# Place attachment and sense of belonging

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## Keywords

Workplace, Employees, Stress, Environmental management

#### **Abstract**

Examines the concept of "place attachment" as defined in various disciplines and develops an effective conceptual approach that can be applied to facilities management. Describes the development of a model-matchmaking process adapted from Passini's model of cognitive mapping. Findings that the emergence of the new economy is undermining our ability to form attachments with people, places and companies. However, one of the unintended effects of this is that it has strengthened the value of place and aroused a longing for community. Moreover, loyalty to an organisation is increasingly determined by social and place attachment. Proposes that further research needs to be undertaken to "engineer out" the negative impacts of flexibility associated with loss of place. States that place attachment presents a challenging view of the world that is contrary to all the received wisdom in facilities management, where flexibility has always assumed an unchallenged position in relation to buildings and people. Concludes that this research area presents many pragmatic design and operational questions for facilities managers.

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Facilities

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## Introduction

In the provocative book by Sennett (1999) *The Corrosion of Character* he argues that companies' ever-greater pursuit of flexibility may not make sense for human beings. He challenges whether people want to be free agents or virtual employees and suggests that the demands of flexibility may be eroding human character. Facilities managers have always had a key role to play in supporting flexibility: both in the design of buildings and the demands for change made on employees. Can and should the natural human condition for place attachment be protected in an increasingly turbulent work environment?

Organisations are often forced to modify their physical environment and relocate employees in response to new business strategies. However, the impact of these changes on employees is rarely considered. This research considers the attachment employees have for their established workplace. It is argued that this attachment may influence people's response to the new environment and the move process. Issues of place attachment, personal expectations and perceptions can affect a person's response to a changed environment, which may be at odds with a strong organisational imperative for a move. To date, however, our understanding of how these factors relate to each other is limited. This study seeks to expose the gaps in our understanding of "attachment" as a phenomenon. It describes the methodology that will be used for a subsequent case study that attempts to quantify and qualify the phenomenon of place attachment in the workplace. In particular it suggests possible mechanisms for using the physical environment as a way to increase our sense of attachment in the workplace.

Organisations often make changes to their physical environments in response to a corporate need, which may be the result of reorganisation or downsizing, merger with another company, product development projects or expiry of a lease. However, little thought is given to the ways such changes may be viewed by the employees, and the consequences of such changes (Mazumdar, 1992).

Despite the best efforts of corporate managers, 25 per cent of major change initiatives fail because employees are fearful of and resistant to change. Executives and employees see change differently. For senior managers, change means opportunity; but for many employees, change is seen as disruptive and intrusive (Strebel, 1998).

Relocations and refurbishment are viewed by facility managers as an opportunity to resolve growth and space constraint problems. Yet, to employees, it can be seen as harmful, disturbing

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and emotionally alienating. When viewed as environmental deprivation, such placements can have serious negative and emotion-laden consequences (Mazumdar, 1992). It is well known that people resist some types of change but not others. The challenge is to understand better the conditions under which people will or will not resist change (Becker, 1990).

Many organisations are acutely aware of the costs associated with high staff turnover, staff alienation, and recruitment. The cost of not overcoming the resistance to change can be enormous. It can include:

- · increased absenteeism;
- substantial reductions in productivity;
- low morale and a poor attitude toward the company that may persist for months and years;
- an increase in work errors;
- the loss of experienced, hardworking people; and
- attempts to sabotage the move (Attwood, 1996).

It is pointed out in change management literature that employees resist change as a consequence of poor communication, non-participation and non-intervention. It is also suggested that, whatever the reasons, resistance to change is often caused by lack of information about:

- · why the relocation is happening;
- when it will happen;
- · where the new office will be;
- what will happen to the workers' jobs and relationships; and
- how the company plans to deal with the relocation (Attwood, 1996).

Routinised interactions in a given location typically result in place attachment. An emotional bond is formed by an individual with a physical site. Having developed a "secure" place attachment, the loss of such an attachment creates a stressful period of disruption. This is followed by a postdisruption phase of coping with lost attachments and the creation of new ones (Brown and Perkins, 1992). It is important for those who have been given the responsibility for implementing new business strategies (that invariably involve an appropriate space planning strategy) to know employees' beliefs. The move is often a "loss experience" for employees. The focus of this research is to expose the current gaps in our understanding of "attachment" to previous workplaces as a phenomenon.

The research considers how new workplace designs can interfere with the basic psychological needs of people to remain attached.

Much of the previous research about work environments is largely defined by the outcomes and facets of the physical environment. For the individual employee, such research has focused on the outcomes of satisfaction and performance and their association with the ambient environment and workstations. For interpersonal relationships, it has focused on the outcomes of communication and group formation, cohesion, as well as their relationship with features of the workspaces and layout. For the organisation, the focus has been on organisational effectiveness and its association with the features and layout of buildings (Sundstrom, 1986).

Beyond work stress, privacy, territoriality, and social interaction studies, the scope of previous research does not include the psychological influence of attachment to the workplace, nor does it deal with its impact on the health of employees and its influence on staff absenteeism and turnover

Issues of place attachment, personal expectations and perceptions have a significant bearing on a person's response to a changed environment, even when a move provides a path for economic improvement. To date, however, our understanding of how these factors relate to each other and place attachment is rather limited in move projects in organisations.

The research is particularly focused on the concept of place attachment to understand better the person's response to a changed environment. In particular it suggests possible mechanisms for using the work environment as a way of accelerating our sense of attachment in the new workplace.

After describing the aims, objectives and the context of the study, the paper will reconsider previous work done on place attachment phenomenon. Empirical research findings are drawn from a broad-ranging literature review. The resulting research model will be applied to the proposed case study and the validity of this model assessed.

# Aims and objectives of the study

Change and transition recur in the lives of people and are part of human development. Although for some people change is positive, for others it is difficult to accomplish without disruption and distress (Fisher and Cooper, 1990).

The main aim of the study is to determine the impact of place attachment in employees' perception of change. It seeks to describe the socio-psychological and behavioural effects of

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changes in the physical environment on employees.

The second aim of this study is to explore the meanings such adjustments hold for employees exposed to changing environments.

The third aim is to examine the extent of employees' place attachment in old and new environments. This involves isolating aspects of the person-place transactions which have affected their ability to detach from the old environment and attach to the new. The objectives of the study are to:

- expose the current gaps in our understanding of "attachment" as a phenomenon;
- investigate human reaction to change in the environment;
- measure the significance of this reaction to business performance; and
- obtain tools for communicating concepts of change management.

# **Context of the study**

Changes occur in companies as a result of implementing new business strategies, and organisations often make changes to their physical environments in response to this need. Employees show reactions to various kinds of environmental changes in their offices. But how do we define and measure such reactions?

Stokols *et al.* (1990), cited in Fisher and Cooper (1990), argue that the pattern of move outcomes is more closely tied to the specific micro- and macrolevel changes associated with a move than to the simple physical distance between the old and the new environments.

They suggest that move types can be grouped according to certain taxonomic dimensions such as the "micro" or "macro" nature of the changes associated with such moves.

Micro-level changes include those that are proximal to a single worker, or small work group, such as shifts in the level of physical enclosure, spatial density, ambient noise, illumination quality and overall comfort of one's immediate work area. Macro-level changes include those that relate more generally to features of the entire worksite and are less directly associated with particular workstations or work areas, such as the aesthetic quality, technological sophistication, services and amenities of an office building (e.g. its proximity to public transportation systems, parking facilities, restaurants and convenience stores).

The analysis of the relationship between people and their physical settings varies depending on whether the unit of analysis is the individual, the work groups and interpersonal relationships, or the entire organisation. These three units of analysis are interrelated in that individuals participate in interpersonal relationships and interpersonal relationships are elements of organisations (Sundstrom, 1986). However, the units of analysis operate within the context of physical environments that differ in size and scale. As a consequence, each unit of analysis involves different outcomes and different underlying processes. This study considers the individual employee as the unit of analysis.

Organisations are changing and the dynamics of organisational change are still not well understood. In particular, a question for the psychology of the workplace concerns the role of the work environment in the evaluation of organisations. Sundstrom (1986) argues that the evaluation of offices seems to grow out of the organisational change; but perhaps some change also grows out of the environment. To identify the most pivotal or influential elements of (physical) environmental change, it is necessary to separate the effects of organisational change on employees. The issue of organisational change, including downsizing, reorganisation, cut backs, reshuffling, and their relation to change in the environment, though important, are not central to the scope of study. The study does not specifically address change in organisations, but what employees feel when faced with changes in the physical environment. Environmental changes may, on occasion, be associated with organisational change, but environmental change can occur even when there is no associated organisational change.

However, there are many types of organisation: it stands to reason that the physical work environment will have a different impact on different types of organisation. The organisational features are the mediating factors that influence the relationship between organisations and physical work environment. Mediating factors include business environment, organisational culture, structure, standards, procedures, politics and management decisions (Lauden and Lauden, 1999). The features of organisations exert a powerful influence on precisely how the physical environment can and will be used in an organisation. As organisations are so different, it is wrong to conclude that physical environment and place attachment will have certain specific impacts on individuals in all organisations. Further analysis of specific work groups in organisations is required to understand these variations further.

To forge place attachment theory with practice, the research will address a case study enabling us to quantify and qualify the phenomenon of place attachment of employees on a micro level of change in the physical environment.

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# Previous research on place attachment

## What is place attachment?

The psychology of place is an emerging area of research that explores the association between individuals and their immediate environment setting. The psychology of place assumes that individuals require a "good enough" environment in which to live. People are linked to that environment through three key psychological processes:

- (1) attachment;
- (2) familiarity; and
- (3) identity.

Displacement breaks these emotional connections. The ensuing disorientation, nostalgia, and alienation may undermine the sense of belonging and mental health in general (Fullilove, 1996).

Familiarity refers to the processes by which people develop detailed cognitive knowledge of their environs. Place identity is concerned with the extraction of a sense of self, based on the places which one occupies in life (Fullilove, 1996).

Although the words place and setting have generally been used interchangeably to refer to a person's immediate location and physical surrounding, they should be distinguished from one another so that we can understand their effects on our experiences (feelings). Settings are the external environment surrounding a person at a particular location and time. They are made up of both physical (spaces, furniture, fixtures ... etc.) and social features (social institutions, relationships, organisations). One clear analogy is a theatrical stage set, in which the physical parts (stage floor, lighting, backdrops) and social features (roles, scripts, relations among the cast members) combine to influence the behaviour and experiences of both actors and audience (Steele, 1981). Place attachment is the pattern of reactions that a setting stimulates for a person. These reactions are a product of both features of setting (what settings are) and personal processes (what the people bring to it) (Figure 1).

Milligan (1998) defines place attachment as: [...] the emotional link formed by an individual to a setting that has been given meaning through interaction, comprised of two interwoven components: the interactional past and the interactional potential of the setting".

Interactional past refers to past experiences: in other words "memories" associated with a setting places have the power to recall emotions and stir memories that have been dormant while the person was away from the place.

Interactional potential refers to the future experiences imagined and anticipated to be possible in a setting, or in other words

"expectations". An individual's experiences within and in relation to a specific setting, result in a set of expectations for future interactions in the setting.

In forming people-place interactions, what people bring to their setting is equally important as to what settings are. A particular setting becomes place to an individual specifically because of the activities that have occurred within its boundaries, which then come to be associated with the setting. In a pattern of time, this process creates a history tied to the experiences of people that have occurred within the setting. At the same time, specific features of the setting shape, constrain and influence the people's perceptions and expectations for evaluating new settings (Milligan, 2003).

Setting acts also as a facilitator of needs. Beside past experiences of people in setting and future expectations they build from their perceptions, the evaluation of the setting that what extends the setting answers people's needs plays a role too. Stokols and Shumaker (1981) suggested that the degree to which a particular setting satisfies the needs and goals of an individual determines his or her judgement of its quality. This quality judgement regulates the attachment to a place.

While psychological factors of people determine the cognitive process of attachment to place, the needs of people establish the emotional and symbolic content of the bonds.

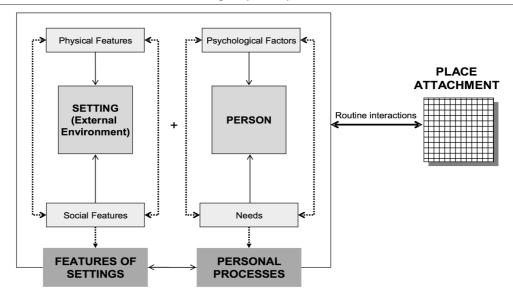
Within the past few years, place attachment has been studied by scholars from several disciplines such as: anthropology; architecture; family and consumer studies; folklore, gerontology; landscape architecture; leisure and recreational studies; marketing; psychology; sociology; social ecology; and urban planning. This diverse research is bringing to bear different philosophical approaches, theoretical formulations, and research methodologies. Perhaps the most important challenge for researchers in this area of inquiry is to integrate different viewpoints and approaches (Altman and Low, 1992).

Guillian and Feldman (1993) group the differences in the researchers' definitions of place attachment according to several characteristics:

- The content of the bond: affective, cognitive, and/or symbolic.
- The valence of the bond: positive or negative.
- The specificity of the bond: some researchers choose to consider attachment as a broad concept, a super-ordinate category whereby effects are designated as part of an entire system such as "set of feelings". Others seem to consider attachment a specific affect that is distinct from other kinds of affects that are part of the same system.

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Figure 1 Place attachment, the link of features of setting and personal processes



Source: Adapted from Steele (1981)

Problems arise if we accept a broadened definition of place attachment. Such definitions of the phenomenon become so general that they fail to explicate the nature of the cognitions and effects that characterise psychological bonds, linkages, ties and so forth with places. It also obscures the conceptual distinctions between different affective bonds and their dynamics.

Numerous concepts have been used to refer to the similar or broadly related notions: rootedness, sense of place, belongingness, insideness, embeddedness, affiliation, appropriation, commitment, investment, dependence, identity among others. This leaves us with the difficult question: are these researchers observing and theorising about the same phenomenon?

As a result, the role of place in people's lives is more complex than we understand. Attachment can be viewed as a multilevel person-place bond that evolves from specifiable conditions of place and characteristics of people. This fact has implications for the attitudes and behaviours of individuals toward their socio-physical environments (Low, 1992).

Place attachment study propels us away from the sentimental aspects of attachment to a more objective viewpoint of what makes every person develop a relationship with his/her environment. There exist two camps among those investigating the concept. In one are those who view place attachment from an emotional perspective; in the other are those who view it from a more objective behavioural and cognitive perspective (Giuliani, 2002). These camps are not mutually exclusive.

The literature has identified numerous ways in which the interrelationships between people and their physical environment arise. Many such studies have focused almost exclusively on home environments and neighbourhoods. Relatively few studies have tried to provide an understanding of the view employees have of the physical environments in the office. Indeed, we know little about work environments and how they compare to the home environment.

# The process of place attachment

Place attachment operates in the background of awareness. It is difficult to assess. Shock of disruption helps to clarify what has been disrupted. A study of place attachment starts with an understanding of disruptions of place attachment.

Repeated interactions in specific settings including organisational locations typically result in place attachment. An emotional bond forms between an individual and a physical site. After the development of secure place attachments, the loss of normal attachments creates a stressful period of disruption followed by a post-disruption phase of coping with lost attachments, followed by the creation of new ones (Brown and Perkins, 1992).

Place attachments develop slowly but can be disrupted quickly and can create the need for a long-term phase of dealing with the loss and repairing or re-creating attachments to people and places. These three phases are interdependent, as qualities of the initial attachment or disruption can ease or exacerbate the stress of loss and difficulty of re-creating attachments. Much of the challenge facing those with disruptions of place attachment

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is to negotiate reconciliation between the past (what has been lost) and the future. Certain aspects of pre-disruption attachment may forecast the extent and severity of the disruption and the availability and effectiveness of coping mechanisms (Brown and Perkins, 1992). Instead of making specific claims, we will simply point out that there are discernible patterns across the phases of disruption (Figure 2).

There are two important studies that specifically address the process by which place attachment is formed. Fuhrer and Kaiser's (1992) work entitled "Attachment to the home place: the emotional bases" is important as it explores the aspects necessary for the formation and maintenance of place attachment.

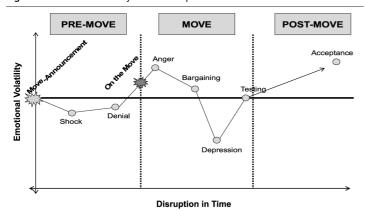
Fuhrer and Kaiser (1992) advanced the field of people-place relationships by thinking of place as a facilitator of emotional needs. They adapted Bischof's model of social motivation which suggests that:

... four emotions represent the core of social regulations: security, arousal, autonomy and libido. Thus, places are experienced in terms of these emotions and represent the basis for regulating both identity and social interaction (Fuhrer and Kaiser, 1992).

They developed and tested a model involving three processes of place attachment. Place was described as a facilitator of emotional needs, based on the emotions of security, autonomy and arousal. Security is defined as the perceived freedom from risk or danger on a physical and/or psychological level within the place. It includes familiarity of place, a sense of community support, a sense of belonging and feeling of permanence. Autonomy is defined as self-determination, being independent, unrestricted. This includes:

- a sense of ownership;
- the ability to regulate interactions with others (i.e. privacy regulations);

Figure 2 Emotional volatility versus disruption in time



Source: Adapted from Bourne and Bourne (2002)

- a sense of control and power; and
- the ability to initiate change.

Stimulation (arousal) is eliciting or accelerating a physiological activity. Significant relationships between social and physical qualities of the home place and of the emotional dimensions were found. The results revealed that these emotional meanings represent the bases of attachment to the home place.

Spellers' (1996) work has expanded Fuhrer and Kaiser's concepts on the aspects of place attachment, including external stimulation, emphasising the importance of appropriation and place congruence. Appropriation is making something part of oneself, often through the process of doing. Place congruence is defined as the psychological state of believing that place reflects the person's identity. There is a close link between appropriation and place congruence. Perceived congruence resulted in active appropriation that in turn increased place congruence. These aspects not only seemed to lead place attachment but also play an important role in order to maintain it. However, she also argues that further research is needed to establish whether these five aspects of place attachment are apparent in other research contexts, such as work environments.

The workplace is a particularly worthy context in which to examine the process of change and transition in relation to place attachment since people spend a large proportion of their waking hours in work environments. Moreover the frequency with which changes such as relocations and renovations occur in these settings continues to increase (Fisher and Cooper, 1990).

# **Analytical approach**

The main strength of the place attachment studies is the variety of approaches that has been taken by researchers. This has led to the examination of the concept from several perspectives. However, this diversity is also a weakness since it has meant that the work lacks coherence.

Previous research on place attachment can be divided broadly into two categories, differentiated by their conceptual focus. For the study of place attachment, while qualitative interviews are the preferred approach for many, others have attempted to quantify place attachment. Such approaches rely on the analysis of behaviours and directed questioning about affect and thoughts pertaining to place.

Place attachment can be thought of as both a product/outcome (i.e. feeling attached) and a process (i.e. reasons for attachment) (Giuliani,

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2002). As a product, place attachment is an emotional bond with a specific place. It is the experience of feeling attached and belonging to a place that can be stated at a point in time. This experience is multi-dimensional. As a process, place attachment is the appropriation of space via involvement with the local area. It is a continuous, dynamic process.

In place attachment studies, cross-sectional surveys and longitudinal studies are the methods used for collecting data. A cross-sectional study is one that deals with status. A longitudinal study is defined as one that is based on repeated measurements of the same individuals over time (Stacey, 1969). Cross-sectional or "conceptive" studies are "psycho- or socio-static", providing a simultaneous and synoptic study of the situation as it is at the time of enquiry. Longitudinal or "prospective" studies are "socio- or psychodynamic" and are interested in change. Only the longitudinal method can show the nature of the growth and trace patterns of change in an individual. It can give a true picture of cause and effect relationships over time (Wall and Williams, 1970). A longitudinal approach is important for work on process and change. The rich data provided by repeated in-depth interviews with employees over a year period will provide an essential source for exploring the process of change.

The proposed model is adopted from Passini's (1992) model of cognitive mapping. Passini suggested that people cycle through a set of decisions using a process of "matchmaking" to evaluate a decision and determine behaviour (Kitchin and Blades, 2002). As place attachment is a cognitive process, matched feedback process explains well how this mechanism works in a changing environment; people cycle through within move (before move, on the move and after move). Our expectation of a future setting is the product of our past experiences. In a familiar environment, a person recalls what should be sensed at a location and this is checked against what is actually sensed. If there is a match, then a planned behaviour is executed as establishing new attachments. If the two do not match, it is problematic; resistance to change is shown. New approaches are needed to manage the expectations and attitudes. It is suggested that once precursors of the previous attachment are identified, they can be used as a mechanism to adapt to new situations and find the match to continue the process (Figure 3).

While defining the attachment one should consider not only cognitive bonds that explain the operational side of it as how the mechanism works to a particular setting, but also the emotional and symbolic content of the bond which covers the precursor of attachments; individual

characteristics influencing attachments; and characteristics of places which influence whether people attach to them. Place attachment is the pattern of reactions that a setting stimulates for a person. These reactions are a product of both cognitive and emotional/symbolic aspects of the bond (Figure 1).

There have been many attempts to conceptualise the process of interacting with an environment and the role of place attachment in determining spatial behaviours. While the previous models provide reflection of the complexity of place attachment, they went no further in providing testable hypotheses that will stimulate research. The proposed model in this study while offering some integration of the processes, concepts, and relationships involved other researchers mentioned it includes predictions that can be tested in an empirical research.

It is wrong to have a conclusion that previous models explaining place attachment are mutually exclusive. On the contrary, they can make up different components of attachment bonds as they place different emphasis on the importance of stability and, therefore, on the consequences of leaving the place. The proposed model takes account of this issue. While the emphasis of the research has been the phenomenological aspects of employees' perceptions of the relocation, by investigating emotional and symbolic bonds, a quantitative survey of explaining the cognitive process of attachment would provide numerical support for the links made between theoretical concepts that arise out of the qualitative data.

This model will be tested on a longitudinal design case to monitor the process of place attachment (and detachment) starting two months before the relocation and ending eight months post-relocation.

# Discussion/conclusion

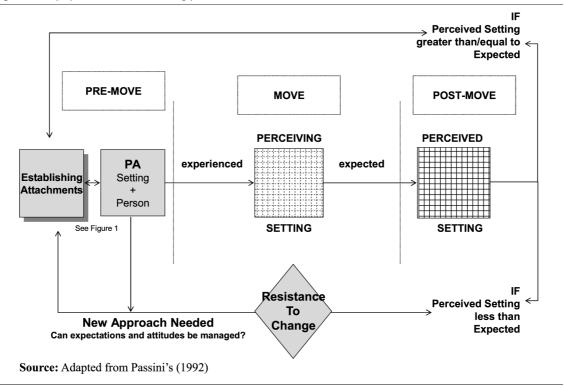
It has been shown that place disruptions (move experiences) interrupt the processes that bind people to their socio-environments. In order to understand the impact of this disruption, one must examine pre-existing conditions that influence the experience of attachments, as well as post-disruption conditions that influence how individuals can cope with their losses and begin rebuilding ties to places and people. The difficulty of coping with loss and re-constructing place attachment is that individuals rarely appreciate the depth and extent of these attachments.

This raises several important questions:

 Do people have place attachments in work environments?

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Figure 3 The proposed model-matchmaking process



- What role does place attachment play in employees' resistance to change in the move process?
- If place attachment exists should it be encouraged and used to better manage change in physical workplace environments?

To answer these questions, further questions need to be asked:

- What is the nature of place attachment and what factors encourage or inhibit its formation and maintenance?
- Does research support the idea of five distinct aspects of place attachment?
- What changes in the physical layout are of importance in terms of their sociopsychological and behavioural impact on employees?
- What changes in behaviour patterns related to relocation do employees exhibit?
- Does an employee's psychological sense of community change over time?
- Do levels of employees' attachment to place change before and after the move?
- Is there a high degree of variation between people in place attachment?

In *The Corrosion of Character* Sennett (1999) expressed the following view:

Recent developments in the working conditions of modern work life have brought increased alienation from work and family, much less job security and a new set of dominant values which elevate the individual and destroy the ties of co-operation, not to mention solidarity".

The emergence of the new economy is undermining our ability to form attachments with people, places and companies. However:

... one of the unintended consequences of it is that, it has strengthened the value of place, aroused a longing for community ... for some other scene of attachment and depth.

If this is the case, how can we recover this sense of attachment through building design?

In conclusion, the study of place attachment in the work environment is important for three reasons. First, it serves to foster a sense of community by supporting the integration of groups in an organisation. Second, it has benefitted the improving attraction and retention of key staff. Third, it helps to identify and reflect the organisational culture.

The question of place attachment has a key role to play in the design of workplaces. Facilities managers, designers and planners need to be aware that people become attached to place and that they are likely to encounter resistance from them. Loss of place in an organisation can be the "psychological last straw" that causes an employee to leave. Given that place attachment is a significant part of the human condition, redesign and relocation solutions should be undertaken in an informed manner. Such solutions should

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attempt to transfer those aspects of the environment that define place attachment.

## References

- Altman, I. and Low, S. (Eds) (1992), *Place Attachment*, Plenum, New York, NY.
- Attwood, D.A. (1996), The Office Relocation Sourcebook: A Guide to Managing Staff Throughout the Move, John Wiley & Sons, Chichester.
- Becker, F.D. (1990), The Total Workplace: Facilities Management and the Elastic Organization, Van Nostrand Reinhold, New York. NY.
- Bourne, M. and Bourne, P. (2002), *Change Management in a Week*, Hodder and Stoughton Edu., London.
- Brown, B. and Perkins, D.D. (1992), "Disruptions in place attachment", in Altman, I. and Low, S. (Eds), *Place Attachment*, Plenum, New York, NY.
- Fisher, S. and Cooper, C. (Eds) (1990), On the Move: the Psychology of Change and Transition, John Wiley & Sons, New York, NY.
- Fuhrer, U. and Kaiser, F. (1992), "Bindung an das Zuhause: Die Emotionalen Ursachen", Zeitschrift für Sozialpsychologie, pp. 105-18.
- Fullilove, M.T. (1996), "Psychiatric implications of displacement: contributions from the psychology of place", *American Journal of Psychiatry*, Vol. 153 No. 12, pp. 1516-23.
- Giuliani, M.V. (2002), "Place attachment", in Bonnes, M., Lee, T. and Bonaiuto, M. (Eds), Psychological Theories for Environmental Issues, Ashqate, Aldershot.
- Guillian, M.V. and Feldman, R. (1993), "Place attachment in a developmental and cultural context", Journal of Environmental Psychology, Vol. 13, pp. 267-74.
- Kitchin, R. and Blades, M. (2002), *The Cognition of Geographic Space*, I.B. Tauris Publishers, London.
- Lauden, K. and Lauden, J. (1999), Management Information Systems, Macmillan Publishing, New York, NY.
- Low, S. (1992), "Symbolic ties that bind: place attachment in plaza", in Altman, I. and Low, S. (Eds), *Place Attachment*, Plenum, New York, NY.

- Mazumdar, S. (1992), "Sir please do not take away my cubicle: the phenomenon of environmental deprivation", Environment and Behaviour, Vol. 24 No. 6, pp. 609-722.
- Milligan, M. (1998), "Interactional past and potential", *Symbolic Interaction*, Vol. 21, pp. 1-33.
- Milligan, M. (2003), "Loss of site: organizational site moves as organizational deaths", *International Journal of Sociology* and Social Policy, Vol. 23 No. 6-7, pp. 115-52.
- Passini, R. (1992), Wayfinding in Architecture, Van Nostrand Reinhold, New York, NY.
- Sennett, R. (1999), Corrosion of Character: Personal Consequences of Work in the New Capitalism, W.W. Norton Publications, London.
- Spellers, G. (1996), "Community in transition", unpublished PhD thesis, University of Surrey, Guildford.
- Stacey, M. (1969), Methods of Social Research, Pergamon Press, Oxford
- Steele, F. (1981), Sense of Place, CBI Publishing, Boston, MA.
  Stokols, D. and Shumaker, S.A. (1981), "People in places: a transactional view of settings", in Harvey, J. (Ed.),
  Cognition, Social Behaviour and Environment, Erlbaum,
  Hillsdale, NJ.
- Strebel, P. (1998), "Why do employees resist change", in, Harvard Business Review on Change, Harvard Business Review Paperback, Harvard Business Review, Boston, MA.
- Sundstrom, E. (1986), Workplaces: the Psychology of the Physical Environment in Offices and Factories, Cambridge University Press, Cambridge.
- Wall, W.D. and Williams, H.L. (1970), Longitudinal Studies and the Social Sciences, Heinemann Educational Books, London.

## **Further reading**

Giuliani, M.V. (1991), "Towards an analysis of mental representation of attachment to the home", the Journal of Architectural Planning Research, Vol., Vol. 8, pp. 113-46.