

## Relating Physical Environment to Self-Categorizations: Identity Threat and Affirmation in a Non-Territorial Office Space

Kimberly D. Elsbach

*University of California, Davis*

I used qualitative methods to explore why some employees working in a newly created, non-territorial office environment perceived that their workplace identities were threatened and used particular tactics to affirm those threatened identities. Findings suggest that the non-territorial work environment threatened some employees' workplace identities because it severely limited their abilities to affirm categorizations of distinctiveness (versus status) through the display of personal possessions. Categorizations of distinctiveness appeared to be most threatened by the loss of office personalization because of three characteristics: (1) their absolute, rather than graded membership structure, (2) their high subjective importance and personal relevance, and (3) their high reliance on physical markers for affirmation. In affirming threatened identity categorizations, employees chose different tactics, in terms of the amount of effort required and their conformance with company rules, based on the acceptability and importance of affirming the threatened categorization.●

Non-territorial workspaces (often termed "hoteling" or "hot-desking" environments) comprise shared workspaces that employees must reserve on a daily basis and completely evacuate, removing all work materials and personal possessions, at the end of the reservation period (Turner and Myerson, 1998). The use of such flexible and non-dedicated workspaces has become increasingly popular in corporate office settings during the past decade (Elsbach, 2004a). In this time period, for example, Anderson Consulting revamped its Paris offices to function as a hoteling workspace for consultants who travel to and from field offices around the world, while British Airways redesigned its London headquarters to function much like an airport, with drop-in workspaces employees may use as they travel through the London area (Turner and Myerson, 1998). Such non-territorial work arrangements remove most physical markers of status and functional group boundaries. As a result, proponents suggest that these office arrangements may enhance cross-functional collaboration, because group members are no longer confined to isolated locations away from other functional specialists, and cross-level interaction, because all employees, regardless of rank, use the same workspace (Zelinsky, 1998). Non-territorial offices are usually designed to utilize physical space more efficiently than traditional offices. A non-territorial space can accommodate between 20 and 40 percent more employees than can a traditional workspace because non-territorial workstations generally do not sit idle as they do in traditional offices (Turner and Myerson, 1998). This efficient use of space allows companies to delay acquiring new space as they grow. A recent set of surveys predicted that the projected benefits of non-territorial workspaces would make them the fastest growing form of alternative offices in the new millennium (reported in Zelinsky, 1998). Another forecast suggested that the number of workers using such alternative work arrangements would double between 2000 and 2010 (JALA International Inc., 2003).

Despite optimistic projections about the positive effects of non-territorial work environments, there is growing evidence

© 2003 by Johnson Graduate School,  
Cornell University.  
0001-8392/03/4804-0622/\$3.00.

●

I am grateful to Joe Porac, Dan Brass, and my three anonymous reviewers for their guidance in revising this paper. I would also like to thank Jamima Iley for her tireless efforts in coding the data, and Linda Johanson for her masterful editing.

### **Identity Threat**

that they have their downsides. Because offices in non-territorial workspaces are meant to be interchangeable, workers lose the ability to personalize and mark the boundaries of their surroundings. Anecdotal accounts and case studies of such depersonalized settings show that many workers perceive these environments as threatening to a sense of distinctiveness and status at work (Vischer, 1999). One of the best-known examples of a controversial non-territorial work arrangement is the New York office of advertising firm Chiat/Day (Zelinsky, 1998). It's clear from an interview with president Jay Chiat, however, that he didn't understand why the 1995 office transformation was so unpopular. In response to early complaints about the new arrangement, Chiat (quoted in Zelinsky, 1998: 72) remarked, "I started to question people to give me logical reasons as to why eliminating offices altogether would be a stupid idea. I got a lot of reasons, but none of them were logical; they were all emotional." He went on to say, "Many offices are structured to answer to people's status and egos. My personal lifestyle was lavish enough that I didn't have any of those needs. I didn't need a great office. I figured if I didn't have an office, no one else could complain about not having an office." His comments suggest that Chiat discounted a connection between the self-concept at work—what I define below as "workplace identity"—and dedicated office space. Ignoring the link between office ownership and workplace identity turned out to be a costly mistake for Chiat/Day. As the head of Carnegie Mellon University's School of Architecture, reported, ". . . it lost its best employees and executives after incessant bickering over ownership of work space. The company has since reinvested in new enclosed workstations that are assigned to individuals and in team spaces that are assigned to work groups" (quoted in Vischer, 1999: 10).

The case of Chiat/Day illustrates how, through the removal of personal offices, "[a] 'non-territorial arrangement' . . . limits the potentially important capacity of individuals to display their individual identities and specialized roles within the group" (Sundstrom and Altman, 1989: 199). Yet outside of a few case examples like Chiat/Day, little empirical research has directly examined these proposed effects of non-territorial workspaces on employees' identities. Moreover, almost no research has examined how employees perceive threats to specific dimensions of workplace identities in work environments that limit the display of personal identity markers. The study presented here attempts to fill that gap.

## **WORKPLACE IDENTITY AND THE PHYSICAL WORK ENVIRONMENT**

### **Defining Workplace Identity**

Workplace identity refers to the distinctiveness and status self-categorizations used by an individual to signal his or her identity in a specific workplace (Elsbach, 2004a). These self-categorizations include both personal identity categorizations (Turner, 1999), which signify a person's intragroup distinctions and status (e.g., "I'm an efficient worker" or "I'm a team leader"), and social identity categorizations (Tajfel, 1982), which signify a person's distinctive and status-oriented affilia-

tions (e.g., "I'm in the top-management team" or "I'm an engineer"). These identity categorizations need not be work-related, however; they need only be used by an individual to define him- or herself at work (i.e., "I'm a parent").

This definition of workplace identity is grounded in several streams of organizational and psychological research. First, it is grounded in research on situated identities (Alexander and Lauderdale, 1977; Ibarra, 1999) and identity centrality (Sherman, Hamilton, and Lewis, 1999), which define identity in relation to context. This work suggests that, according to the context (e.g., work, home, hobbies), the salience and importance of specific self-categorizations that make up a person's identity can vary (Brickson, 2000; Ashforth and Johnson, 2001). For example, at work, one may define oneself primarily based on social identity categorizations such as "sales manager" and "old-timer." In the context of one's hobby of tennis, however, one may define oneself primarily by the personal identity categorizations of "extrovert" and "league champion." Second, this definition of workplace identity is based on social comparison and categorization theories that suggest that identity categorizations confer both status based on the legitimacy and rank associated with a category and distinctiveness based on inclusion or exclusion from specific categories (Brewer, 1991). That is, personal self-categorizations that define one at work say something about how one is distinct and how one ranks compared with other ingroup members, while social self-categorizations that define one at work say something about how one's group is distinct and how one's group ranks compared with other groups (Brickson, 2000). In this definition, status and distinctiveness categorizations are not separate constructs from workplace identity but are dimensions of it. As Brewer, Manzi, and Shaw (1993) noted, both dimensions can influence the value of identities. Finally, this definition of workplace identity arises from work on self-categorization that suggests that individuals deliberately choose to define themselves as members of specific groups or categories (Turner, 1987). Self-categorization theorists propose that individuals attempt to influence and affirm positive identities by selecting self-categorizations that provide them with positive distinctiveness in comparison with others (Turner, 1987) and that "they say and do things to try and change the parameters so that a subjectively more meaningful and self-favoring identity becomes salient" (Hogg and Terry, 2000: 125).

### **Identity Threats and Physical Environments**

While no studies have directly examined the effects of non-territorial work environments on employees' identities at work, studies in the broader realm of self-perception, including work on categorization and social identity, have provided evidence that maintaining a positive workplace identity is related to one's ability to personalize one's physical work environment. A closer look at this work suggests that various types of personalization of the workspace can help affirm specific identity categorizations. In a review of much of this work, Belk (1988: 139) drew on findings from psychology, consumer research, psychoanalytic theory, material and popular culture studies, feminist studies, history, medicine,

### **Identity Threat**

anthropology, and sociology to support the conclusion that "we are what we have." Belk further noted (1988: 150) that the functions such possessions play in the extended self involve "the creation, enhancement, and preservation of a sense of identity," including personal and social identities. In this vein, researchers have shown that perceptions of personal distinctiveness and status can be managed through the acquisition and display of personal possessions such as expensive household appliances or furniture (Ames, 1984) and business attire such as expensive watches, business shoes, and attaché cases (Solomon and Anand, 1985). At the same time, Belk (1988) noted that the loss of personal possessions may induce threats to identity. Subsequent research (reviewed below) suggests that the loss of particular physical markers may induce threats to each of the specific identity categorizations defined above, i.e., personal distinctiveness, personal status, social distinctiveness, and social status.

**Threats to personal distinctiveness.** The loss of personalization of one's surroundings may be especially unsettling in organizational settings, where one has little control over the image of the workplace as a whole (Hull, 1992). Researchers have suggested that such situations can threaten individuals' sense of personal distinctiveness by imposing a norm of uniformity over employees' appearance and workspace. Goffman (1961) discussed how institutions that confiscate personal possessions upon arrival (hospitals, military training camps, prisons, boarding schools, monasteries) systematically lessen the distinctiveness of individuals. Similarly, Snyder and Fromkin (1980) discussed how issuing standardized "identity kits," made up of a standard wardrobe and minimal possessions, can lead to a traumatic lessening of individuals' distinctive sense of self. Self-perception theorists have suggested that in such depersonalized settings, individuals are not able to satisfy their powerful "needs for differentiation" (Brewer, Manzi, and Shaw, 1993: 157). These needs for differentiation have been found to be strong enough to overpower status needs in highly depersonalized situations (Brewer, Manzi, and Shaw, 1993).

**Threats to social distinctiveness.** Preserving a sense of social distinctiveness among group members has been linked to an underlying "need for distinctiveness" (Brewer and Pickett, 1999) and has been shown to be important for increasing the commitment and motivation of group members (Sheldon and Bettencourt, 2002). At the same time, a growing amount of psychological research suggests that events that reduce the sharpness of conceptual group boundaries, making it hard to tell one group from another, can pose a major threat to members' perceptions of social distinctiveness. In an experimental study of distinctiveness threat through conceptual boundary loss, Jetten, Spears, and Manstead (1997) found that merely telling individuals that they belonged to a group whose abilities or beliefs (e.g., "belief in supernatural phenomena") overlapped with another group was enough to threaten their sense of social distinctiveness. Subsequently, several other studies showed that individuals who perceived themselves as belonging to a distinctive subgroup experienced social distinctiveness threats when their subgroup was

categorized as belonging to a more general, superordinate group (Hornsey and Hogg, 2002). Such occurrences are common following acquisitions of organizations (van Knippenberg and van Leeuwen, 2001). In these cases, loss of membership in the acquired organization, and all of the distinctive qualities associated with that membership, may threaten the social distinctiveness of employees who are new members of the larger, acquiring organization (Buono, Bowditch, and Lewis, 1985). These effects may be especially salient in acquired firms because of the loss not only of conceptual boundaries but of physical boundaries that provide visual cues about who is included and excluded from organizational groups. In the same manner, it seems plausible that non-territorial work environments may threaten social distinctiveness categorizations if they require workers to shift offices daily, an arrangement that typically leads group members to work in separate areas, removing visually salient physical group boundaries (Turner and Myerson, 1998).

**Threats to personal status.** Psychological research on self-perception and the physical environment also suggests that physical markers such as the size of an office and its location, number of windows, and quality of furnishings are commonly used as indicators of personal rank, prestige, and status (Sundstrom et al., 1982). Studies of status markers and satisfaction suggest that office workers are most satisfied with their workspaces when their physical surroundings accurately reflect their rank in the organization (Louis Harris & Associates, 1980). By contrast, employees who perceive that their status markers are incongruent with their rank are likely to call for the markers to be changed to more appropriate levels (Steele, 1973). Congruence between physical status markers and rank appears to be so important to people that organizations' attempts to remove them from the environment (e.g., by assigning everyone the same type of workspace regardless of rank) have been met by employees constructing their own alternative means of signaling status through other physical markers (e.g., by supporting unspoken rules about the number of personal artifacts allowed to different levels of managers) (Zenardelli, 1967).

**Threats to social status.** Finally, psychological research suggests that removing obvious boundaries that separate groups of varying status may threaten the social status of those groups. Researchers have found, for example, that removing territorial boundaries between racial groups (e.g., through the interracial busing initiatives of the 1970s) threatened the perceived group status of individuals who saw themselves as part of a higher-status race group (Bobo, 1983). Without clear boundary markers, these individuals feared that they might be mistakenly perceived as members of a lower-status group. Similarly, researchers have shown that the acquisition of one firm by another often reduces not only the distinctive identity of the acquired firm, but also the perceived status of employees who belonged to the acquired firm (van Knippenberg and van Leeuwen, 2001). These employees may perceive themselves to have actually changed group membership, from a high-status to a lower-status group. In the same manner, it seems plausible that the loss of physical group

### **Identity Threat**

boundaries and markers in non-territorial work environments (e.g., high-status groups may no longer occupy the top floors of a building) might threaten the social status of groups that perceived themselves as high status.

Together, the above findings suggest that physical markers in the workplace are important to maintaining workplace identity categorizations. Specifically, they suggest that organizational limitations on the personalization of workspaces may affect employees' expression and affirmation of personal and social distinctiveness categorizations, as well as personal and social status categorizations. As Sundstrom and Altman (1989: 198) noted:

Environmental support for individual identities may derive from individually assigned workspace and features that allow display of self-identity, status, and individual work roles. With long-term, exclusively assigned individual workspaces, group members can personalize through photographs, posters, knick-knacks, and other personal objects or through features of the workspace itself, such as layout or furnishing. Status demarcation might involve floor space, furniture, equipment, location of workspaces, amount of personalization, or degree of enclosure (e.g., Konar and Sundstrom, 1985).

Yet, as noted earlier, none of this work has directly examined the relationships between specific types of identity categorizations and workplace personalization. For example, we have no empirical evidence about how important personalization is to affirming personal versus social categorizations or distinctiveness versus status categorizations. Given the complexity of human identity, it seems likely that the degrees and quality of opportunities for personalization will variably affect different forms of identity categorizations. Understanding why physical objects and boundaries affect specific identity categorizations can help scholars extend their understanding of identity threat and help managers prepare employees for impending losses of physical identity markers when they are moved to non-territorial work environments. These issues suggest the first of two research questions:

**Research question 1:** Why do non-territorial office environments threaten some employees' workplace identities?

### **Identity Affirmation and Physical Environments**

One consistent finding in the above research on identity threat is that when their identity categorizations are threatened, individuals are likely to seek to affirm those identities. In particular, the above research on the loss of office personalization suggests that office employees may devise substitutes or "proxies" for lost identity markers as a means of affirming their workplace identities. A review of research on identity affirmation suggests two primary proxies that employees may use in place of permanent identity markers: (1) portable artifacts that can be carried from place to place and (2) salient and visible behavior that can be enacted across settings.

**Portable artifacts.** First, several studies have examined the use of workplace dress as a portable identity marker (Rafaeli and Pratt, 1993). Recent research on the symbolic effects of

dress by medical professionals (Pratt and Rafaeli, 1997) and administrative assistants (Rafaeli et al., 1997) suggests that choices in clothing and accessories provide employees with a salient means of affirming and expressing social distinctiveness and social status categorizations. Dress markers such as lab coats and surgical scrubs indicate the status and distinctiveness of medical professionals through their different colors (e.g., surgeons wear green or blue, nurses wear pink) and styles (physicians wear lab coats, while nurses almost never do) and may help employees adapt to changes in their workplace identities, such as a move from formal to more informal relationships between medical professionals and patients (Pratt and Rafaeli, 1997).

A common finding of these studies is that employees often use portable markers to reflect new workplace identities that they adopt as a result of job changes, geographic moves, and role evolutions. For example, in the area of professional dress, Pratt and Rafaeli (1997) found that nurses, when confronted with a choice of workplace identities because of the evolving nature of health care, used dress to signal the identity they chose to maintain. Nurses who maintained a more traditional identity of "acute care professional" wore traditional white uniforms, surgical scrubs, and lab coats. As one nurse reported, "We take care of sick patients. . . So we should look like medical professionals, we should be dressed in scrubs" (Pratt and Rafaeli, 1997: 862). By contrast, nurses who maintained the more modern identity of "rehabilitation professional" wore street clothes like those of their patients. Another nurse described this approach: "If they [patients] and their caretakers wear street clothes, patients will think of themselves as moving out of the sick role and into rehabilitation. They will be ready for life outside the hospital. This is the rehab philosophy, and this is what makes this unit unique" (Pratt and Rafaeli, 1997: 862). Dress markers, then, provided salient cues about the workplace identities different nurses intended to affirm in a more diverse environment. Appropriate organizational dress helped these employees feel like their identities fit their work roles and provided them with added confidence and psychological comfort in carrying out those roles.

**Salient behavior.** Second, research in psychology, sociology, and organizational behavior suggests that individuals may use repeated or salient behavior as a means of visibly marking workplace identities. A growing number of social psychologists, for example, have recognized the role of non-verbal behavior as a means of self-presentation in small groups (see Leary, 1996, for a review). These researchers suggest that visible behavior, such as seating preferences (Reiss, 1982), doing favors (Baumeister, 1982), aggressive body language (Bandura, 1973), engaging in sports (Leary, 1992), public eating habits (Pliner and Chaiken, 1990), and risky activities (Brockner, Rubin, and Lang, 1981) are often used to convey images of power, compassion, control, and youth to other group members. Similarly, several organizational researchers have recently examined how individuals use and interpret role-normative behavior as a means of developing new workplace identities as their work roles change (Ely, 1995;

### **Identity Threat**

Covaleski et al., 1998; Ibarra, 1999). This work has shown how employees adapt their in-role behavior to fit (or to resist) normative role expectations. Over time, such modeling becomes aligned with the employee's workplace identity and alters that person's perceptions of the central and distinctive traits that define him or her at work (Ibarra, 1999). Along these lines, Ely (1995) discussed how female lawyers often used behavior to socially construct a gender identity at work. Some women in her study used traditionally masculine behavior to mark themselves as "accommodators" (e.g., women willing to display aggressive behavior to meet the firms' norms for success), even when the profile went against their own behavioral preferences. In these cases, the women clearly used behavior to send a signal about their workplace identities. Ely (1995: 619) quoted one woman as noting that she had stopped showing her insecurities: "Men don't do that. So I've stopped doing that. But that was a pretty easy rule to follow: Do not wear your heart on your sleeve." In response, many of these lawyers received clear feedback about the correctness of their adopted gender identities for success within their firms (Ely, 1995).

Finally, sociologists in the field of symbolic interactions (Goffman, 1967) have long discussed the role of interaction rituals as a means of creating and maintaining "selves." For example, Goffman (1967: 34) discussed the role of face work, "actions taken by a person to make whatever he is doing consistent with his social image." More specifically, he described how aggressive face work, such as encouraging compliments, elitist snubs, and jokes, can be useful in demonstrating one's superiority and status relative to others. Goffman (1967: 25) suggested that it is not only the verbal content but also the behavior in these interactions that helps to maintain an individual's image: "In aggressive interchanges, the winner not only succeeds in introducing information favorable to himself . . . but also demonstrates that as an interactant, he can handle himself better than his adversaries."

Collectively, the above research suggests that portable physical artifacts and salient behavior can play important roles in establishing workplace identities and that these types of markers are easily recognized in many organizational contexts. This work suggests that such markers could be useful tools for affirming workplace identities in office environments that limit personalization. Nevertheless, these studies are limited in a number of ways. First, much of the work on symbolic interactions has been done outside of organizational contexts. The informal interactions with strangers in one-time encounters on which these studies focused do not appear to be a good proxy for examining the types of encounters one may have at work. Second, much of this research has focused on how individuals adopt new workplace identities based on changing roles. In response to new roles, individuals apparently affirm their new workplace identities through normative portable artifacts and behavioral markers (e.g., they wear uniforms traditionally worn by people in their new roles). This work, however, has not explored the possibility that employees might use portable artifacts and salient

behaviors to affirm existing workplace identities when the use of permanent identity markers is limited. Further, this research has not looked beyond dress in terms of portable artifacts. In particular, it did not examine the use of portable office decor and supplies pertinent to non-territorial work situations. Finally, and perhaps most interesting in terms of theoretical advancement, previous work on behavioral markers has focused on identifying and managing threats to common workplace images rather than threats to more individualistic identities. In the former case, there are typically normative and widely accepted behaviors that individuals may use in response to threats to common images such as legitimacy, trustworthiness, or power (Elsbach, 2004b). For example, an employee who wishes to manage a threat to his or her image of power may effectively do so by sitting at the head of the table during meetings. By contrast, it is less clear how an employee might use behavioral markers to manage threats to a very personal, workplace identity. For example, how might a sales manager respond to threats to his or her identity as an avid art collector in a non-territorial setting? These gaps in prior research suggest a second research question:

**Research question 2:** Why do employees in non-territorial office environments choose the tactics they do to affirm threatened workplace identities?

I conducted a qualitative, exploratory study to answer the above research questions. This study was intended to provide theory elaboration, extending theory in an area in which we already know something about the phenomena of interest (Lee, Mitchell, and Sablinski, 1999), by enhancing our understanding of how specific identity categorizations are related to the display of physical identity markers.

## METHODS

Methods involved an in-depth case study of a single firm and followed Eisenhardt's (1989) seven-step approach for building theory through case study research.

### Case Selection and Research Setting

The research case for this study was a large, successful high-tech corporation headquartered in the Silicon Valley area of Northern California, which I refer to as "Goldtech." Goldtech was chosen for the study for theoretical reasons. Initial discussions with Goldtech managers indicated that a number of employees at each of their West-Coast offices were unhappy with the new, non-territorial work arrangement and that these employees attributed their negative reactions to the loss of a "connection" to their work and workplace, rather than practical difficulties with the new arrangement. Further probing revealed that this lost connection was defined in terms of both status and distinctiveness categorizations important to employees (e.g., being part of a specific team or being perceived as an expert in a particular area). For these reasons, Goldtech appeared to be a suitable case for studying identity threat in a non-territorial workspace.

### **Identity Threat**

I collected data at five of Goldtech's Silicon Valley offices between the fall of 1999 and spring of 2000. All of the offices in this geographic region had implemented non-territorial office arrangements, and all but two of its total offices in the U.S. had implemented this type of arrangement. All five offices had taken on the non-territorial arrangements in the six months just prior to the start of this study, and the transformation from traditional to non-territorial offices was made in a few weeks at all office sites. The offices were similar in that they provided administrative, research, and sales functions (all support functions), rather than manufacturing functions. While the offices differed slightly in their office reservation protocols (e.g., some offices required that employees reserve a different office every day; others allowed employees to reserve offices for between two and five days at a time), all of the offices shared the following important features relevant to the non-territorial environment: (1) most employees (all but the administrative assistants in all five offices and a few managers in one office) were "unassigned" and had no designated office; (2) all unassigned employees had to use a computerized reservation system to obtain workspace; (3) unassigned employees had access to one or two permanent lateral files located in a hallway and a mobile cart; (4) unassigned employees could reserve either an enclosed office or an open cubicle for individual work and could reserve a larger meeting room for group work; and (5) all reservations were made on a first-come, first-served basis.

### **Data Collection**

I used multiple methods of data collection. First, I collected interview data from 34 Goldtech managers (24 men and 10 women; average age 42 years; average tenure at Goldtech 4.8 years) who volunteered to talk about their experiences in the non-territorial work environment. I interviewed between 5 and 10 managers from each office, including employees from engineering, sales, and project management from all five offices. All had worked in a non-territorial workspace for 1–6 months (average 4.6 months) and had previously worked in a traditional office space. Participants answered open-ended questions about their identities at work, the fit between their physical work environment and their identities, and the ways they marked or affirmed identity in this environment. Interviews lasted between 30 and 60 minutes (an average of 45 minutes) and were tape recorded and transcribed. Second, I observed normal business interactions that took place on the days I interviewed informants at the five work sites. My total observation time totaled 45 hours over the course of the study. During observation time, I took notes about how people interacted, how they used their offices, who used which offices, and how they personalized their offices. I wrote these notes up as a field journal after each observation period.

### **Data Analysis**

Qualitative data analysis followed an iterative approach, moving back and forth between collection, analysis, and existing literature (Glaser and Strauss, 1967). The goal of this analysis was to obtain an in-depth, accurate understanding of identity threat and identity affirmation issues facing a very specific

group of people, managers who work full time in non-territorial office environments. A research assistant and I performed analysis within each data source (i.e., interviews and observation) and compared findings across these sources. In addition, our data analysis moved back and forth between the emerging theory and extant literatures to explore broadly possible explanations for findings and focus on the explanation that best fit with the data, what Yin (2003) called "explanation building." The analysis continued until new analysis was not providing additional insight.

**Identity threat.** Early analysis focused on searching for within-source evidence of threat to participants' workplace identities that they attributed to the non-territorial work environment. I defined identity threat as an instance in which a participant perceived that the non-territorial workspace impeded his or her ability to affirm or display an aspect of identity (e.g., "I'm a rule-breaker . . . and it's not okay for me to be rebellious anymore in this environment"). A research assistant and I coded all interviews for comments indicating threats to workplace identities. We then compared our findings. Our intercoder agreement was  $k = 0.72$  (Cohen, 1960). We then discussed and resolved all discrepancies. Threats to workplace identity were identified for 18 of the 34 participants, including managers from each of the five offices (4 women and 14 men). Overall, we identified 52 instances of identity threat from the 18 participants. We then examined field notes from my observation of the five non-territorial offices and searched for similar evidence of identity threats, such as participants complaining about loss of personal or social identity to coworkers or in casual conversations with the author, who was doing the observation. We then looked for evidence across these two sources to see if the same people had provided evidence of identity threat and to see if identity threat was evident in both types of data.

Next, we coded each instance of identity threat, from both observation field notes and interview data, in terms of the specific identity self-categorizations that were threatened. Based on our definition of identity self-categorizations as previously described, we coded the 52 identity threats as threats to (1) personal distinctiveness (e.g., "I identify with being intelligent, creative, and sort of a thinker, introspective, and I haven't had a good creative idea in this environment."); (2) personal status (e.g., "This environment says something about how important you are. Overall, I'd say my status has declined in this environment."); (3) social distinctiveness (e.g., "One problem is that there's not a contingent of people. There isn't a constant group . . . there isn't a commonality . . . there isn't a common interest. You know, a common functional something. [In my old work setting] we all worked in real estate."); and (4) social status (e.g., "There was a little bit of prestige and status attached to just working in that area because I was surrounded by very smart people and people who are of great levels above me, generally speaking."). We compared our findings (initial intercoder agreement was  $k = 0.70$ ; Cohen, 1960) and discussed and resolved all discrepancies. Of the 52 instances of identity threat, 19 were to personal distinctiveness, 20 to social distinctiveness, 10 to per-

### **Identity Threat**

sonal status, and 3 to social status. We defined strong evidence for a type of identity threat as one that was indicated by a majority of participants. Moderate evidence was defined as a type of threat that was repeatedly indicated by a few participants, and weak evidence was defined as a threat that was indicated by only a few participants and only rarely.

We then looked at each instance of identity threat to learn more about how physical identity markers were related to threats to specific identity categorizations. An overall review of the data indicated that there were three dimensions that were obvious in most instances of identity threat: (1) the specific distinctiveness or status categorization threatened, (2) the specific type of physical marker that had been lost, and (3) the degree of identity threat. Accordingly, we coded each instance for these three dimensions. In this step, there were no discrepancies between coders. We then looked for trends in the three dimensions of identity threat (specific categorization, specific marker, and degree of threat) across the four types of identity threats (i.e., threats to personal distinctiveness, threats to social distinctiveness, etc.). This helped us better understand the nature of the threatened identity categorizations.

**Lack of identity threat.** We then returned to the complete set of 34 interviews to look for reasons why participants did not perceive identity threat in some cases. We focused on the two categorizations that were least often threatened in the non-territorial work environment, personal status and social status. We then searched for comments indicating either "no change" or "positive change" to these categorizations as a result of the non-territorial work environment. We discussed all instances as we searched and agreed that 28 instances indicated positive changes to identity categorizations (10 personal status and 18 social status) and 19 instances indicated no changes to identity categorizations (11 personal status and 8 social status).

We then compared these participants' descriptions of their workplace identities, and how they were related to the physical environment, with those of the participants who reported identity threat. Based on the earlier theory review, we searched for differences in their description of status and distinctiveness categorizations and how the non-territorial environment affected these categorizations. Looking at the 28 instances of identity affirmation, we categorized these in terms of the reasons why the non-territorial workspace was identity affirming vs. identity threatening. We agreed on 26 of the 28 instances, discussed the remaining two, and came to an agreement on their categorization. It is important to note that we used these data to help us better understand the nature of identity threat in the non-territorial environment rather than to develop a theory of identity affirmation in this environment.

**Responses to identity threat.** In our later rounds of analysis, we focused on participants' responses to identity threat. We first performed within-source analysis of both observations and interviews, searching for indications of identity affirmation in response to specific identity threats. In interviews, we matched each instance of identity threat to a specific identity

affirmation response by looking at participants' comments related to that specific threat and how they responded to it. In observations, we looked for evidence of specific forms of identity markers for specific participants. To move beyond extant work, we excluded any comments about dress (only two informants spoke about dress specifically) and focused on office decor. We compared our findings within each data source (initial intercoder agreement was  $k = 0.79$ ; Cohen, 1960) and discussed and resolved all discrepancies. We then compared across these data sources to search for corroboration of identity affirmation from both observation and interviews. We identified 50 distinct instances of identity affirmation in response to the 52 instances of identity threat.

We then coded each instance of identity affirmation in terms of the specific self-categorizations that were affirmed. We used the same four categorizations that we used to code the identity threats (personal distinctiveness, personal status, social distinctiveness, and social status). We compared our findings (initial intercoder agreement was  $k = 0.93$ ; Cohen, 1960) and discussed and resolved all discrepancies. Of the 50 instances of identity affirmation, 28 involved personal distinctiveness self-categorizations, 14 involved social distinctiveness self-categorizations, 6 involved personal status self-categorizations, and 2 involved social status categorizations. We then identified from participants' comments the specific categorizations that were affirmed. There were no discrepancies in our coding of these categorizations. We also used an evolving set of categorizations to describe the specific tactics used (e.g., display of portable artifacts, display of specific types of behavior). We used the same criteria to indicate strong, moderate, or weak use of identity management tactics as we used to indicate different levels of identity threat, described above. We compared our findings (initial intercoder agreement was  $k = 0.87$ ; Cohen, 1960) and discussed and resolved all discrepancies.

## FINDINGS

In general, the findings of the current study suggest that some employees in Goldtech's non-territorial work environments perceived threats to their workplace identities because they perceived that they had completely lost the ability to affirm distinctiveness categorizations relevant to those identities (as opposed to status categorizations). These findings did not appear to be associated with a low importance of status in the organization. Our interviews and observations indicated that employee-status distinctions at Goldtech were fairly traditional, well defined, and widely accepted. Instead, these findings appeared to reflect perceptions that distinctiveness categorizations were more difficult to affirm than were status categorizations in the non-territorial work environment, and the complete loss of distinctiveness markers was more threatening to workplace identities than was the partial loss of status markers. In addition, the findings suggest that in affirming distinctiveness categorizations, employees used a wide variety of tactics, including behaviors such as "squatting" in offices that were supposed to be unassigned, and displays of artifacts such as reconstructing group territories. These tactics were often effortful

### **Identity Threat**

and in violation of company rules of workplace etiquette. By contrast, in affirming status categorizations, participants used relatively simple and allowed behaviors and displays of artifacts. These choices in affirmation tactics appeared to result from employees' perceptions about the acceptability and importance of affirming distinctiveness versus status categorizations. Table 1 summarizes the data supporting these findings.

### **Why Non-Territorial Work Environments Threaten Workplace Identities**

Evidence from the present study suggests that employees' distinctiveness categorizations were most threatened in the non-territorial work environment because they were most likely to be (1) subjectively important and consistently relevant to participants (Ashforth and Johnson, 2001), (2) exclusively affirmed through physical markers, and (3) defined by an absolute membership structure, which meant that the loss of affirmation markers resulted in a complete loss of perceived category membership (Diesendruck and Gelman, 1999). By contrast, employees' status categorizations appeared to be least threatened in the non-territorial work environment because they (1) were only relevant in specific work situations, such as meetings, (2) could be easily sustained through behaviors, such as exerting decision-making authority, and (3) were viewed as having a graded membership structure, which meant that a loss of affirmation markers might lower the level of one's perceived category membership but not remove it completely.

**Threats to personal distinctiveness.** The most prevalent identity threats reported by study participants were threats to personal distinctiveness categorizations that distinguished these participants within a group. Participants routinely reported that they were not able to display permanent physical identity markers that indicated the valued and distinctive skills or roles they possessed and that they felt a loss of identity as a result. The most common instances of personal distinctiveness threats resulted from the absence of personal artifacts (e.g., photos, mementos, equipment) that participants used to signal distinctiveness categorizations central to their workplace identities (e.g., parent, artist, athlete). Although these distinctiveness categorizations were relevant to participants' workplace identities, they typically involved non-job roles, such as being a parent, that were not easily affirmed through other work-related markers, like behavior or titles. As a result, personal distinctiveness categorizations were likely to be affirmed exclusively through the display of personal physical artifacts. Further, because the artifacts were personally selected and prominently displayed, even though they did not relate to work, these types of distinctiveness categorizations were likely to be subjectively important and central to an employee's core sense of self, as well as consistently relevant rather than relevant only in specific contexts (Ashforth and Johnson, 2001). This reasoning is supported by participants' comments, which suggested that the loss of personal distinctiveness markers was especially threatening to workplace identities. As one participant noted,

Table 1

**Evidence of Identity Threat and Identity Affirmation by Goldtech Employees\***

Categorization threatened/ Degree of threat	Identity markers lost	Specific categorizations threatened	Examples
<b>Personal distinctiveness</b> High threat	Photos, toys, art, mementos	Parent, athlete, artist	"My kids' pictures used to cover one whole wall. It's sad because I'm a dad."
	Calendar, equipment, project artifacts, books	Technical whiz, non-technical, non-conformist, long-timer	"I've been here a long time. I miss having [prototypes] from past projects to remind me of my history here."
	Photos, awards, mementos	Competitive person, outgoing person	"I don't have the visual effects of people walking by my office saying, look what she's into, sky-diving."
<b>Social distinctiveness</b> Moderate to high threat	Group boundaries, permanent offices	Organization-specific group member	"I've grown up with the group and that's been a big piece of my identity here . . . and it doesn't seem so much like a group anymore."
	Specialized equipment	Functional group member	"My work station used to have a special device attached to it that said 'he's an engineer'."
<b>Personal status</b> Moderate threat	Awards, diplomas	High-performing employee, highly educated employee	"I just had to bring all my plaques home. I have to go home to see my accomplishments."
	Permanent office, office size/ location	High-status employee, important employee	"Just the fact that I had my own office said that I was important and it did denote status. I guess, status-wise, I've come down."
<b>Social status</b> Low threat	Group boundaries	Prestigious group	"I was surrounded by very smart people, and there was a bit of status attached to working in this area."

\* Strong evidence = a threat/tactic repeatedly indicated by a majority of the participants; moderate evidence = a threat/tactic repeatedly indicated by a few participants; and weak evidence = a threat/tactic indicated by a few participants, and only rarely.

I don't like this environment. Mostly because of the lack of personalization. No pictures of my daughters. None of their artwork or any of that. It's almost sad to say, especially as I'm a dad. I do miss having their pictures up and their artwork. It bugs me because I spend more time here than I do with them. It's important to me to remember that I'm a dad even when I'm at work.

In addition, as shown in table 1, many of these non-work-related distinctiveness categorizations were of a type that may be defined by absolute membership structures

### Identity Threat

Table 1 (Continued)

Strength of evidence	Identity management tactics used in response	Specific categorizations affirmed	Examples	Strength of evidence
Strong	Display of portable artifacts	<i>Personal distinctiveness:</i> Parent, athlete, artist	"I have pictures of my kids pasted all over my portable cart."	Strong
	Display of prohibited permanent artifacts	<i>Personal distinctiveness:</i> Unique individual, non-conformist	"I leave my stuff lying around. I am trying to recreate my old office to express my individualism."	
	Display of allowed and prohibited salient behaviors	<i>Personal distinctiveness:</i> Outgoing, competitive, rebellious	"I just promote myself more (since I don't have the photos up). I talk about what I did over the weekend."	
Strong	Display of prohibited salient behaviors	<i>Social distinctiveness:</i> Organization-specific group member	"A lot of us [in the group] drifted back there. I'd say 95% of the people here do not move. This has become our spot."	Strong
	Display of allowed and prohibited permanent artifacts	<i>Personal distinctiveness:</i> Unique individual, parent, artist	"I put up a bunch of pictures on top of my filing cabinet. They're pictures of my kids that I used to have in my office."	
Moderate	Display of allowed permanent artifacts	<i>Personal status:</i> High-performer, highly educated	"Everyone's got a little shelf near their mailbox. I put my business books up there. And they're a symbol of my education."	Moderate
	Display of portable artifacts	<i>Personal distinctiveness:</i> Unique individual, parent, athlete	"I went to Kinkos and had six pictures of my kids put on magnets, and I put them up on the file cabinets each day. I go to work for my kids."	
Weak	Display of allowed permanent artifacts	<i>Social status:</i> Prestigious group	"I set out creating a living room for us. I pulled in pieces of furniture that were lying around. It feels a little bit like a private club. So the suite of spaces itself is a marker."	Weak

(Diesendruck and Gelman, 1999). For example, we typically use the categorization "parent" as an absolute type of categorization because it is relatively easy to separate parents from non-parents. By contrast, the status categorization of "high-performer" is more likely to have a graded membership structure because individuals may possess some dimensions of a high-performer (high work output) but not others (important organizational function). In support of the notion that many personal distinctiveness categorizations were thought

of as absolute in their membership structure, a number of informants noted that their ability to affirm these types of categorizations had been completely lost in the non-territorial environment and uniformly subsumed by more generic categorizations. Such a sense of complete loss would be most likely when a category is perceived as all or none, as the informant quoted above went on to note, "Actually, what it's [the non-territorial office environment] done is make us real generic . . . you don't have personalization. You don't walk into the office, see the kids' pictures there, and know I'm a dad."

In other instances of threats to personal distinctiveness, participants reported the loss of personal artifacts that they used to affirm personal attributes or skills (e.g., being a non-conformist or technical whiz) that were, in fact, work related. Yet, in these cases, the distinguishing attributes or skills that were threatened were often ones easily signaled through physical artifacts rather than through behaviors or titles. For example, a technical whiz could display prototypes, blueprints, or models from past projects but may not be able to saliently display expertise through behaviors such as working at his or her desk or computer. Again, these features may have contributed to these physical markers' exclusive use to affirm personal distinctiveness categorizations and to the strong identity threats that accompanied their loss. As an informant noted,

I compete for the award for the least technically proficient in the group. As a symbol of that, I used to have this artistic artifact sitting on my desk. It was a wooden anatomical figure from art school. I felt like that was something of a badge of honor. It really stood out from all the technical stuff most people have on their desks.

**Threats to social distinctiveness.** Threats to social distinctiveness were the second most common identity threats reported by study participants. Most frequently, these threats were associated with the loss of permanent office assignments, which participants had used to identify the boundaries of organizational groups. The lack of permanent office assignments, coupled with rules requiring frequent, sometimes daily, changes in workspace, meant that most members of a functional or organizational group did not regularly sit next to each other. This affected some participants' sense of belonging to a group. As one informant noted, "The sense of a group started disappearing a while ago when we went to this type of office and didn't sit together anymore. It's a big point of contention with all the different engineers and project managers [on this team] that we don't have fun anymore as a group. That was a big part of who we were." In other instances, participants noted that the loss of specialized equipment or tools reduced their ability to affirm distinctive, functional group identities. As one engineer noted, "As an engineer . . . you get new toys and stuff. And because we had personalized offices with a work station, we could install things on our work stations and use them and play with them. . . . As far as being an engineer, the equipment was kind of a symbol of that."

### **Identity Threat**

Analysis revealed that the specific social distinctiveness categorizations that were most likely to be threatened were associated with organizationally created management teams or cross-functional “work effectiveness” teams, rather than with functional groups. Two attributes of social distinctiveness categorizations appeared to drive this result. First, unlike functional groups, such as engineering or sales teams, the organization-specific groups did not have meaning outside of the organization and were not associated with professional organizations that could help to affirm them. As a result, group members relied heavily on physical boundaries and markers within the organization, such as signs denoting the group area, to affirm them. In fact, physical markers were likely to have been exclusively used to affirm these types of social distinctiveness categorizations. As one participant noted, “[Group X] was our home. That area was our den, our rumpus room. Now, I don’t live in that house anymore. It’s like moving to another state or something big like that.” And like personal distinctiveness categorizations, most organization-specific social distinctiveness categorizations appeared to have been relatively absolute in their membership structure, perhaps because they were deliberately constructed. For example, being categorized as a member of an organization-specific group like a “work effectiveness team” was commonly thought of as an all-or-none categorization: either one is on the team or not.

In instances in which threatened social distinctiveness categorizations were associated with functional group memberships (e.g., engineering or sales groups), participants’ comments indicated that these identity categorizations were subjectively important and consistently relevant (Ashforth and Johnson, 2001). Participants who desired to affirm their functional group memberships appeared to do so because those groups were relatively central to their identity and relevant to their day-to-day work. As one noted, “Being a salesperson, I think that salespeople should be in a bullpen, because that’s how we learn and do business. That’s part of what makes us who we are. And it just doesn’t feel like I’m a salesperson anymore [in the non-territorial environment].”

**Threats to personal status.** Threats to personal status were the third most commonly reported identity threat, though they were much less common than threats to personal or social distinctiveness. In most cases, these threats were related to the lack of a dedicated workspace in general and to the sterile and generic look of non-territorial workplaces in particular. There were also complaints about the loss of the kinds of offices that convey status (e.g., large and/or corner offices). In these instances, the lack of office space appeared to have threatened subjective, hard-to-verify categories such as “high-status employee” and “important employee.” For some participants, occupying an office was seen as one of the only means available to them for affirming personal status categorizations, resulting in a high degree of identity threat upon their loss:

You’ve got a Harvard degree. You’ve got a fine house, a fine car. Why should you go to work in a place that’s a piece of shit? Where you’d be embarrassed to take your wife. They want you to work

from your laptop, out of your garage or the parking lot. They have some places where you just have a two-by-two place that you have to stand up, and what it's doing is totally devaluating the worker. You're like an interchangeable part. They make it very clear that you're not important. That the cost of saving real estate is what's important, and that shouldn't be the case. I mean, you should be worth much more than those cost savings. That's part of doing business.

In a few other cases, participants noted that they were not able to display awards and diplomas that were previously prominent in their offices, however, the threatened categorizations (e.g., high-performer or highly educated) were relatively easy to verify through work titles and assignments. Consequently, these employees perceived only a moderate identity threat. As one said, "I'd prefer to have all my plaques out because they are from [the high-performer club] here. They are valued here at Goldtech. But I still get to go to the annual [high-performer club] retreat every year, so people still know I'm in that club."

Yet, for most participants, the loss of office space or personalization appeared to pose only a weak threat to personal status categorizations. Instead of perceiving their status as undesirably low, most participants perceived that their status had become equivalent to all others in the non-territorial environment because everyone worked in the same type of office: "I think it [status differences] were way more obvious before. Now, there are a bunch of manager-type offices and who knows if I'm a manager or not. I can sit in this office and it doesn't mean I'm a manager. As far as anyone can tell, we're all at the same level." In addition, the fact that personal categorizations such as "high status" appeared to have a graded membership structure may have reduced the degree of identity threat perceived. Unlike more absolute personal distinctiveness categorizations such as parent, individuals can occupy categories such as "high status" at various levels, from total inclusion to minor inclusion. As a result, the worst-case loss of status markers may have resulted in a person's reduction from high status to merely average. Participants' comments support this conclusion. For example, one remarked, "I'm not able to put up my awards anymore. But no one else is either. So it's like this environment is pushing us all to be at the same level."

Finally, data from participants who reported identity affirmation (vs. identity threat) in the non-territorial environment suggest that personal and social status affirmations were actually strengthened for some people in this environment. In terms of personal status affirmations, many participants indicated that their personal status of being movers and shakers, people who will lead the company in the future, was affirmed by the non-territorial work environment. These participants viewed their status as related to their affiliation with new and forward-looking projects in the company. As one participant noted, "Being a promoter and advocate of this space has a certain aura about it. It makes me feel more up to date, more like a part of the future of this company. . . . [in contrast], those people who aren't a part of this seem like dinosaurs, wallowing away in their piles of paper and crap."

### **Identity Threat**

**Threats to social status.** Finally, there were a handful of instances in which participants indicated that the non-territorial workspace threatened social status categorizations. Specifically, a few participants indicated that the lack of permanent group territories, which identified value or rank relative to groups in traditional office environments, threatened their social status categorizations: "What [the non-territorial environment] does do is send a message about the position of [our group] in the organization, because people see the rest of the managers outside this building have offices. And I have this teeny office that I have to reserve every day."

In most cases, however, participants appeared to view the non-territorial work environment as having a neutral or positive effect on their groups' status. Because status categorizations appeared to be graded rather than absolute in structure, the non-territorial work environment may have merely diminished participants' standing in the category rather than challenging their membership altogether. Further, because most social status categorizations were organizationally conferred rather than personally selected, they were likely to be less subjectively important and consistently relevant to participants (Ashforth and Johnson, 2001). In line with this reasoning, many participants suggested that the non-territorial work environment did not affect their group's status and, in some cases, actually improved it. As one participant related, "This new, non-territorial design allows you to more easily rise to the level of the people around you, and you're sort of given the status of other people. Whereas if you had your own office, you would be less likely to have that [group's status]." Analysis of the data from participants who did not perceive identity threat further confirmed this notion. Among these sixteen participants, the most commonly reported reason for identity affirmation due to the non-territorial environment was that it improved the social status of all who were associated with it. As one of these participants noted, "In a bigger organizational sense, I'm benefiting much more by having contact with people in this environment. And being a part of the whole new way of doing things is making me much more high-profile to others in the company."

### **Why Employees Choose Particular Identity Affirmation Tactics**

In response to the perceived identity threats described above, Goldtech employees appeared to affirm their workplace identities through a variety of portable and permanent markers, which were chosen based on their ease of use and the importance of affirming a specific identity categorization. These findings support prior research suggesting that portable markers can be an effective means of signaling identity categorizations. Further, these findings extend this general notion by identifying a number of identity affirmation tactics and the circumstances in which they are most likely to be used. General categories of tactics were (1) the display of portable artifacts, (2) the display of permanent artifacts (allowed and prohibited), and (3) the display of salient behavior (allowed and prohibited). Table 1, above, summarizes the data on identity affirmation tactics employees used in

response to the threats to the four types of identity categorizations.

**Responses to threats to personal distinctiveness.** Personal distinctiveness threats were the only type of identity threat that merited use of all three categories of identity affirmation tactics. Further, they were the threats to which participants most commonly responded by taking actions that were prohibited in non-territorial workspaces, such as leaving personal artifacts in an unassigned workspace overnight. Finally, affirmations of personal distinctiveness were the only ones that warranted effortful displays of portable artifacts. These outcomes might be explained by the fact that personal distinctiveness categorizations were (1) the most subjectively and consistently relevant to employees because they were personally selected rather than organizationally conferred, (2) the most likely categorizations to be exclusively affirmed through office personalization because they could not easily be affirmed through work-related behavior, artifacts, or titles, and (3) the most acceptable categorizations to affirm, unlike status categorizations, which were seen as inconsistent with the egalitarian philosophy on which the non-territorial work environment was based. As a result, the loss of office personalization appeared to leave employees with a strong need to affirm personal distinctiveness categorizations, but with few allowed options for doing so.

Participants used portable markers only to affirm personal distinctiveness categorizations. A number of participants reported using portable artifacts, such as photographs attached to portable carts, movable equipment and furniture, and portable artwork for this purpose, and suggested that they could not affirm personal distinctiveness categorizations, such as parent or artist, in any other way. Further, because these categorizations were subjectively important to them and central to their identities, participants appeared to be willing to put in the extra effort required to haul such identity markers around. As one participant noted, "I have pictures of my children pasted all over my portable cart. If I can only put up one thing on that mobile cart, that's what I'll pick, because it's important to me to have that visual reminder. And there's nothing else at work that really provides that."

Although the non-territorial work environment prohibited personalization of individual workspaces, several participants admitted to displaying permanent artifacts, such as books, binders, equipment, or clothing, in an office or work area that they routinely occupied. In many of these cases, participants indicated that the display of these artifacts was a means of affirming personal distinctiveness categorizations that helped to distinguish them from others. One such participant remarked, "I put up some of my personal possessions in this office. Marvin the Martian had one place, and I tacked up the little Hotwheels car someplace else. And the idea for me was to spread around my presence as an individual, as someone who has these quirky interests. Everybody feels better in their own presence." Some of these participants indicated that such displays of permanent artifacts were also necessary because they not only affirmed their identities but also were important to the way they worked: "It's important for

### **Identity Threat**

me, spatially, to have my office laid out in a specific way. So it's just easier if I leave my stuff in one office. It's about me being in control and being me, but also about the way I work." While such displays were strictly against the rules of the non-territorial workspace at Goldtech, participants suggested that they were unlikely to be criticized for them, because they were relatively harmless and were seen as part of the individual habits of these workers. As one noted, "Everyone knows that this is my office and these are my things. They know that I like to work in the same place everyday, and they know that I like to have my crazy artwork up, and nobody really objects to it. I think it's accepted that this is the way I work and I'm not going to change."

In some cases, participants broke rules about proper behavior in the non-territorial environment (e.g., being quiet when occupying an open cubicle, cleaning up after themselves, and not occupying more than one workspace at a time) as indicators of personal distinctiveness. The most common behavior used to indicate personal distinctiveness was squatting, occupying a workspace as if it were permanently assigned. Like displays of permanent artifacts, squatting was often used to indicate that a participant was a non-conformist or even a rule breaker: "I am a squatter. I exhibit that behavior. I like to be a rule breaker, which tends to be more my identity. And I will not follow a norm just because everybody says that's a norm. If it impedes my work, I'll ignore the norm."

In addition, a few participants used allowed, informal interactions as a means of signaling personal distinctiveness. These participants made significant efforts to display their identity through routine and visible discourse. For example, one participant noted that to manage her identity as a competitive salesperson, she had begun to intentionally talk more about her accomplishments in casual conversation:

My natural tendency is not to promote myself, and so the new office has caused some behavior changes in myself—to actually promote myself in a more verbal way. For example, for the triathlon thing, . . . I tell people what I did this weekend. I tell them I was up at 5:30 this morning swimming. . . . People ask you about your weekend and that's when you mention it, so it's pretty natural. And it gets back to the competitive culture here, and talking about triathlons increases my status there.

**Response to threats to social distinctiveness.** Aside from threats to personal distinctiveness categorizations, threats to social distinctiveness categorizations were the only other identity threats that elicited the use of prohibited identity affirmation tactics, including both salient behaviors in violation of company rules (e.g., use of the same office every day) and displays of permanent artifacts in unassigned offices. As with threats to personal distinctiveness, threats to social distinctiveness appeared to elicit prohibited behavior because they were more central to employees' identities, more likely to be exclusively affirmed through physical markers, and more likely to be viewed as appropriate to affirm.

Most commonly, participants used squatting in offices or cubicles to affirm social distinctiveness categorizations. By permanently occupying offices near one another, squatting

was one of the only effective means by which employees could re-create a group or team space. As one participant noted, "I wasn't going to re-pack everything up every day and then re-pack it out. And nobody else on my team was either. I mean, everyone just informally found their little place back here and squatted there, and typically, no one had a problem. It allowed us to keep working together and to be a real team."

In addition to squatting, participants responded to threats to social distinctiveness by displaying both allowed artifacts, such as displaying artifacts in common areas or mailrooms, and prohibited artifacts, such as leaving possessions in unassigned offices overnight. While such displays were used in response to social distinctiveness threats, they were used to affirm personal, rather than social distinctiveness categorizations. In these cases, it appears that participants employed what social identity theorists call "social creativity" in identity affirmation (Hogg and Abrams, 1988), by affirming an alternate categorization when one categorization was threatened. Yet, instead of focusing on a second social categorization because the value of the first social categorization was threatened (as in most descriptions of social creativity), participants in the present study appeared to focus on a whole different level of categorization—personal distinctiveness categorizations—when their social distinctiveness categorizations were threatened. This focus may have been due, in part, to the fact that the only means available for affirming social distinctiveness involved prohibited acts, such as squatting or gaming the reservation system. In addition, the loss of social distinctiveness markers (like group boundaries) may have caused participants to view themselves more as individuals at work and less as members of a group (Brickson, 2000), leading them to focus on affirming personal versus social distinctiveness categorizations. Together, these factors may have led participants to view personal distinctiveness categorizations as more acceptable and more important to affirm than social distinctiveness categorizations. As one participant noted:

I don't have any business relationships with anybody in [this] office, and I attribute it to the [non-territorial environment]. Clearly, it's a very unfriendly place to work. So here, I'm just an independent contractor . . . as long as I get a space every day, I'm fine. It's too hard to make connections with the others [members of my group]. About the only thing I focus on here besides work is my kids, and that's why I've got my kids' pictures up on the file cabinets.

**Response to threats to personal status.** As noted above, threats to status were much less common than threats to distinctiveness. In response to threats to personal status categorizations, some participants displayed allowed permanent artifacts, such as books in their mailboxes or business cards in the reception area, to affirm their personal status. Many of these participants indicated that affirming personal status was not as acceptable or desirable as affirming personal or social distinctiveness, and thus it merited more subtle means of affirmation. Further, because status markers such as business cards or books were acceptable artifacts to display in common areas or mailboxes, their display may not have been

### **Identity Threat**

seen as promoting one's status too much. In fact, Ashforth and Gibbs (1990) suggested that protesting one's status too much, for example, protesting through the overt use of titles or verbal claims, may actually reduce one's status. For example, one participant noted that he left his business books in his mailbox as a symbol of his education because others could easily see them, but also because it was viewed as a practical place to store books in the non-territorial environment. Another participant noted that she had made an intentional change in her business card to replace the awards and plaques she used to display in her office as indicators of her status. As she reported:

When you've made [a high performance sales club] for five years, you can get a little emblem embossed on your business card. So I changed my business card to have that emblem. So now, mine is the only one in this entire office that has that emblem on it. And all the cards are sitting out in the reception area anyway. And some people have noticed. They think it's pretty awesome. They go, "You know you're the only one that has the five-year sticker on your business card?" So that's how I am emoting my success without having a lot of plaques up on the wall.

In other instances of threats to personal status, participants affirmed personal distinctiveness categorizations by displaying portable artifacts. These participants carried around photographs, equipment, or mementos as a means of affirming their distinctiveness as parents, athletes, or simply unique individuals. As one individual noted, "When I did my skydiving in October, I put a picture of me skydiving on the glass outside this office. I just used scotch tape and put it up in the office that I was using. . . . That was one instance of me showing how I was an athlete and kind of competitive." As with the affirmation of personal distinctiveness in response to threats to social distinctiveness, these tactics appeared to be a form of social creativity (Hogg and Abrams, 1988) in a situation in which affirming the threatened categorization (i.e., personal status) was not as viable.

**Response to threats to social status.** In the very few instances of responses to social status threats, participants displayed allowed permanent artifacts to affirm social status. As with threats to social distinctiveness, participants appeared to use these markers to signify social boundaries. As one participant recalled, "We kind of marked our territory in a common area with signs and putting up work plans and drawings that definitely showed what we were working on. . . . And now we're more visible, so I feel like there's definitely . . . in a way, a sense of credibility and legitimacy."

## **DISCUSSION AND CONCLUSIONS**

Returning to the comments by Jay Chiat at the beginning of this paper, it appears that in addition to failing to appreciate the value of office space for affirming employees' egos and status, Chiat severely underappreciated the value of office space for affirming employees' distinctiveness. The current findings suggest that this latter error may have been most to blame for the poor reception of his non-territorial work arrangement. As such, the current findings provide a number of theoretical and practical implications for understanding the

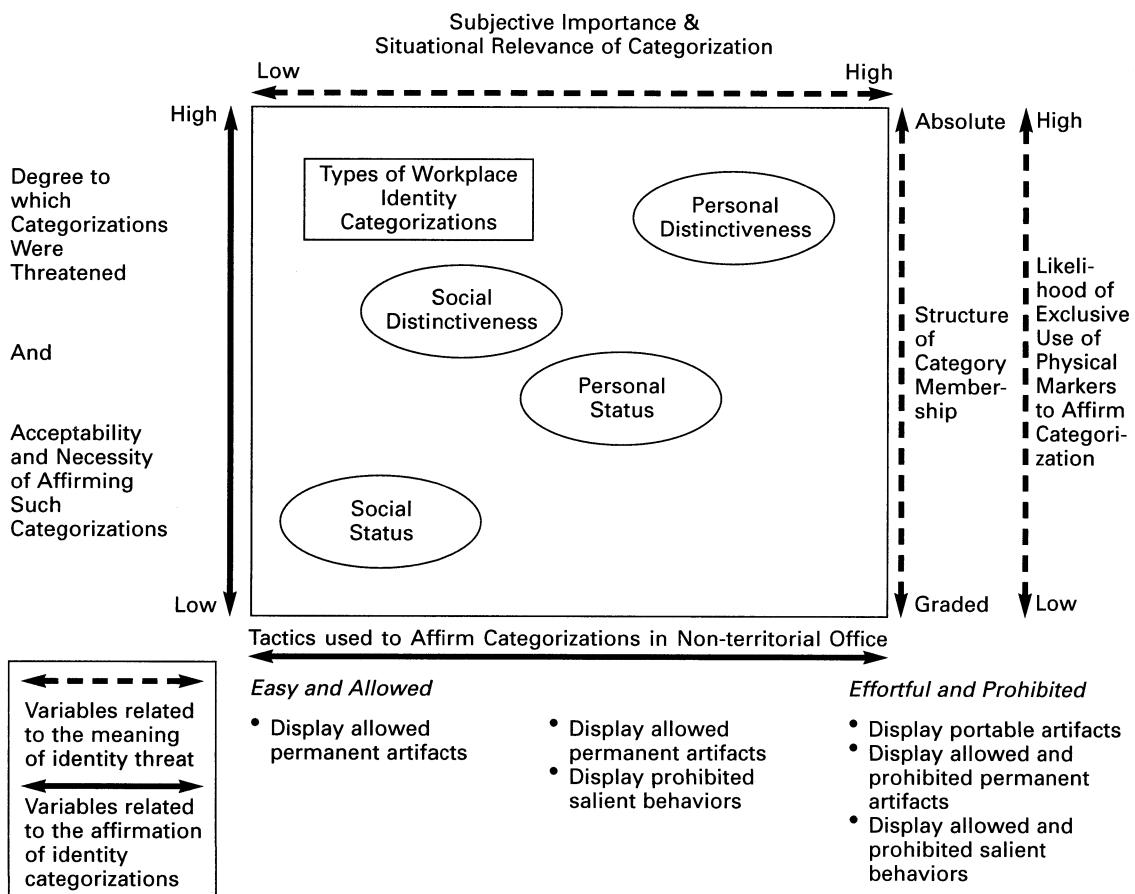
relationship between the physical environment and self-categorizations at work.

### Theoretical Implications: Relating Physical Markers to Identity Categorizations

In terms of theoretical implications, the current findings provide insight into why individuals perceive identity threat in non-territorial work environments and respond to such identity threats in particular ways. These insights are summarized in figure 1. Specifically, figure 1 illustrates how the four types of workplace identity categorizations may be defined in terms of their subjective importance and situational relevance, category membership structure, and likelihood of being exclusively affirmed through physical markers. The figure shows how these factors relate to the degree to which each type of identity categorization is threatened in a non-territorial work environment. In addition, figure 1 illustrates the degree to which the four types of workplace identity categorizations are perceived as necessary and acceptable to affirm in the workplace and can be affirmed through easy and allowed tactics vs. effortful and prohibited tactics.

**Why employees perceive identity threat.** A primary implication of the current findings relates to the nature of distinctiveness categorizations and their susceptibility to threat. Distinc-

**Figure 1. Explaining identity threat and affirmation in a non-territorial office environment.**



### **Identity Threat**

tiveness categorizations appear to possess several characteristics that leave them open to threat in non-territorial office environments. One of these characteristics is the subjective and consistent relevance of distinctiveness categorizations. Recent research on the relative salience of multiple identities in organizations suggests that there are subjectively important identities that are consistently important to a person's core sense of self regardless of context, while other situationally relevant identities are important only in specific contexts (Ashforth and Johnson, 2001). The current findings suggest that the affirmation of subjectively important identities in office environments may be especially dependent on employees' abilities to personalize their workspace, because such personalization allows them to affirm the most central dimensions of their identities, such as being a parent or artist, which would be difficult to affirm through other means. Specifically, the current findings suggest that employees' central identity dimensions may be affirmed through physical markers of distinctiveness that are unrelated to work, personally selected, and prominently displayed. As a result, when office personalization is limited, distinctiveness affirmations are limited, and distinctiveness categorizations are threatened.

A second characteristic of distinctiveness categorizations that appears to make them susceptible to threats in non-territorial work environments is their absolute membership structure. In a recent examination of categorization processes, Diesendruck and Gelman (1999) found that individuals were likely to view animal categories as absolute in membership structure (a horse or not a horse), while artifact categories were perceived as graded in membership structure (a vase could be included to varying degrees in the category of furniture). This research suggests that people use at least two methods for determining category membership, based either on essential properties or the extent to which something matches a prototype. The notion that some category memberships are absolute fits with what cognitive psychologists call an essentialist model of categorization (Medin, 1989). As Diesendruck and Gelman (1999: 338) explained, "People do not necessarily know what the essential properties of a category are, but rather they simply have a belief that these properties exist. On this account, all members of a category are believed to possess the category's essential properties to the same degree and are therefore considered members of the category to the same extent." By contrast, the notion that category membership is graded fits with prototype-matching models of categorization (Rosch, 1978), which allow items to vary in terms of their degree of match with a prototype and, consequently, their degree of category membership (Diesendruck and Gelman, 1999). The current findings support the notion that people assess different types of category members in different ways. Further, these findings extend theories of category judgment and identity threat by suggesting that observers determine membership in categories that define distinctive individual occupations or interests (e.g., parent, artist) in the same way that they judge membership in animal categories (e.g., bird, fish), through an essentialist, absolute category model. This notion

is supported by the finding that the loss of key distinctiveness markers led participants to perceive that they had lost the ability to display the essential property of category membership. By contrast, the current findings suggest that observers judge membership in categories that define individual status (e.g., sales leader) in the same way that they judge members of artifact categories (e.g., furniture, tools), through a prototype-matching, graded model. The loss of status markers appeared to diminish, but not eliminate, participants' ability to signal category membership. These suggestions seem reasonable given that occupational or interest categorizations, such as parent or athlete, are more naturally occurring, much like animal categories. By contrast, status categorizations are artificially constructed, much like artifact categories.

A third and final characteristic of distinctiveness categorizations that appears to contribute to their threat in non-territorial work environments is their strong reliance on physical markers as a means of affirmation. Specifically, the current findings suggest that employees most commonly affirm distinctiveness categorizations through the continuous and salient display of physical artifacts, such as photos, mementos, equipment, and furniture. By contrast, employees most commonly affirm status categorizations through the display of in-role behaviors and interpersonal interactions, such as giving orders and making decisions. These findings add to our understanding of identity affirmation and threat by suggesting that status categorizations exist primarily in the relationships between people and people, while distinctiveness categorizations exist primarily in the relationships between people and things. A high-ranking manager who loses his or her high-status office furniture continues to provide performance evaluations, receive visits from other high-ranking managers, and to be treated with deference by most employees. By contrast, an artistic member of an engineering team who takes great pride in his or her engineering drawings may feel great identity threat if he or she is thrust into a workspace that prohibits the display of those drawings.

These findings also add to theories of identity threat by extending our understanding of the stability of status hierarchies (Jost, Burgess, and Mosso, 2001). Psychological research on status hierarchies has shown that legitimate and stereotypical evidence supporting perceptions of high- versus low-status groups (i.e., test scores that indicate one group is more intelligent than another) help to maintain status hierarchies (Yzerbyt, Rocher, and Schadron, 1997). Further, recent research on systems justification theory (Jost and Banaji, 1994) suggests that even low-status group members will support a status hierarchy if they believe the overall system that produced it is just and good. The present data add to these notions by suggesting that because status categorizations are less likely to be threatened by changes in the physical environment than by changes in the social environment, status hierarchies are sustained more through social interactions than through physical markers.

### **Identity Threat**

**The strategy of identity affirmation.** The current study also provides new insight into tactics that employees use to affirm threatened identity categorizations. First, the current findings suggest that people view publicly affirming distinctiveness categorizations as much more acceptable and necessary than publicly affirming status categorizations. Further, it appears that non-territorial work environments promote this norm, as they are often designed to do (Zelinsky, 1998). The notion of acceptability seems consistent with related work on the study of tactics individuals use to improve their status or ranking. Researchers have found that tactics for enhancing status in real-life organizations are more effective when they are subtle and normative (e.g., working hard, displaying knowledge, obtaining an education) than when they are more overt and anti-social (e.g., derogating others, boasting, using deception and self-promotion) (Kyl-Heku and Buss, 1996). For example, Ely's (1995) study of female lawyers showed that those who wanted to become partners changed subtle dimensions of their behavior, such as not showing insecurity through their verbal comments. In addition, the notion of necessity seems consistent with current findings about the exclusive use of physical markers to affirm distinctiveness, but not status categorizations. Because status categorizations may be affirmed through behavioral or verbal markers (i.e., sitting at the head of the table, demanding deference in meetings, using a high-status title), such categorizations are less threatened by a non-territorial work environment, and it is less necessary to affirm them through other means.

A second insight about identity affirmation tactics provided by the current findings is that employees in non-territorial office environments are most likely to affirm personal distinctiveness categorizations in response to a threat to any of the four identity self-categorizations. The prevalence of affirmations of personal distinctiveness may have resulted from the fact that the non-territorial work environment made personal categorizations more salient. In this vein, Brickson (2000) has suggested that organizations defined by an atomized organizational structure, in which individuals feel separated from one another, promote awareness of personal distinctiveness. Such an atomized structure may be more likely to be perceived by individuals working in a non-territorial environment, where interaction with coworkers or relevant group members is uncommon. These findings also underscore and enrich existing theories about the flexible nature of the human self-concept in response to threat (Hogg and Abrams, 1988). This research has shown that, in the face of a threat to one aspect of self-concept (e.g., research quality), individuals are likely to restore a positive identity by affirming an alternate aspect (e.g., teaching quality) (Bourhis and Hill, 1982; Steele and Aronson, 1995). The present data suggest that such creativity in identity affirmation can be displayed not only through verbal accounts, as shown in prior research, but also through physical artifacts and salient behavior.

A final insight about identity affirmation tactics provided by the current findings is that individuals are fairly creative and

flexible in their choice of identity markers. Physical markers can be viewed repeatedly and independent of the display (Elsbach, 2004a). But behavioral markers can be more easily adapted to a specific situation. For example, one can make claims about one's technical skills to engineering superiors and about one's people skills to marketing superiors. Individuals who maintain and use a variety of identity markers appear to adapt more easily to threats to their identity self-perceptions and to situations that call for an alteration in their displayed identity. Access to a variety of identity markers may be useful for individuals who are attempting both to affirm a new identity (e.g., associated with a new role or organization) and to affirm an existing identity in a context in which one or more identity markers are not available (e.g., in a situation like that in the present study, where permanent physical markers are not available). These notions add an additional layer to models of social cognition and adaptation and further illustrate the flexibility of social cognition processes (Fiske and Taylor, 1991).

### **Practical Implications**

An important practical implication of this study is that employees are willing to expend considerable effort to affirm threatened workplace identities. While portable artifacts and behavioral identity markers add to the flexibility and adaptability of identity affirmation tasks, in terms of practical application, using these markers to replace permanent ones requires adding to the employee's daily chores. It is as if members must engage, over the long term, in the effortful identity-constructing behaviors that Ibarra (1999) described for new employees, such as being careful always to use the correct language and terminology. This finding supports social psychological research showing that individuals who are forced to express a false identity go to great lengths to make that falsehood clear. Flemming and Rudman (1993) found, for example, that individuals who were required to read a counter-attitudinal speech to a hostile audience displayed their true attitude through body language (e.g., nervous twitching, non-serious speech styles).

Ultimately, managers may benefit most from offering employees opportunities to use both portable and permanent markers rather than forcing them to rely solely on portable ones. In this manner, recent research on home-officing and the use of conveniently located drop-in work centers in combination with dedicated offices suggests that working in an environment that disallows permanent status and distinctiveness markers can be desirable for people who value those things if such work arrangements are only a supplement to dedicated office space (Elsbach, 2004a). That is, people who have both dedicated offices, in which to display identity markers, and home offices or temporary drop-in spaces that allow them to work more efficiently, with fewer distractions and less commuting time, report the most satisfaction with their work arrangements. Unfortunately, this solution satisfies workers but does not solve a company's problem of space constraints. In the end, practical solutions may not meet all of a worker's identity needs. In such situations, making sure top managers use the non-territorial

### **Identity Threat**

offices and abide by occupation and reservation protocols may be the only way to mitigate employees' resistance.

### **Theoretical and Practical Limitations of Study Findings**

Despite the numerous theoretical and practical implications of this research, it is not without its limitations. In particular, the study is limited by the scope and focus of its data, which were collected from one organization in the first several months after it transitioned to a non-territorial work environment and focused on evidence of identity threats from a relatively small number of employees. The recency of the non-territorial arrangement may have intensified participants' attention to adjustment pains that may have eventually receded. Thus these findings may not apply to employees in more mature non-territorial work environments. Further, these findings do not provide insight about how identity threats may evolve or how employees might adapt to them over time. Future work may need to focus, over the long term, on the day-to-day management of identities in environments that limit the display of identity markers.

In addition, my focus on identity threat—to the exclusion of other variables such as identity affirmation, organizational identification, and identity change—limits our understanding of the variety of effects of non-territorial work environments on identity and identification in organizations and limited the bulk of my data analysis to the half of the respondents who reported identity threat. As a result, this study did not examine how such work environments might actually affirm the workplace identities of workers. My analysis of data from participants who did not experience identity threat provides some clues about this issue. Specifically, it suggests that employees who did not experience threat were those who viewed their identities as being consonant with the non-territorial work environment. Their status and distinctiveness came from being part of new projects and being connected to the larger organization. Yet, because I did not focus on these participants in my data analysis, these notions are not strongly supported. To complete our understanding of the implications of workplace design on employees' identities, future work may need to look more directly at the propensity for identity threat and affirmation in alternative work environments and examine more explicitly how such environments might affirm employees' identities.

The findings of this study nevertheless indicate that trends toward more non-territorial work arrangements in modern corporations are likely to create identity threats for many employees. Yet, rather than threatening employees' status, as one might guess based on the long-standing tradition of giving nicer offices to higher-status employees, these environments appear most threatening to employees' sense of distinctiveness. In response, employees are likely to expend considerable effort to personalize their work environments through alternate means. In the end, Goldtech's lesson for us may be that in the design of new work environments, we must consider not only how work arrangements enable productivity but also how they enable the expression of individuality.

## REFERENCES

- Alexander, C. N., and P. Lauderdale**  
 1977 "Situated identities and social influence." *Social Psychology Quarterly*, 40: 225–233.
- Ames, K. L.**  
 1984 "Material culture as nonverbal communication: A historical case study." In E. Mayo (ed.), *American Material Culture: The Shape of Things around Us*: 25–47. Bowling Green, OH: Bowling Green University Popular Press.
- Ashforth, B. E., and B. W. Gibbs**  
 1990 "The double-edge of organizational legitimization." *Organization Science*, 1: 177–194.
- Ashforth, B. E., and S. A. Johnson**  
 2001 "Which hat to wear? The relative salience of multiple identities in organizational contexts." In M. A. Hogg and D. J. Terry (eds.), *Social Identity Processes in Organizational Contexts*: 31–48. Philadelphia: Psychology Press.
- Bandura, A.**  
 1973 Aggression: A Social Learning Analysis. Oxford, UK: Prentice-Hall.
- Baumeister, R. F.**  
 1982 "Self-esteem, self-presentation, and future interaction: A dilemma of reputation." *Journal of Personality*, 50: 29–45.
- Belk, R. W.**  
 1988 "Possessions and the extended self." *Journal of Consumer Research*, 15: 139–168.
- Bobo, L.**  
 1983 "Whites' opposition to busing: Symbolic racism or realistic group conflict?" *Journal of Personality and Social Psychology*, 45: 1196–1210.
- Bourhis, R. Y., and P. Hill**  
 1982 "Intergroup perceptions in British higher education: A field study." In H. Tajfel (ed.), *Social Identity and Intergroup Relations*: 24–40. Cambridge: Cambridge University Press.
- Brewer, M. B.**  
 1991 "The social self: On being the same and different at the same time." *Personality and Social Psychology Bulletin*, 17: 475–482.
- Brewer, M. B., J. M. Manzi, and J. S. Shaw**  
 1993 "In-group identification as a function of depersonalization, distinctiveness, and status." *Psychological Science*, 4: 88–92.
- Brewer, M. B., and C. L. Pickett**  
 1999 "Distinctiveness motives as a source of the social self." In T. R. Tyler and R. M. Kramer (eds.), *The Psychology of the Social Self*. Applied Social Research: 71–87. Mahwah, NJ: Lawrence Erlbaum.
- Brickson, S.**  
 2000 "The impact of identity orientation on individual and organizational outcomes in demographically diverse settings." *Academy of Management Review*, 25: 82–101.
- Brockner, J., J. Z. Rubin, and E. Lang**  
 1981 "Face-saving and entrapment." *Journal of Experimental Social Psychology*, 17: 68–79.
- Buono, A. F., J. L. Bowditch, and J. W. Lewis III**  
 1985 "When cultures collide: The anatomy of a merger." *Human Relations*, 38: 477–500.
- Cohen, J.**  
 1960 "A coefficient of agreement for nominal scales." *Educational and Psychological Measurement*, 20: 37–46.
- Covaleski, M. A., M. W. Dirsmith, J. B. Heian, and S. Sajay**  
 1998 "The calculated and the avowed: Techniques of discipline and struggles over identity in Big Six public accounting firms." *Administrative Science Quarterly*, 43: 293–327.
- Diesendruck, G., and S. A. Gelman**  
 1999 "Domain differences in absolute judgments of category membership: Evidence for an essentialist account of categorization." *Psychonomic Bulletin and Review*, 6: 338–346.
- Eisenhardt, K. M.**  
 1989 "Building theories from case study research." *Academy of Management Review*, 14: 532–550.
- Elsbach, K. D.**  
 2004a "Interpreting workplace identities: The role of office decor." *Journal of Organizational Behavior*, 25: 99–128.
- 2004b "Managing images of trustworthiness in organizations." In R. M. Kramer and K. Cook (eds.), *Trust and Distrust in Organizations: Dilemmas and Approaches*: 275–292. New York: Russell Sage Foundation.
- Ely, R. J.**  
 1995 "The power in demography: Women's social constructions of gender identity at work." *Academy of Management Journal*, 38: 589–634.
- Fiske, S., and S. Taylor**  
 1991 *Social Cognition*. New York: McGraw-Hill.
- Flemming, J. H., and L. A. Rudman**  
 1993 "Between a rock and a hard place: Self-concept regulating and communicative properties of distancing behaviors." *Journal of Personality and Social Psychology*, 64: 44–59.
- Glaser, B., and A. Strauss**  
 1967 *Discovery of Grounded Theory*. Chicago: Aldine.
- Goffman, E.**  
 1961 *Asylums*. New York: Doubleday.  
 1967 *Interaction Ritual*. New York: Pantheon Books.
- Hogg, M. A., and D. Abrams**  
 1988 *Social Identifications: A Psychology of Intergroup Relations and Group Processes*. London: Routledge.
- Hogg, M. A., and D. J. Terry**  
 2000 "Social identity and self-categorization processes in organizational contexts." *Academy of Management Review*, 25: 121–140.
- Hornsey, M. J., and M. A. Hogg**  
 2002 "The effects of status on subgroup relations." *British Journal of Social Psychology*, 41: 203–218.
- Hull, R. B.**  
 1992 "Image congruity, place attachment and community design." *Journal of Architectural and Planning Research*, 9: 181–192.

## Identity Threat

- Ibarra, H.**  
 1999 "Provisional selves: Experimenting with image and identity in professional adaptation." *Administrative Science Quarterly*, 44: 764-791.
- JALA International Inc.**  
 2003 "Forecast of telework in the U.S." [www.jala.com](http://www.jala.com).
- Jetten, J., R. Spears, and A. S. R. Manstead**  
 1997 "Distinctiveness threat and prototypicality: Combined effects on intergroup discrimination and collective self-esteem." *European Journal of Social Psychology*, 27: 635-657.
- Jost, J. T., and M. R. Banaji**  
 1994 "The role of stereotyping in system-justification and the production of false consciousness." *British Journal of Social Psychology*, 33: 1-27.
- Jost, J. T., D. Burgess, and C. O. Mosso**  
 2001 "Conflicts of legitimization among self, group, and system: The integrative potential of the system justification theory." In J. T. Jost and B. Major (eds.), *The Psychology of Legitimacy*: 363-388. Cambridge: Cambridge University Press.
- Konar, E., and E. Sundstrom**  
 1985 "Status demarcation in the office." In J. Wineman (ed.), *Behavioral Issues in Office Design*: 203-249. New York: Van Nostrand.
- Kyl-heku, L. M., and D. M. Buss**  
 1996 "Tactics as units of analysis in personality psychology: An illustration using tactics of hierarchy negotiation." *Personality and Individual Differences*, 21: 497-517.
- Leary, M. R.**  
 1992 "Self-presentational processes in exercise and sport." *Journal of Sport and Exercise Psychology*, 14: 339-351.  
 1996 Self-presentation. Boulder, CO: Westview.
- Lee, T. W., T. R. Mitchell, and C. J. Sablinsky**  
 1999 "Qualitative research in organizational and vocational psychology: 1979-1999." *Journal of Vocational Behavior*, 55: 161-187.
- Louis Harris & Associates, Inc.**  
 1980 *The Steelcase National Study of Office Environments No. II: Comfort and Productivity in the Office of the '80's*. Grand Rapids, MI: Steelcase.
- Medin, D. L.**  
 1989 "Concepts and conceptual structure." *American Psychologist*, 44: 1469-1481.
- Pliner, P., and S. Chaiken**  
 1990 "Eating, social motives, and self-presentation in women and men." *Journal of Experimental Social Psychology*, 26: 240-254.
- Pratt, M. G., and A. Rafaeli**  
 1997 "Organizational dress as a symbol of multilayered social identities." *Academy of Management Journal*, 40: 862-898.
- Rafaeli, A., J. Dutton, C. V. Harquail, and S. Mackie-Lewis**  
 1997 "Navigating by attire: The use of dress by female administrative employees." *Academy of Management Journal*, 40: 9-45.
- Rafaeli, A., and M. G. Pratt**  
 1993 "Tailored meanings: On the meaning and impact of organizational dress." *Academy of Management Review*, 18: 32-55.
- Reiss, M.**  
 1982 "Seating preferences as impression management: A literature review and theoretical integration." *Communication*, 11: 85-113.
- Rosch, E.**  
 1978 "Principles of categorization." In E. Rosch and B. B. Lloyd (eds.), *Cognition and Categorization*: 27-48. Hillsdale, NJ: Erlbaum.
- Sheldon, K. M., and B. A. Bettencourt**  
 2002 "Psychological need-satisfaction and subjective well-being within social groups." *British Journal of Social Psychology*, 41: 25-38.
- Sherman, S. J., D. L. Hamilton, and A. C. Lewis**  
 1999 "Perceived entitativity and the social identity value of group memberships." In D. Abrams and M. A. Hogg (eds.), *Social Identity and Social Cognition*: 80-100. Oxford: Blackwell.
- Snyder, C. R., and H. C. Fromkin**  
 1980 *Uniqueness: The Human Pursuit of Difference*. New York: Plenum.
- Solomon, M., and P. Anand**  
 1985 "Ritual costumes and status transition: The female business suit as totemic emblem." In E. C. Hirschman and M. B. Holbrook (eds.), *Advances in Consumer Research*, 12: 315-318. Provo, UT: Association for Consumer Research.
- Steele, C. M., and J. Aronson**  
 1995 "Stereotype threat and the intellectual test performance of African Americans." *Journal of Personality and Social Psychology*, 69: 797-811.
- Steele, F. I.**  
 1973 *Physical Settings and Organizational Development*. Reading, MA: Addison-Wesley.
- Sundstrom, E., and I. Altman**  
 1989 "Physical environments and work-group effectiveness." In L. L. Cummings and B. M. Staw (eds.), *Research in Organizational Behavior*, 11: 175-209. Greenwich, CT: JAI Press.
- Sundstrom, E., J. Town, D. Brown, A. Forman, and C. McGee**  
 1982 "Physical enclosure, type of job, and privacy in the office." *Environment and Behavior*, 14: 543-559.
- Tajfel, H.**  
 1982 "The social psychology of intergroup relations." *Annual Review of Psychology*, 33: 1-39.
- Turner, J. C.**  
 1987 *Rediscovering the Social Group: A Self-categorization Theory*. Oxford: Basil-Blackwell.  
 1999 "Some current issues in research on social identity and self-categorization theories." In N. Ellemers, R. Spears, and B. Doosje (eds.), *Social Identity*: 6-34. Cambridge: Blackwell.
- Turner, G., and J. Myerson**  
 1998 *New Work Space, New Culture: Office Design as a Catalyst for Change*. Brookfield, VA: Gower.

- van Knippenberg, D., and E. van Leeuwen**  
2001 "Organizational identity after a merger: Sense of continuity as the key to postmerger identification." In M. A. Hogg and D. J. Terry (eds.), *Social Identity Processes in Organizational Contexts*: 249–264. Philadelphia: Psychology Press.
- Vischer, J.**  
1999 "Will this open space work?" *Harvard Business Review*, May–June: 4–11.
- Yin, R. K.**  
2003 *Case Study Research: Design and Methods*. Thousand Oaks, CA: Sage.
- Yzerbyt, V. Y., S. J. Rocher, and G. Schadron**  
1997 "Stereotypes as explanations: A subjective essentialistic view of group perception." In R. Spears, P. J. Oakes, N. Ellemers, and S. A. Haslam (eds.), *The Social Psychology of Stereotyping and Group Life*: 208–235. Oxford: Blackwell.
- Zelinsky, M.**  
1998 *New Workplaces for New Workstyles*. New York: McGraw-Hill.
- Zenardelli, H. A.**  
1967 "Testimonial to life in a landscape." *Office Design*, 5: 30–36.