratory-based psychologists a narrow focus on what was to be studied and on tactics considered appropriate for such studies.

Of course, not all of Barker's students or their students were so orthodox. Recent developments in the approach have introduced questionnaire and other procedures less focused on observations (Wicker 1979; Bechtel 1982). Even with these developments, however, Barker's ecological psychology still remains isolated from broader ecological perspectives within the social sciences at large (see, e.g., Richerson and McEvoy 1976) because its conceptual tools are so restricted to the behaviorist tradition.

Unlike Barker, Craik (1976) was motivated to environmental concerns by what he saw as the strengths of existing approaches within psychology and their potential for use in the untried realm of the physical surroundings. In particular, he saw the study of the environment as a development in personality measurement and developed scales for carrying out environmental assessment and inventories for distinguishing between people in their environmental responses. Craik (1981) described environmental psychology as "the invasion of an array of relatively distinct and mature research traditions, currently viable within scientific psychology, into the domain of person-environment relations." Although Craik's formulations went beyond Barker's by including the subject's descriptions of their environmental experiences, he still focused on "what is inside the head, not what the head is inside of."

Neither Barker nor Craik's influential writings nor the writings of many other early environmental psychologists (cf. Stokols 1978) described actual physical settings. Proshansky (1970) made the important contribution of pointing to the need actually to map places and the behavior within them if they were to be understood. The book of readings he and his colleagues produced was one of the first to include plans and axonometric drawings of buildings as well as photographs of actual settings. But this innovation, although frequently quoted, has yet to be fully integrated into the mainstream of environmental psychology research. For example, the epitome of Proshansky's approach as demonstrated in the detailed study carried out by his colleagues finds only few parallels in other research (Richer 1979; Canter 1972; Hart 1979).

A number of people active in environmental psychology for some time have questioned the initial bases of their activities. Sommer (1974), for example, questioned the practical value of the notion of "personal space." Wohlwill (1973) asked whether the environment is in the head. Only a few psychologists looked directly at the role the physical environment in all its shapes and forms plays in human experience. This has meant that the applicability gap perceived to exist between

designers and researchers is still an issue for discussion (Hill 1979) and that some psychologists are not convinced that environmental psychology has any future (Taylor 1980).

The consequence of this state in environmental psychology is now beginning to leave its mark as other developments in psychology turn to this new field for assistance. A number of developments within social psychology now encourage textbook writers to include at least a section on environmental psychology. Yet it is understandable that their view of environmental psychology, based almost inevitably on its early faltering steps, should be so uninspiring. Thus, recently Argyle et al. (1981) characterized environmental psychologists as having "a behaviouristic approach to experimentation," as being "closely aligned to the pure social learning theory position, which holds that individual difference variables are a function of the environment" and are underplaying "the role of the subject, both in selecting, avoiding, negotiating or defining social situations" (23). These weaknesses are true of some work of some environmental psychologists, but this is not their fault. They have drawn on the same sources as other psychologists and fallen into the same traps.

The reason these pitfalls are so important here is that if social psychologists buy back from environmental psychologists the concepts and procedures they bought from social and experimental psychologists a generation earlier, the same problems are likely to be recycled under a different label. Thus, in their recent overview of social situations, Argyle and his colleagues make the confusion of devoting a chapter to "environmental setting." The opening sentence of that chapter refers to the physical environment as a "feature of situations." They thus get caught in the confusion referred to earlier, of dealing with the physical environment as another set of variables to be considered in a situation, rather than recognizing that human beings inevitably have a physical presence and that the physical must therefore be an integral component of any situation, not simply a cause of, or an effect produced by behavior.

Of course, the integral, systemic nature of the physical environment's contribution is implicit in the assertion by Argyle and his colleagues that transactions with the surroundings are stimulated as much by the individual as by the surroundings. This was also argued by Proshansky and his colleagues (1970) and enshrined in the book *Environmental Interaction* in which Canter and Stringer (1975) developed a similar argument. Furthermore, by pointing out, as Argyle et al. did, that the physical surroundings often reflect the goals of the users of those settings, they showed that human actions must play a more fundamentally causal role than the physical variables themselves. By emphasizing human agency rather than responses to environmental stimuli, the starting point for any activity is looked for in the actions of people.

But again the process is set in motion whereby the physical nature of our existence is lost sight of and processes within the individual again become superordinate.

The problem here is a profound philosophical one that has, like most problems in philosophy, been debated at least since Plato's time. In essence, if a dualist distinction is proposed between the physical and the psychological aspects of reality, then it is difficult to show how or where these dual realms of existence can affect each other. Any causal link between subjective and objective reality requires their coming into contact with each other. But how can they do that if they are distinct aspects of existence? On the other hand, if we take our own experience as paramount, recognizing the physical world as a product of our own perceptions and cognitions, then it is difficult to accept that modifications of those surroundings can be of any substantial consequence.

This summary of the epistemological questions central to exploring the psychological significance of the physical environment does not begin to do justice to the subtleties and complexities of more than 2,000 years of philosophical debate and the vast libraries exploring these themes. The reader wishing a further understanding of this debate should read a classic introductory text such as Russell (1927) or a more recent review such as Ayer (1982), or Pirsig's more popular account (1974), or even the script of *Jumpers* (Stoppard 1972). Within the area of environmental research, Hillier and Leaman (1973) and more recently Teymur (1981) argued in some detail that the lack of philosophical clarity makes the bridge between psychology and the physical environment so difficult to build.

The importance of this debate can be gauged from two conflicting facts. On the one hand, as noted, most societies assign a lot of their resources to shaping the physical surroundings. Many different professional groups, architecture, interior design, planning, and so on, have been established to create and manage these physical resources. On the other hand, the few psychologists concerned with the human consequences of the physical surroundings have had difficulty in establishing any clear, direct causal effects of the physical environment on behavior. This has been true since the days of the Hawthorne investigations (Roethlisberger and Dickson 1939).

Of course, preferences and differences in evaluative descriptions of environments can be readily established (e.g., Nasar 1981; Espe 1981), and studies of differences between groups in their reactions to the surroundings are frequently published (e.g., Webley 1981; Schroeder 1981). However, reports of the direct effects of the physical environment on human behavior are rare, and those published tend to be in the psychological domain (e.g., Hawkins 1981; Rohles and Munson 1981). This lack of support for a dualist perspective is also found when attempts are made to act on the findings of studies of the physical sur-

roundings. As Bechtel (1980) has shown from a major review of environmental evaluations, they do not connect with the issues confronting decision makers and rarely lead to implementation.

There is thus growing evidence that as long as the human and the physical are treated as separate realms of discourse and brought together only at a notional level through general models of interaction, psychologists will continue to be caught in the various cul-de-sacs of dualism. They will continue to attempt to get out of these awkward situations by studies focusing on the human components, preferences, individual differences, conceptualizations, expectations, and the like, without connecting directly with the physical aspects of experience and with a consequent weakness of potential for application. These difficulties exist in any psychology still struggling with the remnants of the dualist framework of stimulus and response. It follows that they are central to the attempts of social and environmental psychologists to incorporate the physical surroundings into their theoretical formulations.

THE CONCEPT OF PLACE

A brief review of the recent history of our understanding of the environment's role in social behavior provides four points on which to build the foundations of bridges between social and environmental psychology.

1. There is a prima facie case for the relevance of the physical surroundings to social behavior.
2. Both social and environmental psychology have had difficulty accommodating physical variables directly into their theoretical formulations.
3. The difficulty of integrating physical variables into environmentally oriented studies has its roots in part in the experimental laboratory tradition and the epistemological dualism typically assumed within that tradition.
4. As Argyle et al. (1981) pointed out, many environmental studies, especially in North America, have been in the behaviorist tradition. People's goals, objectives, or reasons for being in any particular location are not normally considered.

Following from these four points, I propose to identify units of environmental experience for which some people use the term *place*.

The first detailed formulation of *place* as a technical term describing an approach to located action was detailed in Canter (1977). This approach has many general parallels to the writings of Tuan (1977) and

Relph (1979) and other geographers (e.g., Buttimer and Seamon 1980; Seamon 1979), but there are some important differences in emphasis. The most fruitful way to think of places in a psychological framework is as a quanta of experience. As in physics, the smallest units of energy normally available are quanta of energy, and all energy can usually be released only in multiples of these quanta; it is proposed there are similarities in human experience. We think of ourselves as being in one place or another. A distinct locational component to experience is always present.

However, an immediate caution is necessary—the parallels with physics are not precise. The molecules of chemistry have some properties this theory assigns to places. In other words, components of places can readily combine with each other to form new quanta of experience. Similarly, attention can be directed to larger or smaller place scales. We can focus our experience on big molecules or small ones; a city can be a place psychologically just as much as a corner of a room can.

Places, then, are the major building blocks for understanding human actions in their naturally occurring context. Both behavior settings and situations occur within places. One place may house many of Barker's behavioral settings or Argyle's situations, at the same or different times. It must be emphasized, though, that places are part of experience. They cannot be specified independently of the people experiencing them. The central postulates are that people always situate their actions in a specifiable place and that the nature of the place so specified is an important ingredient in understanding human actions and experience. One goal for any science of situated human action is classifying the places in which those actions occur.

How, then, are we to describe and classify places? Again, a clue can be found in chemistry. Consider the analogy of elements and how they are classified and described. Distinct elements can, of course, be named for their special properties (for example, hydrogen was so named by Lavoisier because it was seen as a maker of water). In the same way, if we have evidence for their distinctness we can specify places such as bedrooms, park benches, hospitals, or inner cities. Like the early chemists, we may often confuse similar places and not distinguish different ones in our labeling. But descriptions are the key to any future improvement of labeling.

In chemistry, the growth in understanding of the nature of atomic weight as a crucial descriptor of elements helped stabilize the classification system. For places, it is proposed that three sets of properties are the key to their distinctness. Taken together, these sets describe much of what is psychologically significant about a place. They are not variables to be dealt with independently and intercorrelated but aspects of places to be explored.

The three constituents of places are:

1. The activities understood to occur at a location and the reasons for them.
2. The evaluative conceptualizations that are held of the occurrence of those activities.
3. The physical properties of the place as they are evaluated in relation to the activities.

Let me emphasize again that places can be readily distinguished from behavior settings and situations. Unlike behavior settings, places a) are not created by the investigator on the basis of observing behavior and b) have distinct evaluative and physical components. Unlike situations, at least as identified by Argyle and his colleagues (1981), places have a distinct enduring existence as well as being inevitably intertwined with the location's physical properties.

Some of the best examples of place descriptions are in the work of novelists rather than scientists. Reference has been made to Proust; at the other end of the writing spectrum, a delightful example of a place description is in the closing chapter of Milne's *The House at Pooh Corner.*

> They walked on, thinking of This and That, and by-and-by they came to an enchanted place on the very top of the Forest called Galleons Lap, which is sixty-something trees in a circle; and Christopher Robin knew that it was enchanted because nobody had ever been able to count whether it was sixty-three or sixty-four, not even when he tied a piece of string round each tree after he had counted it. Being enchanted, its floor was not like the floor of the Forest, gorse and bracken and heather, but close-set grass, quiet and smooth and green. It was the only place in the Forest where you could sit down carelessly, without getting up again almost at once and looking for somewhere else. Sitting there you could see the whole world spread out until it reached the sky, and whatever there was all the world over was with them in Galleons Lap. (Milne 1928, 169–172)

An analysis of Milne's description of Galleons Lap shows that:

1. It gives pointers to the direct experience of the place's structure and location. The position of Galleons Lap in the forest, the texture of the floor, and even the experience of so many trees that a six-year-old cannot possibly hope to count them accurately all highlight the setting's physical aspects characterizing the experience of it.
2. It provides reference to the activities associated with the place. It is a comfortable place to sit during a walk in the forest and to contemplate the world.

3. It gives an account of the feelings and conceptions associated with the place. It is enchanted and quiet and a place where "all the world over" is with you.

These constituents have been isolated for identification under three broad headings here, but the experience of the place clearly is a unique blend of them all. Galleons Lap as a place can be seen as a system containing the physical location "at the very top of the Forest," which is thought of as being "enchanted" and where it is possible to indulge in the activity of "sitting down carelessly." For study and analysis, it is necessary to divide the places' components into their constituent parts, but the essence of the argument is that they are always components of an integrated system.

It is thus always possible, in literature, at least, to re-create one, or possibly two, components of a place from others specified. For example, Drabble's (1979) book on landscape in literature is about the conceptions and evaluations associated with particular ways of describing landscapes and how these conceptions in their turn are a function of the uses of and culturally embedded approaches to thinking about and experiencing landscape.

Girouard (1978), an architectural historian, shows that the physical form of English country houses and their changes from the sixteenth century to the present can only be understood as part of changes in the pattern of activities in the house and the changing symbolic qualities important to associate with those activities. For example, Girouard argues that one of the strongest influences leading to design changes in English country houses was the increasing gap between the upper and lower strata in society, accentuated by the disappearance of the intermediate ranks who no longer needed to put themselves under the protection of the great by entering their service.

The large baronial halls of medieval times, in which all members of a vast household ate together, gave way to quarters associated with each social stratum in the household. The location, style, and furnishing of each section of the house responded as much to what went on in those places as to what was believed to be the appropriate symbolic representation of their place in the household. The size and pretensions of the houses overall were "an accurate index of the ambitions—or lack of them—of their owners."

Thus, together with the changes in the society's structure and in people's expectations of their physical surroundings are parallel changes in the physical forms housing social behavior. But note that the parallels between the physical components of the English country house and its behavioral components would not be possible, at any time, were it not for the distinct roles existing in a household and the social norms and rules guiding who does what where. The influence of role differ-

ences and guiding rules is not limited to historic houses. Ellis (1982), for instance, showed that these social processes can be found in controlling the use of public spaces on council housing (publicly owned) estates. They provide a basis for understanding how places come into being and change.

PLACE ROLES AND RULES

Literary and historical illustrations, by their nature, do not provide any specific indications as to what psychological processes generate and maintain the experience of places. Some powerful roots in psychological theory do clarify how places form units of experience.

The notion that people can cope with their life experiences insofar as they can develop an articulated structure for conceptualizing those experiences has origins in Mead (1967) and has since been elaborated by many authors (e.g., Brittan 1973). For psychologists, the stimulus of Kelly's (1955) Personal Construct Theory provided the impetus for harnessing this model to explain social behavior. Quarter of a century after Kelly's major publication, it is still instructive to read. His statement of the communality and sociality corollaries of his theory gives direct understanding of how the personal experience of places can still be part of something as public and socially shared as the physical environment.

In his communality corollary, Kelly states that the similarity of the psychological processes of any two people is a function of how similar their construction of experience is. It follows that if two people expect the same relationships between physical and social events (construing their experience of these events in a similar way), then the meaning to them of that combination of events will be similar. The sociality corollary emphasizes that the possibility of one person's playing a role in the social processes of any other person derives from the first person's ability to construe the construction processes of the other person.

Thus, two people must realize that they expect the same associations between physical and social events for them to be able to use a place in relation to each other. If a lecturer sits at the back of the lecture hall anticipating that the students will sit on their desks and face him, then until they share an understanding of his conceptualization of the place they will not be able to use it appropriately. It follows from the sociality corollary that places are shared aspects of experience. They are components of our conceptual systems deriving validity from their similarity to those of other people who experience the same places. This is how it is possible for places to be part of public discourse and awareness yet essentially components of individual, personal conceptual systems.

Although personal construct theory provides a useful starting point for understanding places, it still relies on the relatively primitive mechanisms of people recognizing associations between the constituents of places in order to build up a conceptualization of those places. Primitive though it is, this lays the framework for a powerful self-fulfilling prophecy. To use any place, an individual must be aware of the pattern of activities that might be expected in that location and of how satisfactory those activities are likely to be. The person is thus likely to use the place in accordance with those expectations, thereby creating the basis for others to recognize and support the expectations the individual had. However, if this were the only mechanism available for developing conceptualizations and the related actions of places, then our experience would be hard and painfully won and would not be subject to the changes that are apparent.

The elaboration of these primitive processes comes fruitfully from another aspect of Kelly's theory that evolved within the framework of the ethogenic approach as espoused by Harré (1979).

This approach recognizes the significance of people's goals, or purposes. Two consequences of taking a goal orientation have implications for understanding place experience, as they do for studying situations in general. One is that the people's roles in any setting will influence how they conceptualize that setting. The other consequence is that systems of social rules will be drawn on and transmitted so the use of places can be an effective part of the society's fabric. Whether an open area is regarded as a public path or a private garden is in part determined by the accepted rules governing that place and the ease with which the people who experience that place can recognize or learn those rules (cf. Ellis 1982).

The Stability of Place Rules

The existence of socially negotiated expectations of what happens in places leads to the predictions that relatively stable rules of place use can be identified, that these rules will relate to the place users' interpretation of the physical clues a place provides of its use. Such predictions are, of course, open to empirical test. Furthermore, only through empirical investigation can the particular existing place rules be identified and classified.

With the enhanced hindsight this view of place provides, we see that many empirical studies often presented under the heading personal space are, in fact, demonstrations of the rules associated with particular places. Much relevant empirical evidence in the pioneering reports of such studies by Sommer (1969) noted how regularly the sequence of seat selection at library tables was governed by rules of maximizing

distance and minimizing potential eye contact. Other studies, such as Delong's (1970) account of seating in a committee room, also shows place rules clearly in operation. Rosengren and DeVault's (1963) fascinating account of how a mother-to-be in a maternity hospital is treated differently as she moves closer to the delivery room also clearly shows how consistent rules of social interaction relate directly to physical location and its associated design and layout.

However, these studies, evolving within the social psychological framework, pay little attention to the salient features of the physical surroundings in which the behavior being studied actually occurs. We are told little of the location, shape, or size of the library tables, or of the physical details in many other studies of personal space. Even Altman (1975), in his later summary of these and related studies, with an eye to the significance of the physical surroundings, finds it difficult to indicate how the surroundings actually contribute to the development and reflection of role differences and the establishment of rules of place. Intriguing studies by Sommer et al. (1981) have begun to rectify this weakness. He noted how the physical structure and organization of food shopping facilities, notably supermarkets and farmer's markets, create a context where different social interaction patterns are expected both among customers and between customers and the sales people.

These empirical studies reveal the existence of a rich set of place rules, but research is needed to address this issue more directly. Such research need not be only anthropological; various forms of field experiment are also possible. One example of such a study going further to show how the rules of a place can be established and modified in relation to physical form can be drawn from a study presented in detail in Canter and Kenny (1975, 152-154).

In that study, students were invited into a lecture room in which chairs were arranged in rows. As the students entered, a lecturer standing at the front of the room, with his back near the wall, gave them a questionnaire and asked them to sit down and take part in an experiment. A second group of students were invited in to the room; this time, the lecturer was standing near the front row of desks. In both cases, the students sat at about the same distance from where the lecturer was standing. They sat further back in the lecture room when he was standing near the front rows of seats than when he was standing a few feet away from those seats. Many readers have experienced the phenomenon especially with students in their first year at college. They use the room layout to distance themselves both physically and metaphorically from what they presumably find as a threatening prospect for formal interaction.

Particularly interesting about this study of student seat selection, beyond the distancing mechanism, was that the investigator went on to explore the consequences of altering the room's furniture arrangement. The study was repeated with the chairs arranged in a semi-circle. In this case, the lecturer's location did not have any measurable effect on the seats the group chose. In other words, the mechanism seemingly operating here was that what students believed would occur in the room led them to apply an appropriate set of rules to guide their use of space, in accordance with what they wished to achieve in the room. When they thought the activity was a formal one in which they could, in a sense, get away from the lecturer, they tried to optimize their distance from him. When they saw from the layout of the furniture that a more informal interaction was expected, they used different principles to choose seats.

Note that the change in the physical structure did not directly effect behavior. A more subtle role must be conceived for the physical surroundings than as a mere stimulus. The most interesting findings here are how the interaction between the use of the space by a person in one role group and the layout of that space is related to the use of the space by other role groups.

Unfortunately, like so many intriguing studies in psychology, no replications have been published. Other parallel studies in different contexts suggest themselves. For example, how does a customer act if a bank manager calls him or her into the office (or to his or her desk) as opposed to getting up to lead the customer over. How do rowdy crowds behave in response to different types of movement of groups of police officers when areas have been demarcated for different groups as opposed to when they have not?

The Reliability of Place Rules

One reason for following through on the place approach to situations is to establish a level of analysis of the contexts of human action consistent and stable enough to allow classification. Beyond the evidence that the rules for actions in places are stable, it is necessary to show they do not change except in relation to properties of the use of places themselves. This proposition can have remarkable implications, many of a practical consequence. The strongest example can be derived from looking at what happens in a building on fire. Even in extreme circumstances, well-established place-related rules continued to operate (cf. studies reviewed in Canter 1980).

The most dramatic example is the fire at the Kentucky Supper Club in which more than a hundred people died (Best 1977). While this fire was in progress, waitresses showed patrons out of the building. Later interviews revealed that many waitresses only showed out people sitting at their stations. Patrons unlucky enough to be at a table where the

waitress was trapped by smoke sat as smoke filled the room, while people at the next table had been shown out by their waitress.

At a more general level, studies by Canter et al. (1980) of behavior in fires revealed a consistent difference in the sequence of actions of husbands when compared with wives. Typically, the husband attempts to fight or investigate the fire, whereas the wife is more likely to inform others and get away from the fire. These different patterns clearly relate to the different role/rule structures within the average household. They have the consequence that if anybody is likely to get hurt in a fire through inappropriate actions, it is the husband rather than the wife. On the other hand, studies in hospitals, where the nursing staff is predominantly female, do not reveal a sex bias in the activities carried out in a fire. Differences relate closely to a person's position in the hierarchy and how that hierarchy normally functions in relation to locations within the hospital.

The Contribution of the Physical Component of Places

The role/rule perspective on places and their experience explains why it is difficult to establish direct and simple effects of the physical environment on behavior. If the physical component reflects, facilitates, or inhibits the evolution of rules for the differential pattern of place uses by varying role groups, then changes in the role structure or developments in the rule system would produce different patterns of place use in the same places. But this does not mean that the physical form of place is irrelevant. The reverse is true; it always plays a role in the definition and evolution of a place. Transposing role/rule relationships to new physical forms is likely to start a process resulting in a different pattern of role/rule relationships.

It follows that challenges to the researcher are to a) identify consistent place-related rules, b) classify the varieties of places commonly occurring and c) establish the roles that the components of places play in developing place use and place experience. We now turn to the first of these challenges, taking as an example a commonly experienced place—the home.

PLACES IN THE HOME

In considering the home, one question is whether the unit of place experience described as a home can be shown to have in it a patterned structure of place use reflecting the various rules constituting living in a house or apartment. Canter and Lee's (1974) study provides a useful basis for this exploration. It used data from Japanese high-rise apartments and thus is of interest because the identification of rules is often easier for a culture obviously different from that of the researcher.

The perception of patterns in a foreign setting is less likely to be dulled by familiarity.

Japanese Houses

Western visitors are often told that Japanese households are completely flexible—beds can be taken from cupboards and rolled out on floors; low, portable dining tables can be moved into a corner. Thus, no rules as to which space be used for what purpose seem to apply. As Nishihara (1967) argues:

> The notion of continuous and uninterrupted spatial flow pervades even the storage spaces, which are treated much as the actual living spaces.... Since these interiors conform to a number of needs they actually serve no function at all. When a bed is needed, the Japanese bring it in, and when a table is required, they bring that in too. In other words the Japanese house is functionally flexible.

This view is antithetical to the theory of place use outlined above, so Canter and Lee's (1974) study is instructive. This study used plans of 120 Japanese apartments, with the furniture in the apartment recorded on the plans. By content analyzing the furniture, it was possible to see which pieces of furniture were likely to be found together in the same room across the plans.

In effect, two stages in the process are being explored. The first stage assumes that people buy furniture and arrange it in their rooms in accordance with the activities they wish to occur in that room. The second stage assumes that to facilitate activities within a household, it is necessary to avoid housing conflicting activities by designating separate places for incompatible activities. Thus, by looking at the types of furniture grouping it is possible to identify what sorts of conflicts are being avoided and to find out what place rules exist. Put another way, the study allows the listing of patterns of objectives people have in their house; the goals or range of intentions they are striving toward when they move into and furnish a house. This study of Japanese furniture shows, in effect, an archaeological account of the relationships between the activities in the home.

An MDS analysis of the data showed first that some pieces of furniture are more general or possibly flexible in their use. Such furniture as a large Japanese cushion or charcoal brazier have high correlations across all rooms, on average, with all other pieces of furniture, showing that they are not special to any particular locations in the house. On the other hand, some furniture is more specific in its use and more likely to be found in only one location—such as a dining table or a bed. This finding gives a first clue to underlying principles of space use in a Japanese household. Some activities are considered general,

open-ended, and compatible with other activities. In contrast, some furniture seems specific in the activities associated with it.

This concept of an activity's specificity has many implications for looking at situations. Some situations have clear rules; other situations have only loose, general rules. It seems probable that people learn to cope with these different sorts of situations in different ways.

Looking at the more specific situations, using room labels for simplicity, a living room, kitchen, bedroom, study, and dining room emerge from the results. It is possible also to recognize a distinction within the kitchen of a utility room and a cooking facility. In the study area, desk-related activities can be distinguished from activities more related to recreation and music.

Nishihara's statements are therefore not found to have empirical support when modern Japanese apartments are used to generate data. His ideas are thus either an abstraction based on general ways of thinking about Japanese domestic life or relate only to special houses used by the rich (or poor) in the past, or both. Also note that although the actual furniture in Japanese houses differs from that in the West, the structure of activities it reveals is recognizable. Can similar patterns be established with studies carried out in Britain? To answer this question, a number of studies have been conducted.

The Structure of Living Room Situations

Tagg (1974) asked undergraduates in Scotland what activities they did in which room in their house. He obtained a similar structure to that found in Japan. In a more recent study, Kimura (1982) looked at English houses. In particular, he became interested in the curious British institution of the living room. He approached 100 households in the Guildford area, gave them a list of activities, and asked how frequently they were likely to occur in their own living rooms. Using the same procedure as for the Japanese data, Kimura found a clear distinction between general activities likely to occur in most living rooms and thus seemingly compatible with other activities and more specific activities likely to differentiate between living rooms. He thus found evidence for a pattern of place rules being used. It was possible to distinguish living rooms on the basis of whether they were more likely to house such activities as eating, or studying, or listening to stereo, or cleaning, or making things.

A generalized schematic representation based on the MDS analyses referred to is presented in Figure 9-1. The basis of this representation is that the closer together any two activities are in the diagram, the more likely are they to occur in the same locations; that is, the more compatible are their place rules. The diagram's circular structure is a product of the essentially qualitative distinction between the activities

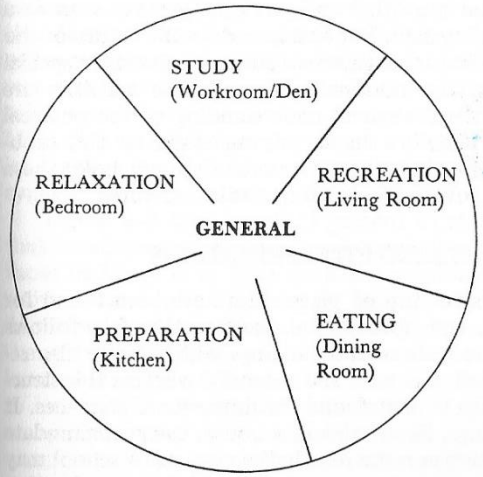

Figure 9-1. Schematic Representation of Domestic Activities and Their Place Compatibilities, Derived from MDS Analyses

rather than a distinction based on quantitative dimensions. Figure 9-1 thus parallels such representations as Munsell's color system (see, e.g., Boyce 1981, 12) in which hues of colors form a circle going through blue, purple, red, yellow, green, and back to blue. In Munsell's circular representation, the direction from the center of the circle to its periphery represents increase in chroma, the grey combination of all colors being at the center and the most colorful colors at the edge. In the schematic representation of activity compatibilities in Figure 9-1, the general activities that can occur anywhere are at the center and the highly place specific activities are around the circumference of the circle.

The schematic summary of the ways in which activities are distinguished from each other by rules relating to where they are likely to occur has interesting implications for which combinations of activities are most feasible. Activities close together in the diagram are potentially more place compatible than are those further apart. For example, certain arrangements can be easily accommodated—the living/dining room; the study/living room; the study/bedroom. The further away any two situations are from each other in this model, the more likely they are to be difficult to coalesce. It can thus be hypothesized that sleeping and eating or studying and cooking in the same space are more likely to be problematic. These hypotheses are open to direct empirical test.

The schematic diagram has other uses, especially when seen as a summary model of a social system. For example, does the nature of the general activities in the center change across cultures? Are there special patterns of coping when the notionally incompatible activities are forced together? How do participants' understanding of the physical structure of place-specific activities shape their use of spaces? One problem now is to find situations in which the model does not hold; these are likely to be situations governed by different rule structures.

THE STRUCTURE OF BUILDING INTERPRETATIONS

Similarities between the structure of place rules have been found for living rooms, apartments, and houses. The question therefore follows whether differences at the scale of the buildings within a city also relate to a general conceptual structure, and secondly, whether this structure bears any relationship to that found for domestic experiences. It can be argued that buildings, like rooms in a house, can accommodate combinations of some activities more readily than others. A school may not be expected to house activities associated with blocks of apartments, whereas it might be expected that offices and factories were similar to each other. One important issue emerging here is whether building designs represent the range of compatibilities of activities the buildings accommodate. Do architects make a university look more like an office block than a school because they are referring to a structured relationship between the rules governing the use of those places?

One direct way to study this is to show people pictures of buildings and to ask them what the buildings are and then to derive correlations from the resulting agreements and disagreements. In other words, illustrations typically thought to represent similar types of buildings can be placed together in some multidimensional space. Young (1978) carried out such a study in Britain, with a number of refinements; complementary yet independent studies were carried out by Groat (1982) in California and by Krampen (1979) in Germany. These studies reveal an organized, structured relationships between what buildings look like and the types of activities and institutions those buildings are expected to house. In effect, these studies show that a building's physical form can indicate the type of role/rule structures governing the patterns of behavior in the building.

A clear illustration of how the interpretation of buildings has a coherent structure can be derived from Young's (1978) study. He asked people to produce drawings representing each of six typical types of buildings. He then showed these drawings to another group and asked them to guess which types of buildings they were. Each drawing was scored on the basis of the accuracy with which people recognized its creator's intentions. The scores were used to produce an MDS configuration, as shown in Figure 9-2. In Figure 9-2, sketches of representative drawings have been placed at points in the two-dimensional, computer-generated space. In the original computer printout, every drawing was represented by a number. However, the results are more obvious when a sample of the numbers are represented by drawings. As in other MDS diagrams, the closer together any two drawings are, the more similar are they. In this case, the more similar are the assignment of building types to them by the respondents.

Figure 9-2 thus reveals a pattern of expectation of the situations that buildings may house. The pattern is reflected in the physical form those buildings take. Like the domestic activities in Figure 9-1, a qualitative order is also apparent in Figure 9-2, from houses to offices to factories to schools to churches and back to houses. Young used only these six building types in his study so it is an open question as to the location of such other places as hospitals, shops, traffic terminals, and so on. Note, however, that in using the same six building types in Germany, Krampen (1979) produced a similar structure. The only difference was that schools were closer to offices than to factories, presumably indicating something about cross-national differences in attitudes to education.

A question for future research is whether the structure emerging from the studies of buildings bears any relationships to the patterns found for room activities. Two general hypotheses underlie this question:

1. Does the central focus of each pattern of activities in a place relate to each component of the overall structure of building types?
2. Does the pattern of building types reflect, or parallel, the pattern of activities in the home?

Support for each hypothesis would have wide-ranging implications for both theory and practice.

THE EXPERIENCE OF PLACE

Activities and physical description are only two components of places. A third component can be described as the feelings a person has about a place. The most direct way this can be articulated is to ask a person how satisfactory a place is, the extent to which he or she is attracted toward it. Despite the limitations to what people can put into words, either due to their ability to verbalize their reactions or their willingness to publicize private feelings, using language to describe places is such a developed activity in our culture (as revealed by earlier reference to Proust, Drabble, and Milne), that asking people about their delight or distaste with particular places is often the most fruitful starting point

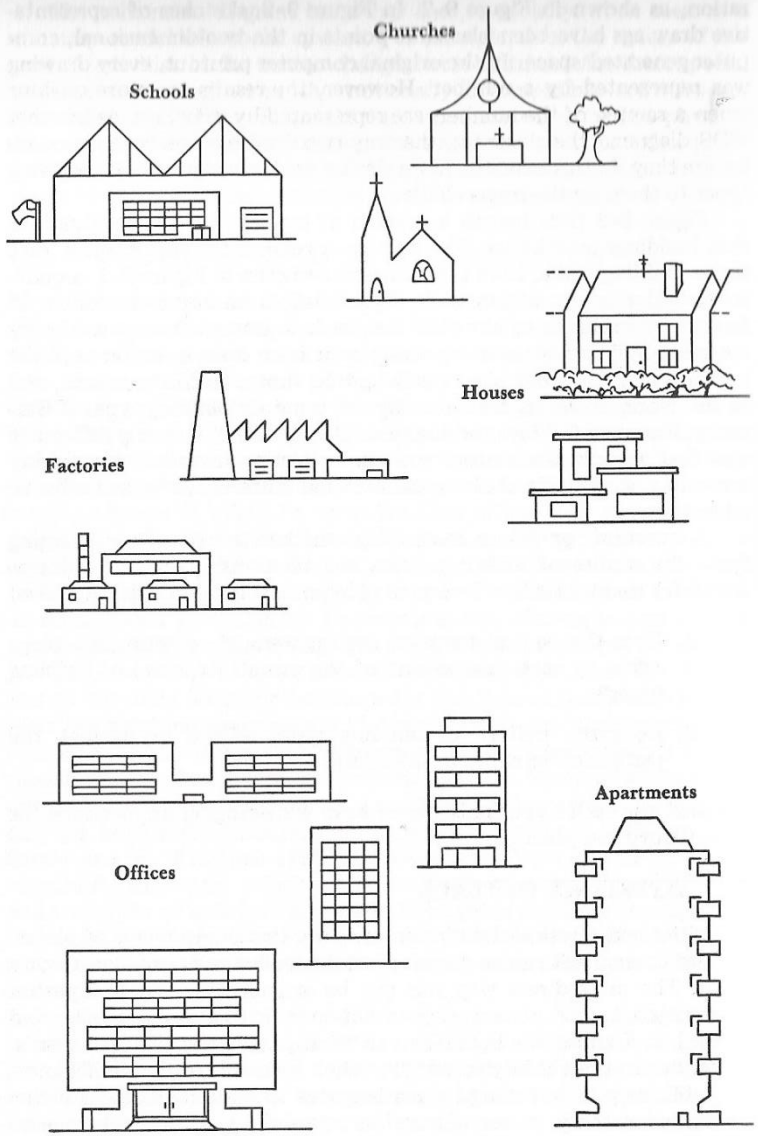

Figure 9-2. Representation of MDS Analysis of Building Types (after Young 1978)

for exploring the success or failure of place uses or place forms. But even if a nondirective, less interventionist approach is taken to place evaluation, as in Bechtel's (1982) ecological explorations, or the studies of room furniture discussed earlier, the affective component of place experience is still implicit.

Place satisfaction provides a valuable key to understanding the structures described so far. The patterns of rules existing for places are rules created to enable people to live a pleasant, acceptable, comfortable existence. If the rules did not facilitiate the satisfactory use of a place, they would not persist. We therefore need to know more about the structure of satisfactions people have with their places because these attitudes are a guide to the motivations leading people to enter into the sorts of informal social negotiations and contracts that make place rules possible. In a sense, any discussion of the social psychological principles making up the structure of people's experiences of places must be complemented by the individual motivational components that provide the organizations of the objectives or intentions people have in using places.

A number of studies carried out within the framework considered here (Kenny and Canter 1981; Canter and Rees 1982) indicated the consistency with which people use the physical surroundings to help them achieve their objectives within that situation. Also consistent is that the core objectives characterizing an individual's interaction pattern in any place are distinct from one place to another. Focal processes thus seem central to place satisfaction. For example, in housing, the general pleasantness and welcomingness of the house frequently enshrined in the quality of the living room appears to be crucial (Canter and Rees 1982). Other facilities, such as the heating system or the amount of space for parking, are ancillary to this core construct. If, on the other hand, a hospital is considered, it is found that the patient-nurse contact, particularly at the bedside, forms the central core for a nurse's satisfaction with a hospital ward (Kenny and Canter 1981).

A second recurrent finding is that the structure of the facilities ancillary to this central core is at least threefold, dealing with:

1. Social issues; in other words, contacts with other people or displays made for public consumption
2. Issues to do with the amount of space available; and to do with
3. Services provided, not necessarily based in one location; the fabric or infrastructure making the place possible.

These aspects of satisfaction with a place imply a model of people as both social and having a physical existence. They must be accommodated in a certain size space with particular properties and a particular environment created by the services. There is thus an implication that

people are motivated both by their social existence and their existence as physical objects.

Roles and Satisfaction

If it is accepted that people are part of a social context in which they are trying to achieve acceptable levels of satisfaction by interacting with other people in particular places, then it is clear that their roles in those places and how they interact within them will differ from person to person. It is therefore feasible that the type of satisfaction they will have with a place will differ according to their role in that place.

The term *role* is potentially ambiguous. I have attempted to clarify it by writing about an environmental role (Canter 1977)—the pattern of interactions a person has in any particular place. Elsewhere, I summarized a number of studies clearly showing that the pattern of interactions a person has in a place will relate to his or her place satisfaction (Canter 1979). One study, for example, illustrated the similarity and differences between different male inhabitants of a school who were asked to evaluate that school (Gerngros-Haas 1982). Her results showed that the school parts to which the individual has access or his responsibilities within the school distinguish him from others in terms of his evaluation. Indeed, the more difference between people in their environmental role, the more likely they are to have differing satisfactions with their settings.

What, then, are the implications of role differences in satisfaction for the structures of rules in different places? One type of answer can be drawn from a study by Canter and Walker (1978). In England, Walker interviewed all people involved in creating a public housing estate, asking them what their major concerns about the housing estate were. She then examined the similarities and differences among individuals on the basis of their concerns. Some people were concerned with the building's administration, some with the building fabric itself, and some with it as an aspect of the suburb's housing requirements. People also differed in terms of how much interaction they had with the actual building. Clearly, the rules they emphasized about the housing facility's creation differed because of their different types of interaction with the entity being produced. The whole notion of *housing* meant something different to each role group.

BRIDGING SOCIAL AND ENVIRONMENTAL PSYCHOLOGY

In summary, this chapter argued that both environmental psychology and social psychology have suffered from an inability to accommodate effectively the physical surroundings in their formulations. The developing importance within social psychology of the study of situations, when taken together with the models of place experience presented here, probably provides fruitful bases for developing bridges between social and environmental psychology and, in so doing, provides a more effective role for the physical components of place within social and environmental models.

The experience of place has been characterized as having three integrated components: activities, evaluations, and physical form. The system of experiences of any given place brings these components into interaction with each other because of the rules people recognize for the use of places. These rules are both a function of the role a person has in any given place and are motivated by a person's desire to achieve role-related objectives. The extent to which people feel able to do this is indicated by their evaluation of a place.

The framework outlined here, then, draws attention to the interrelationships between:

1. Rule-guided place use
2. The roles people have in those places
3. Place evaluations
4. The structured meanings of the physical forms of places.

Much empirical and theoretical work must be done to elaborate fully and to clarify this framework, but the consistencies to which it has already pointed are encouraging. To conclude, this chapter considers the basis this framework provides for integrating developments in social and environmental psychology.

Social Skills and Place Experience

Before considering some of the more general theoretical bridges now possible, a more specific link to understanding social skills is of interest. Argyle et al. (1981), in particular, argued that understanding situations has much to offer to social skills training. He makes it clear that being able to perform social skills effectively involves recognizing a particular situation's structure and the roles within it.

One difficulty with a strictly situational approach is that the variability and changes characteristic of situations have led to an inability to provide an acceptable classification scheme for situations. Thus, much social skill training has focused on particular and specific events, such as how to be assertive when told to work during a lunch break, or how to apply for a job on the telephone (cf. Wilkinson and Canter 1982), or how to greet people. Of course, our understanding of social skills has developed rapidly over the last few years, as Trower discussed in chapter 7. Until some superordinate categorization is available of the

contexts in which social skills occur, there is the risk that people's training to cope in one place will not necessarily transfer to other places.

It is therefore tempting to ask if the overall structures of places illustrated in Figures 9-1 and 9-2 might provide the basis for classifying the broad types of social skills people must master to survive in society. Indeed, have social skills trainers tended to concentrate on living room skills at the expense of bedroom skills? Or, at a larger scale, have domestic social skills been emphasized to the detriment of social skills in offices or factories?

In raising these questions, it must be emphasized that the integrated systemic nature of our place experience precludes the notion that people are different types of beings in different places. Analogous social and psychological processes run through all place experience. But even at an elementary level, it is apparent that a person's ability to comprehend a place's social structure from its physical form and the location of people within it, as well as to recognize the role possibilities provided by how the space is used, contributes directly to the person's skill in performing effectively in that place.

This chapter suggests two more specific sets of hypotheses beyond the general guidance that might be taken from a place perspective. First, if the qualitative relationships represented in Figures 9-1 and 9-2 are valid, then is the transfer of social skills more effective if the places between which the transfer is made are qualitatively similar? For example, are people who are socially effective in a domestic setting more likely to be effective in an office than in a school? Secondly, are people's skills general or place specific?

Two subsidiary questions arise here. One is whether the development of skills grows from one specific place, such as the home, slowly encompassing all the types of place of which a person gains experience (moving around the periphery of Figure 9-2, say), or whether people develop a general level of social skill that becomes differentiated over time (starting from the middle of the circle). The second subsidiary question is whether there is a radical difference in gaining a command of general social skills (at the center of Figures 9-1 and 9-2) when compared to how people gain a command of place-specific social skills.

Whatever the answers to these questions, and whether the place perspective is shown to be valuable in helping us understand social skills and develop ways of training people in them, it is clear that exploring the possibilities for such links will result in a clarification of both social skills and the psychology of place.

Some Bridges

As recent books have revealed, many students of personality differences now accept that much of human behavior can be explained only if the interaction between a person and the situation in which he or she finds himself or herself is also considered; the P × S debate (Forgas 1979; Ginsburg 1979; Harvey 1981; Krasner 1980; Magnusson 1981). That this development is facilitating the broader uptake of an environmental perspective is shown directly in chapters in these books by researchers recognized in environmental psychology (e.g., Craik 1981; Stokols and Shumaker 1981). This chapter is therefore one of a growing number of bridges and it is therefore probably valuable, finally, to identify the links that the place perspective outlined here appear to offer for future research.

1. *The social texture of places.* In his overview of emerging strategies in social psychology, Ginsburg (1979) emphasized the "meanings of actions, events and settings." Harré (1979) brings this closer to the place perspective by discussing the "social texture of space and time." There thus appears to be a growing acceptance that our experience of the physical world is characterized by the assignment of meanings to locations. These meanings incorporate expectations about role-rule relationships and the resulting pattern of activities. It is also clear that to operate within these places, we must be able to recognize the place rules and roles guiding patterns of place use.

Future research could explore what is expected of different classes of places and how understanding different physical forms contributes to what is expected of various role performances. Further, if the setting appears at odds with the patterns of behavior anticipated for other reasons, what coping strategies do people adopt for dealing with these discrepancies? Stokols's (1979) congruence analysis of stress showed some theoretical developments that may help answer this question.

2. *Place cognition.* Harvey (1981) saw the integration of environmental concepts into many areas of psychology as inextricably linked to understanding cognitive processes. This viewpoint can be supported directly from the environmental psychology literature by how environmental cognition studies played a predominant role in the field's development (Russell and Ward 1982). The place framework adds impetus to this development by highlighting the contribution an understanding of physical form and location makes to understanding the social behavior that physical form houses. If a place always has a social as well as a physical component in cognition, then the student of place experience cannot afford to ignore developments in either social or cognitive psychology.

3. *Place and situation prototypes.* More specifically, the suggestion that places form units of experience has interesting parallels in Nancy Cantor's (Cantor 1982) argument that most people understand behavior by drawing on a categorical structure of situations. In essence, her

argument, drawn from cognitive models in psychology, is that people use prototypes of situations to the extent that a list of consensual situation prototypes can be presented. This suggests two questions in our current framework. Are there identifiable consensual place prototypes? If so, how do they relate to situational prototypes? The question of the structural relationships in each prototype group and between groups is also of interest.

The importance of answering these questions can be gauged from the paradox that she recognizes of people being able to articulate situational prototypes but not appearing to draw on them directly when interpreting others' behavior. Perhaps by changing the level of analysis from situations to places, both in terms of prototypes and evaluated patterns of space use, a coherent perspective complementing her "person-oriented" resolution of the paradox can evolve.

4. *Places and social episodes.* When focusing on behavior patterns in a place, the significance of the sequence and structure of those patterns (their episodic nature) becomes paramount. Forgas (1979) mapped out the issues to consider to understand social episodes. He recognized directly that certain "physical components of the environment have a disproportionally important role in the definition and regulation of the interaction episodes occurring within that milieu" (46). He also saw the environment's symbolic meaning as a major mechanism by which it plays its role. However, he virtually restricted his conceptualization of the physical environment to "physical props and furnishings." He moved from what he called "global environments," such as drug stores or residential treatment institutions, at one scale to white coats or chair arrangements at the other. As a consequence, he incorporated the organizational environment either as the contribution to social episodes from the global scale or as symbolic markers giving information about who is allowed to sit where.

The examples of social episodes in buildings on fire illustrate how Forgas's valuable insights can be extended. It was argued that in a home or a hospital, the pattern of rules as to who should do what where, together with the related demarcation of roles, gave rise to and were facilitated by consistent patterns of place use. Thus, during a fire, the social episodes were a direct product of the existing patterns of place behavior. We must know more, of course, about how place rules and social episodes complement each other. The question of whether different types of place tend to house episodes with different structure is also raised.

In some types of place, the appropriate physical form of a place may directly parallel the structure of its characteristic social episodes. For example, as seen in Rosengren and DeVault's (1963) consideration of an obstetrics hospital, which characteristically houses episodes having a distinct sequential order, it may be that understanding how the physical layout represents and facilitates this sequence helps us understand the stages in the social episodes occurring there.

This overview of a few directions in which bridges between environmental and social psychology can be built by using the place perspective shows that much must be done. Perhaps the strongest motivations for carrying out these tasks are that the curious distinction between environmental and social concerns will cease to exist and that some other divisions in the psychological literature, such as between the social and cognitive areas, may also be challenged.

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