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Interpreting workplace identities: the role of office décor

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Summary

Using qualitative methods, I examine how employees in corporate office environments interpreted a variety of relatively permanent office décor (e.g., furniture, photos, personal mementos) as indicators of their colleagues' workplace identities (i.e., central and enduring categorizations regarding employees' status and distinctiveness in the workplace). Similar to the encoding of behavioral cues of identity, findings suggest that interpretation of *physical identity markers* begins with either (1) a top-down process of social categorization, in which specific rules are applied to encoding a few, focal, and visually salient pieces of office decor as evidence of management prototypes, or (2) a bottom-up process of social categorization, in which a variety of physical artifacts are examined and compared to specific managerial exemplars to develop a complex representation of workplace identity. Findings also suggest that some of the unique attributes of physical identity markers (i.e., their potential to be viewed independently from their display, and their relative permanence) may be associated with the focus of each profiling process (i.e., on interpreting status vs. distinctiveness, and consistency vs. change). Copyright © 2004 John Wiley & Sons, Ltd.

Introduction

In this paper, I examine how individuals working in corporate office settings interpret office décor as indicators of their displays' workplace identity. In terms of theoretical advance, the paper extends frameworks of social identity in organizations by describing the cognitive processes by which individuals interpret physical identity markers, and by suggesting how some of the unique attributes of permanent physical markers contribute to those processes.

The paper is organized as follows. I first define physical identity markers and workplace identity, and discuss why organizational scholars and managers should care about how physical identity markers are interpreted. In these sections, I draw on work from cognitive social psychology, environmental psychology, and social identity to make the case that physical identity markers are widely interpreted as cues of employees' status and rank, as well as their distinctive abilities and work ideals. Second, I describe what we know and don't know about how physical identity markers may be interpreted. Here,

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I argue that work in cognitive social psychology has shown that behavioral identity markers may be interpreted either by comparisons to category prototypes or to recent exemplars. This research also suggests some motives and consequences of each interpretation process. Yet, I also note that this research has not considered how physical identity markers—that may be more permanent and independent from their displayer than behavioral markers—are interpreted. I then describe a set of qualitative studies I used to fill gaps in our understanding of the interpretation of physical identity markers. Finally, I discuss the implications of these findings for theories of social identity in organizations.

Physical identity markers and workplace identity: definitions

Borrowing from definitions of the self-concept from social identity theory (Ashforth & Mael, 1989), and social categorization theory (Brewer, 1991) and from recent work on professional identity in organizational roles (Ibarra, 1999), I define *workplace identity* as *an individual's central and enduring status and distinctiveness categorizations in the workplace*. These role categorizations include both personal categorizations (e.g., 'I'm an efficient worker') and social categorizations (e.g., 'I'm a high-status professional,' 'I'm an engineer').

In corporate settings, *physical identity markers* may be defined as material artifacts that cue and/or affirm a person's workplace identity. That is, physical identity markers signal a person's *distinctiveness and status*—the central components of social identity (Elsbach & Kramer, 1996), in the workplace. Although the present research focuses on office decor, physical identity markers in corporate settings may include items such as style of dress, titles on letterhead, business cards, and displayed possessions (e.g., art, office design, the car you drive), and these markers may be used to cue and/or affirm a number of different professional identities (e.g., 'top-manager' vs. 'worker bee'). Physical identity markers may also be perceived by observers in ways that are not intended by the displayer. For example, someone with no interest in sports may display a calendar depicting outdoor sports because it was a gift from a co-worker, but others may perceive that marker as evidence of a 'typical macho male' affiliated with sports.

This last point is important in this paper because of my focus on perceivers' interpretations of others' identity markers. That is, I am concerned with how observers interpret the distinctiveness and status categorizations of another person based on the physical markers they display. While it is possible that these interpretations are inaccurate (i.e., they don't fit with a displayer's definitions of his or her identity), they are the basis for employees' perceptions of their co-workers, and thus, as I argue below, have important organizational consequences.

Physical markers and workplace identity: why should we care?

Although this paper will focus on describing the cognitive processes by which physical identity markers are interpreted, it is first necessary to show that understanding those processes is relevant to organizational effectiveness. To that end, several areas of research germane to the study of workplace identity (i.e., environmental psychology, and social identity) suggest that the subjective interpretations of physical identity markers by observers may have important outcomes for workers displaying those markers. In particular, this research suggests that the way that identity markers are interpreted can affect the image, sense of satisfaction, and productivity of the displayers.

First, a review of recent research in *environmental psychology* (see Sundstrom, Bell, Busby, & Asmus, 1996; Sundstrom & Sundstrom, 1986) suggests that physical markers may have symbolic

effects in organizations, including signaling and affirming an employee's status and distinctiveness, which are central components of social identity (Frank, 1985; Elsbach & Kramer, 1996). The size of an office, its location, the number of windows, and the quality of furnishings, for example, are commonly used as indicators of organizational rank, prestige, and status (Sundstrom et al., 1982). Researchers have found that perceived inequities in status markers—where status markers are incongruent with the person's rank—evoke strong emotional reactions from employees and calls for changes in those markers to appropriate levels (Steele, 1973). Appropriate physical status markers appear to be so important that, even when organizations attempt to remove status markers (e.g., by assigning everyone the same type of workspace regardless of rank), employees have improvised means of determining status via physical markers (e.g., by supporting unspoken rules about the personal artifacts allowed at different levels of management (Zenardelli, 1967)). Similarly, personalization of one's office space to reflect individual distinctiveness has also been shown to have important psychological meaning to workers (Moleski & Lang, 1986). For example, in a recent study of three large British organizations, Donald (1994) found that employees railed against the facility managers' attempts to create a uniform, tidy, and organized office appearance by imposing rules against office personalization. As one employee put it, 'Standardized furniture makes it look better . . . but it's very impersonal. It's better psychologically to be able to personalize; to put things on screens' (Donald, 1994, p. 26).

In turn, these symbolic effects appear to have implications for employee performance and satisfaction. In the study cited above, Donald (1994) found the organizations' strong stance against office personalization led to conflict, subversive personalization of workspace, and apathy among employees—all leading to decreased productivity. By contrast, researchers have found that successful work groups (i.e., those with acceptable output, member satisfaction, and the ability to work together on subsequent tasks) are comprised of individual members who are allowed to display (vs. not display) self-identity and work roles through personal artifacts, equipment, furniture, and décor (see Sundstrom & Altman, 1989, for a review). In addition, a number of studies have shown that participation in the design of one's office leads to increased satisfaction with one's workspace (Town, 1982; Spreckelmeyer, 1993), and the more territorial workers are in their treatment of work space, the more satisfied they are when work environments allow them to personalize or mark their offices (Sloan, 1972). Sundstrom and Altman (1989) also suggest that identity markers may be important to communicating a work group member's legitimacy (e.g., his or her ability to carry out a technical function) to potential work group partners, which affects the employee's ability to collaborate.

Second, a small but growing amount of work on *social identity and identification* among organizational constituencies also suggests that individuals may be influenced by physical markers in the development of professional identities and identifications with their organizations (Pratt & Rafaeli, 1997). For example, recent research on the symbolic effects of dress by medical professionals (Pratt & Rafaeli, 1997) and administrative assistants (Rafaeli, Dutton, Harquail, & Mackie-Lewis, 1997) suggests that choices in clothing and accessories provide employees with a salient means of affirming and expressing their professional roles and identities. For example, dress markers used by medical professions (e.g., lab coats and surgical scrubs vs. street clothes) may indicate status, functional expertise, professional values, and customer affiliation (Pratt & Rafaeli, 1997). In one study, Pratt and Rafaeli (1997) found that nurses who intended to convey an identity of 'acute care professional' wore traditional white uniforms, surgical scrubs, and lab coats. By contrast, nurses intending to convey the identity of 'rehabilitation professional' wore street clothes. In this manner, dress markers provided salient cues as to the professional identities different nurses intended to affirm and support. Appropriate organizational dress also helped employees feel like they fit their work roles and provided them with added confidence and psychological comfort in carrying out those roles.

In turn, related work reveals how dress markers may affect the ability of corporate employees to effectively execute their job roles (Rafaeli et al., 1997). This work suggests that individual employees

relate effectively with others at work, at least partially, through their use of dress markers (i.e., the style, color, fabric, and accessories of work clothes) that signal their professional identities. As one executive noted, her dress was important in signaling her identity as 'manager' to visiting executives. In this manner, appropriate dress markers appear to convey a desired identity for the wearer, as well as elicit role-congruent responses from those with whom the wearer interacts. That is, dress helps workers to do their jobs, partly because it elicits self-reinforcing responses from co-workers, bosses, and customers (Bushman, 1988).

Interpretation of identity markers: what do we know?

Together, the above work suggests that workplace identity interpretation, *vis-à-vis* physical identity markers, may have important consequences for organizations and their members. Despite this evidence, organizational theorists know little about how such interpretations are made.¹ That is, while the research on environmental psychology and social identity describes why physical markers might affect workplace identities (i.e., they denote status and distinctiveness through consistent use), this work does little to describe how this happens (i.e., the *cognitive process* of identity interpretation (Donald, 1994)). In addition, none of the work discusses how qualities of physical markers make unique contributions to the process of identity interpretation.

At the same time, research in social cognition has examined the interpretation of identity through *behavioral or verbal cues* (i.e., category labels and in-role behaviors) (Macrae & Bodenhausen, 2000). This research provides clues about how physical identity markers might be interpreted.

First, research on *social categorizations* describes how individuals interpret information in their social environments as evidence about others' attributes and identities. Research on social categorization (Fiske & Taylor, 1991) suggests two primary strategies for interpreting social cues about a person's identity: (1) theory-driven approaches, in which people rely on stereotypes or schemas as benchmarks of category membership, and (2) data-driven approaches, in which people use available cues to construct a unique perception of a person prior to categorization.

In a similar vein, *attribution theorists* define contrasting strategies for judging others as: (1) 'intuitive politician' perspectives (Bell & Tetlock, 1989), in which categorizations are based on cues about a person's fit with a prototype or stereotype; and (2) 'intuitive detective' perspectives, in which categorizations are based on a variety of cues about a person's underlying motives (Hamilton, 1980).

A recent and extensive review of these cognitive processes (Macrae & Bodenhausen, 2000) concludes that theory-driven, 'intuitive politician' strategies, which involve quick categorization of people and a preference toward biased stereotypes, may be common in situations where a social perceiver lacks the motivation, time, or cognitive capacity to make careful assessments of others, or when they are motivated to make efficient or biased assessments (e.g., to bolster their own egos). Further, this research suggests that, when relying on such social categories, individuals are likely to attend to the information and cues that are the most visually salient. For example, studies in person perception show

¹While there is a long tradition of looking at social markers in the field of sociology and, in particular, in theories of symbolic interactionism (Goffman, 1967; Blumer, 1969), most of this work focuses on interpersonal, face-to-face interaction between people, and how that interaction leads to the social creation of 'selves.' By contrast, the focus of this paper is on how observers make assessments about *others* based on *mere observations* of inanimate objects (many times without the knowledge of the displayer). In these cases, the interpersonal nature of identity creation may come from later discussions of the artifacts between co-workers. Yet, the initial interpretations (which are the focus of the paper) are relatively private. For these reasons, I do not provide a discussion of sociological theories of marker interpretation here.

that visible traits (e.g., talkativeness, self-confidence) vs. less visible traits (e.g., anxiety, introversion) are likely to heavily influence interpersonal judgments (Kenny, 1991). Finally, work on social categorizations has shown that cues that one receives earliest are likely to be weighted most heavily in the formation of interpersonal assessments, and that such early cues help to organize subsequent information (Fiske & Taylor, 1991). As a result of their reliance on stereotypes, theory-driven approaches may result in inaccurate and biased perceptions of those who are the targets of evaluation (Fiske & Taylor, 1991).

By contrast, Macrae and Bodenhausen (2000) suggest that perceivers are most likely to rely on data-driven, 'intuitive detective' approaches and avoid biased stereotypes when they are motivated to be careful (e.g., required to be accurate), and when they don't have access to a relevant stereotype (i.e., they haven't developed a simplified schema that applies in the current situation). In these cases, perceivers may search for ways to 'calibrate' their categorizations of others (e.g., instead of merely categorizing one's accountant, Joe, as extroverted vs. introverted, one may attempt to determine if Joe is extroverted for an accountant) (Biernat et al., 1998). In carrying out such calibrations, researchers have found that such individuals will compare others to specific, relevant exemplars—if those exemplars are readily accessible (i.e., in this case, I should compare Joe to Margaret, my other accountant friend, vs. Mary, my tennis partner, or vs. my stereotype of an accountant) (Stapel & Koomen, 1998). The use of such data-driven attribution processes often require more time-consuming observations, but may, in the end, result in more fair and accurate perceptions of the targets of those observations (Fiske & Taylor, 1991).

To summarize, the above findings suggest that the perception of identities via visible markers can proceed through one of two primary processes (i.e., theory-driven vs. data-driven), and that individuals may be motivated to use one or the other process. For example, individuals who want to make quick assessments of others in ways that might bolster their own ego are likely to use theory-driven approaches, while individuals who want to avoid stereotypical bias and make careful assessments are likely to use data-driven approaches. Further, the above findings suggest that theory-driven (vs. data-driven) approaches are more likely to lead to inaccurate perceptions of individuals because of their reliance on stereotypes, and that visible and early-seen markers are most heavily weighted in theory-driven approaches, while comparisons to relevant exemplars are important for data-driven approaches.

How physical identity markers are interpreted: what don't we know?

While the above evidence provides a fairly sophisticated picture of how individuals might interpret identity markers in social settings, it is limited in a number of important ways. First, a large amount of the literature examining social categorization and identity assessment has relied on verbal cues (e.g., category labels) vs. in-person assessment of physical cues. While a face-to-face interaction may provide cues to many different categorizations, verbal cues tend to define a single category. As Macrae and Bodenhausen (2000, p. 101) note:

One notable weakness of the existing research in this domain is that it has tended to rely on verbal stimulus materials (i.e., category labels) to investigate the cognitive dynamics of the category activation process. . . . when presented with words and people, the mind is faced with distinct cognitive puzzles, puzzles that may require different information-processing solutions.

Further, of the research on identity interpretation that has relied on interpersonal cues, most of it has examined behavioral cues (i.e., personality cues, in-role behaviors), rather than inanimate, physical

markers (Fiske & Taylor, 1991). Behavioral cues are, by definition, tightly linked to their displayer, and they are often assessed during interpersonal interaction, in which social dynamics may play a role in their perception. In fact, a recent stream of research on 'relational categorizations' suggests that we define many categorizations based on our interactions with others (see Dovidio et al., 1999; Aron, Aron, Tudor, & Nelson, 1991). By contrast, physical markers may be viewed and interpreted in contexts that are very different, and thus may provide information to social perceivers that is distinct from verbal or behavioral cues. Specifically, physical markers are distinct from verbal or behavioral markers in two important ways.

First, many physical markers exist *independent* of the displayer (i.e., décor may be displayed in a worker's office even if he or she is not present). Consequently, physical identity markers are likely to be viewed and assessed in situations where the displayer is not present or able to explain them. Such markers may even be the first information an observer receives about a person (i.e., one may view a co-worker's workspace before meeting its inhabitant). Because, as noted previously, early cues about a person's categorization are likely to influence and organize subsequent assessments of that person, physical markers viewed independent of their displayer may carry great weight in assessments of a co-worker's identity.

Second, with the exception of dress, most physical identity markers in corporate settings are *relatively permanent* (i.e., they remain in place in an office over long periods of time). As a result, choice and display of physical markers may be interpreted as a deliberate act (vs. a quirky one-time act, or temporary lapse of judgment) and may be repeatedly viewed, and reinforced over time as a strong indicator of a stable personality or identity (Fiske & Taylor, 1991). In addition, this opportunity for repeat observations may mitigate the effects of cognitive processing capacity on assessments of physical (vs. behavioral) identity markers. For example, observers may have more time to search for comparison exemplars and to develop a more complex picture of a person's identity than with other types of markers.

Together, these differences between physical and behavioral markers highlight what we do not know about identity interpretation in organizational settings: i.e., how relatively permanent, physical markers (e.g., office décor) are interpreted as cues of identity. In light of these differences, the goal of this paper is to describe how physical markers—in the form of office décor—contribute to the perceived workplace identities of corporate employees. Specifically, I aim to answer the following three research questions:

Research question 1: What are the general cognitive processes by which observers interpret physical identity markers? Specifically, do observers interpret physical identity markers using processes similar to those described for the interpretation of behavioral cues (i.e., theory-driven vs. data-driven attribution processes)?

Research question 2: How does the independence of office décor from its displayer contribute to interpretations of the displayer's workplace identity?

Research question 3: How does the relative permanence of office décor contribute to interpretations of the displayer's workplace identity?

In the following sections I describe a set of studies I used to provide answers to these research questions. These studies were conducted from the spring of 2000 (Study 1) to the spring of 2001 (Study 2), and involved questionnaire and interview data gathered from middle managers working in corporate offices of over 20 different organizations in Northern California.

Organizational Context

The Participants and their Work

Most participants in this study were middle managers, in their thirties and forties, working primarily in information technology firms (most commonly Hewlett Packard, or Intel) in Northern California. These types of firms have three distinguishing features relevant to the current study. First, based on this study and a number of other studies involving employees at these firms, it appears that these firms have strong cultures and have highly formalized performance evaluation criteria. As a result, the status meaning of physical markers such as office location, office size, and quality of décor was consistently and easily perceived by most members. Second, because the business of these firms was technology focused, physical markers that indicated interest or skill in technology was valued. Finally, participants almost exclusively worked in cubicles, not in enclosed offices, allowing them to easily observe co-workers and their workspaces.

The External Environment and Time

During the time of this study (Spring of 2000–2001) the economy in Northern California technology firms was at its lowest point in the last decade. The dot.com bubble had burst, and the stock value of technology firms had plummeted to a fraction of what it had been only 2 years earlier. Because of these events, participants in this study were likely to have been the survivors of major lay-offs in their companies. As such, they may have felt lucky to have their jobs, and perhaps guilty about remaining when so many others were out of work. Such environmental conditions may have made them reluctant to criticize others, and may have led them to be more ‘generous’ in their characterization of co-workers’ physical markers.

Methods

Study 1

I used Study 1 to answer Research question 1 (i.e., what are the cognitive processes by which observers interpret physical identity markers?). In particular, I used this study to determine if observers interpreted physical identity markers using cognitive processes similar to the data-driven and theory-driven approaches used to interpret behavioral cues (Macrae & Bodenhausen, 2000).

Questionnaire

To provide initial evidence that physical identity markers were, in fact, used to interpret workplace identities in corporate settings, I administered an exploratory questionnaire. Thirty-seven participants, who currently worked full time in corporate offices in Northern California and attended an evening MBA program at a large Northern California university, completed the questionnaire. These participants were selected because they were all working in corporate office settings and were enrolled in an organizational behavior course that discussed issues regarding workplace identity (thus, they were

aware of the concept and its meaning). The average age of participants was 34, and the gender ratio was 24 males and 13 females. Average length of work experience at the participant's *current* organization was 5 years, while average *overall work experience* was 9.5 years. I asked participants to describe specific co-workers' use of physical identity markers, (i.e., aspects of office décor that they perceived as cues or symbols of a co-worker's workplace identity). I asked them to provide a description of each marker, what that marker said about the displayer's identity, and what they perceived to be the professional benefits and costs (if any) of displaying that marker.

Questionnaire analysis

I developed an initial typology of physical identity markers by reading all of the participants' written descriptions of their markers at work. Two independent coders then grouped the reported markers into those categories, looking only at décor markers (the focus of this study). Inter-coder reliability was $\kappa = 0.87$ on an initial run (Cohen, 1960). Disagreements were discussed and a final set of 10 marker types was agreed upon. Finally, based on prior research indicating that the primary dimensions of individual identities are status and distinctiveness categorizations (Elsbach & Kramer, 1996), we looked at participants' comments about the meaning of each markers, as well as its costs and benefits to determine the status and distinctiveness categorizations that were cued by each type of marker. All comments related to personal preferences, individual skills, abilities, and experiences, personality, character, hobbies, and ideology were defined as cues of distinctiveness categorizations. All comments related to rank, status, relative accomplishment, power, authority, or prestige were defined as cues of status categorizations.

Interviews

To provide answers to Research question 1 (how do observer's interpret physical identity markers?), I interviewed a subset of participants who had completed the questionnaire. I selected participants who had completed the questionnaire because I believed that the questionnaire exercise would get them thinking about office décor and workplace identity. I continued to interview participants until I found that I was hearing the same stories over and over again (i.e., I reached theoretical saturation) (Strauss & Corbin, 1998). In the end, I had interviewed 20 middle-level managers (10 women and 10 men) who had completed the pilot questionnaire described above and volunteered to participate in a more detailed follow-up interview. Participants' mean age was 32.4 and the mean number of years of work experience was 10.8 years. Interview questions are given in Appendix B.

All participants completed an open-ended interview lasting approximately 1 hour. In this interview, I focused on participants' interpretation of physical identity markers in situations where they felt that those interpretations had important effects on the displayer (e.g., they believed that interpretations of markers affected hiring and promotion decisions). In these situations, I reasoned that participants would be best able to recall their thinking processes concerning these markers, and were most likely to have noticed the reactions and comments of other observers. I asked participants to describe a few specific co-workers' identity markers at work, how they perceived those markers, and what they thought some of the effects of those markers were on their own perceptions of the co-workers. I concluded by asking for demographic information (age, gender, years at this job, overall years worked in a managerial position). All interviews were taped and transcribed.

Interview analysis

My qualitative analysis followed an iterative approach, cycling between the data and my evolving theory (Strauss & Corbin, 1998). In early analysis, I read transcriptions of all the interviews to determine if the participants perceived physical identity markers. I searched for comments in the form of 'that marker told me [s]he's X kind of person' or '[s]he seemed like an X (type of manager).'

In the next stage of analysis, I looked for evidence relating the process of identity interpretation through physical markers to that used to interpret behavioral markers (i.e., the theory-driven vs. data-driven approaches). During this phase of analysis, I discovered a commonality between evaluation of workplace identity based on physical markers and 'intuitive' attributional processes discussed in the introduction (i.e., the bottom-up 'intuitive jurist' (Hamilton, 1980) vs. the top-down 'intuitive politician' (Bell & Tetlock, 1989)) and social categorization processes (i.e., theory-driven vs. data-driven strategies (McCrae & Bodenhausen, 2000)). I also discovered that these processes were related to criminal profiling processes used by police detectives and FBI experts in assessing physical, crime scene evidence (Jackson, van den Eshof, & de Kleuver, 1997) (these processes are described in more detail in the findings section). During this stage, I devised a coding scheme to examine these 'identity profiling' processes (see Appendix A). This coding scheme identifies the key processes that define 'bottom-up' profiling (e.g., a comprehensive analysis of all data, an avoidance of quick assessment, a search for motives for display of decor, and a reliance on exemplar matching) and 'top-down' profiling (e.g., a focus on key artifacts and selection rules, a desire for quick assessment, and reliance on stereotype matching) as defined by the literatures on criminal profiling (Jackson et al., 1997) and attribution theories (McCrae & Bodenhausen, 2000) (these processes are described in more detail in the Findings section).

In the final stage of analysis, a research assistant and I returned to the interview transcripts and searched for trends in the identity profiling processes that emerged. Across the 20 interviews we identified 109 separate instances of managerial profiling, in which participants recounted how they used physical identity markers to assess and evaluate the identity of a co-worker. We then placed these instances in one of two categories (i.e., bottom-up vs. top-down profiling). Our inter-coder reliability was $\kappa = 0.83$ (Cohen, 1960). We resolved all discrepancies.

Study 2

Based on my findings of Study 1, I conducted a focused qualitative examination of the interpretation of office décor through bottom-up vs. top-down profiling. This study was designed to get more detailed and specific information about the processes of top-down vs. bottom-up profiling, and to specifically answer Research questions 2 and 3 (about how the unique attributes of physical markers contribute to interpretations of workplace identity).

Interviews

I interviewed an additional 16 full-time managers who were also enrolled in the evening MBA program, but who had not participated in the pilot questionnaire or Study 1 interviews. I believed these participants would be similar to those used in Study 1, and thus a good group to use to confirm the use of identity profiling processes defined in Study 1, and to explore those processes in more detail. Participants were ten men and six women, with an average age of 37.4 years and average working experience of 10.4 years. All 16 participants worked full-time in a corporate office environment.

First, to provide answers to Research question 2 (how does the independence of physical markers, from their displayers', contribute to identity interpretations?), I asked participants to recall one or two cases in which they had made an assessment of a co-worker's identity based on physical markers *before* actually meeting the person. I asked participants to describe what décor they observed, how they interpreted that décor, and what that décor said to them about the displayer's identity (i.e., what it said about the displayer's status and/or distinctiveness). To provide a comparison case in which the office décor did not exist completely 'independent' of its owner, I also asked participants to describe

one or two cases in which they observed the office décor of a co-worker *after* they had come to know that person.

Second, to provide answers to Research question 3 (how does the relative permanence of physical markers contribute to identity interpretations?), I asked participants to describe how, if at all, the identity markers they had observed in co-workers' offices had changed over time; and how, if at all, their perceptions of the markers' displayer had changed over time. I also asked if other co-workers had talked about the office décor and its displayer and what they said about specific markers that had contributed to perceptions of the displayer's identity (i.e., if co-workers thought the markers said something about the displayer's status and distinctiveness over time). All interviews lasted approximately 1 hour and were tape-recorded and transcribed. Interview questions are given in Appendix B.

Interview analysis

Part 1. To help identify which instances of profiling followed a bottom-up vs. top-down process, an independent coder and I categorized, as top-down or bottom-up, each instance in which a specific physical marker (i.e., a specific piece of office decor) was evaluated. We used the definitions in Appendix A to categorize these instances as top-down or bottom-up. Our inter-coder reliability was $\kappa = 0.79$ (Cohen, 1960). All discrepancies were discussed until we agreed on their categorization (i.e., we talked about how well each instance fit the criteria for top-down and bottom-up profiling). In total we found 43 instances of top-down profiling and 35 instances of bottom-up profiling across the 16 interviews (i.e., a total of 78 profiling instances).

To provide a second reliability check of our coding of profiling instances, we looked at each participant's comments about their typical or preferred method of evaluating a person's office décor. Using this self-report information, a research assistant and I categorized each participant as primarily a top-down vs. bottom-up profiler. We discussed each participant's description of their primary mode of profiling until we agreed on their profiling type. We unambiguously categorized 14 of the 16 participants into one of the two categories. For the remaining two participants, we found their descriptions of profiling to be ambiguous (i.e., they appeared to use some top-down profiling tactics, and some bottom-up profiling tactics). For the 14 categorized participants, we compared our categorization of their profiling instances (which they had described earlier in the interview) to their primary profiling method. We found that, of the 70 instances of identity profiling identified in our analysis (from the 14 unambiguously categorized participants), 62 instances matched the primary profiling method described by the participant who carried them out. This analysis suggested that our coding of profiling instances was relatively accurate.

Part 2. Next we focused on profiling instances that occurred *prior* to meeting an office's occupant. Of the 78 instances of identity profiling identified above, 44 were in response to office décor evaluated prior to meeting the office occupant. Of these 44 instances, 27 were top-down profiling, and 17 were bottom-up profiling. Based on prior research indicating that the primary dimensions of individual identities are status and distinctiveness categorizations (Elsbach & Kramer, 1996), an independent coder and I coded each instance of identity profiling as 'status focused' or 'distinctiveness focused.' Status-focused interpretations included comments that the physical markers sent signals about the worker's rank, status, relative accomplishment, power, authority, or prestige. Distinctiveness-focused interpretations included comments that the physical markers sent signals about the worker's personal preferences, individual skills, abilities, and experiences, personality, character, hobbies, and ideology. We performed this same analysis for each participant's case descriptions in which they made identity interpretations of office décor *after* meeting a co-worker (34 instances, in which 16 were top-down and 18 were bottom-up profiling). Our inter-coder reliability here was $\kappa = 0.94$. We discussed all discrepan-

cies until we agreed on their categorization, in the manner described for the Part 1 analysis above. This analysis allowed us to provide answers to Research question 2 by comparing how identity profiling might differ when physical markers are viewed completely independent of their displayer vs. when they are viewed with knowledge of their displayer.

Part 3. Next we looked at each participant's comments about how office décor contributed to the reinforcement of or changes in identity interpretations of co-workers over time. We found 18 instances where people noticed markers over time (i.e., they responded 'yes' to our question 'do you recall how their office décor changed or stayed the same over time?'). For these 18 instances we again coded for a focus on status or distinctiveness as dimensions of identity profiling, as well as coding for evidence of identity consistency or identity change over time. Thus, we coded for four categories of comments: (1) focus on status and consistency, (2) focus on distinctiveness and consistency, (3) focus on status and change, and (4) focus on distinctiveness and change. Our inter-coder reliability was $\kappa = 0.92$ (Cohen, 1960). We discussed all discrepancies until we agreed on their categorization, as in Parts 1 and 2 above. This analysis helped us answer Research question 3 by examining how different profiling methods focused on different identity categorizations over time.]

Findings: Constructing Identity Profiles Through Office Décor

Analysis of the Study 1 questionnaire data revealed that corporate employees observed a variety of physical markers—including furniture, business accessories, artwork, work-related products, awards, diplomas, hobby artifacts, toys, conversation pieces, and ideological posters—as cues of co-workers' workplace identities. Further analysis of these findings suggests that physical artifacts cue workplace identities by indicating both status and distinctiveness categorizations of displayers (i.e., the two types of categorizations used to define social identities (Elsbach & Kramer, 1996)). These findings provide evidence that, in addition to dress (Pratt & Rafaeli, 1997), office décor is used to interpret professional identity. This evidence is summarized in Table 1. In the following sections I present findings from Studies 1 and 2 that describes, in more detail, how physical markers may contribute to identity interpretations in the workplace. I save my theoretical and practical interpretation of these data for the discussion section.

How do observers interpret physical identity markers?

In regard to Research question 1 (what are the cognitive processes by which observers interpret physical markers as cues of workplace identity?), Study 1 interview data suggests salient physical markers that were perceived to 'typify' the displayers' identity helped observers to develop identity profiles of their co-workers. As one manager in the insurance industry put it:

If you want to go up to the management and officers' ranks, you probably would need to tone down your office and become a bit more conservative. So being sort of unmarked is actually better for your promotion into management. You can't give an impression of having an outside life . . . unless it's with, you know, certain charitable organizations. I guess if you wanted to sit on the board of the Diabetes Association, that's good. If you go golfing, that's okay. And, it's good to put industry certifications up. Insurance certifications, like Managed Health Care Professional or Fellow of the Life Management Institute.

Table 1. Identity interpretations through office décor^a

Office décor	Distinctiveness categorizations	Status categorizations
Family photos	Says family oriented, balanced, not work focused	Not a 'player'
Hobby photos, calendar, poster, artifacts	Ambitious, outgoing, well rounded	Unprofessional
Funny, unusual artifacts and conversation pieces	Fun person, joker, off-beat, approachable, lazy, needs attention	Not serious unprofessional
Formal décor, artifacts	Professional, successful, vain, distant, snobbish	High status, authority figure
Informal, messy office, old car	Easy-going, busy, true engineer, disorganized, unskilled	Unprofessional
Awards, diplomas	Show-off, hard-working, successful, pretentious, vain	Accomplished, intimidating
Professional products	Functional expert, 'company person', geek	Accomplished
Ideological artifacts	Patriotic, says 'I have a social conscience,' extreme, radical	Insecure, unprofessional
Salient, flashy artifacts	Need to get attention, flashy	Insecure
High conformity artifacts	Predictable, reliable, conservative, not innovative	Insecure

^aBased on Study 1 questionnaire data.

Further, the repeated observation of these salient markers, in many different situations, appeared to help observers to maintain these profiles over time. As the above participant went on to note:

Those types of reputations do get around. It says something about who you are. I mean, on the downside, my messy office is on the office tour, so it's a constant reminder to other managers that I'm not a mover and shaker.

Yet, not all informants appeared to approach their interpretation of physical identity markers in the same way. In keeping with the discussion in the introduction, participants appeared to prefer either a data-driven or a theory-driven approach to their assessments of physical identity markers. While extant theories of social attribution and social categorization appear to describe these processes in general, these processes appear, from the data analysis, most similar to those described by research on offender profiling (i.e., by FBI agents vs. police detectives). As noted in the methods section, this finding arose from the data analysis, and was not anticipated at the start of the paper. That is, the notion that observers were engaging in profiling was suggested by study participants, which led me to review the profiling literature.

This literature describes the differences between FBI agents and police detectives in their profiling methods. As Jackson et al. (1997, p. 117) note:

There are differences between the [FBI] profiler and the experienced detective... The profiler brought with him a wide range of experience of similar cases and used this knowledge in a top-down fashion to analyze, structure and interpret the case information. He then used this information to predict the probable personality and behavioral characteristics of the offender. The detective worked in a more bottom-up fashion, assimilating more and more details, and attempted to corroborate and weight up their value as evidence at each step.

Grounding my findings in these practical and theoretical models, I use common, profiling terminology to describe the assessment of physical identity markers in corporate settings as either *bottom-up* or *top-down* processes. Using this terminology, we would expect an observer using a top-down approach to (1) search for a few, key physical identity markers, and (2) to examine the fit of those markers with relevant managerial prototypes, and role-specific requirements. By contrast, we would expect an observer using a bottom-up approach to (1) look at a variety of physical artifacts, to determine their owner's motive in displaying them, and (2) to examine the similarity of the markers to those of a known exemplar (i.e., a known manager). These criteria and some common markers identified using each of them are summarized in Table 2.

Top-down profiling

Jackson et al. (1997) suggest that criminal profilers (e.g., FBI profilers) use their vast knowledge of solved cases to develop a prototype of the offender based on key pieces of physical evidence from crime scenes. Research on these investigators also suggests that trained profilers do not see every clue as equally important (as police detectives are said to do), but that 'selection rules' are used to identify key clues (e.g., type of violence used) that are important indicators of offender prototypes. This reliance on selection rules, as well as the use of offender prototypes, allows expert profilers to work more quickly than police detectives.

In the present study, two of the most notable features of top-down profiling were its reliance on a few key types of décor, and its quick assessment of an office occupant. In fact, in many instances of top-down profiling, participants claimed to have used a mental checklist (akin to what Jackson et al., 1997, called profiler 'selection rules') to assess an office or workspace, prior to meeting the occupant. These checklists included designations of both important and relevant types of décor (e.g., quality of furnishings, office arrangement), and unimportant and irrelevant types of décor (e.g., diplomas). Checklist artifacts also tended to be visually salient because of their size, their number, or their location in the office. As denoted in Table 2, the most common types of office decor included in top-down profiling 'checklists' were: photographs, extensive memorabilia, awards/diplomas, quality and orientation of furniture, work books/manuals, and overall neatness/clutter. For example, in one instance an informant described his use of a detailed checklist that included prominent photos and office arrangement, but excluded diplomas. As he noted:

The first thing I tend to do is sort of a quick scan to get an overall kind of environmental feel for it. You know, is it cluttered or clean, is it very austere or are there personal items? And I just try to get a feel for that because I've always found that if there are personal photos, that's also one of the first things I look for, because right away if they have personal photos up, in the first place you can tell that they're open to talking about the people in the photos because obviously they have them out for show. And so I tend to figure if there are no pictures you should probably get down to business right away and not talk about anything too personal for very long. I find most people do not display their diplomas at work. Most of them have them at home, which I understand because that's what I do too. But I don't really look for them, because everyone has one so it's not informative.

The third, distinguishing feature of top-down profiling was its use of well-known prototypes or stereotypes. In many instances of top-down profiling, participants appeared to use the key artifacts on their checklists to develop a 'thumbnail' sketch of the person, and then compared that sketch to a well-known prototype. As one participant noted, her first entrance into an unknown manager's office led her to profile him as a typical CEO type:

One manager's office had a lot of what I'd call kind of paperweight mementos, you know commemorating certain things, like you might commemorate a bond issue by encasing a copy of it in Lucite.

Table 2. Description of top-down vs. bottom-up identity profiling methods^a

Type of profiling	Profiling methods	Common markers	Common categorizations ^b
Top-down	<p>Focus on a few, salient artifacts, uses checklist</p> <p>Mentions/compares to stereotypes</p> <p>Desire to form quick image</p>	<p>Photographs, extensive memorabilia, awards/diplomas, orientation of furniture, quality of furniture, work books/manuals overall neatness/clutter</p> <p>Orientation of furniture, quality of furniture, quantity of personal mementoes, photographs, work project memorabilia</p> <p>Neatness, quality of furniture, personal mementoes</p>	<p>Successful, high status, professional, fun</p> <p>High status, family oriented, unprofessional, functional expert</p> <p>Professional/unprofessional</p>
Bottom-up	<p>Looks at all available evidence/artifacts, including non-salient artifacts</p> <p>Mentions motives for display of décor</p> <p>Compares person to specific others</p> <p>Desire to avoid forming a quick image</p>	<p>Photographs, toys, personal mementoes, company memorabilia, paperwork, posters, artwork, furniture orientation, quality of furniture, size of furniture, picture frame quality, recentness of photos, recentness of work memorabilia, food, arrangement of work, plants, sports radical, equipment, magazines/books, neatness, hobby memorabilia</p> <p>Paperwork, personal mementoes, project memorabilia, arrangement of work, company photographs, arrangement of furniture, toys, food, neatness</p> <p>Work memorabilia, neatness, quality of furnishings, orientation of furnishings, artwork, awards, arrangement of work, personal mementoes</p> <p>Photographs, recentness of memorabilia, recentness of work, neatness, personal mementoes, project memorabilia, posters, hobby memorabilia</p>	<p>Family oriented, fun, approachable, lazy, unprofessional, high status, vain, authority figure, professional, functional expert, extreme, flashy, predictable, reliable, insecure, show-off, accomplished, snobbish</p> <p>Functional expert, expert, engineer, disorganized, easy-going, unprofessional, fun, approachable, high status, snobbish, vain, pretentious</p> <p>Professional, high status, unprofessional, off-beat, functional expert, approachable, fun, pretentious</p> <p>family oriented, company person, professional, well rounded, outgoing, accomplished</p>

^aBased on evidence from Study 1 interviews.^bBased on categorizations for similar artifacts from Study 1 questionnaire.

And I thought he must be a big deal, you know, important. I think we always expect CEO/President types to be 'Type A' and very aggressive and kind of important and maybe perhaps a little bit self-important. You know, to have all the accoutrements of status.

In a contrasting example, one participant recalled how he mistakenly assumed an office belonged to a lower-level administrative assistant in his Research and Development firm:

This office was entirely filled with Winnie the Pooh memorabilia. And right away, I thought this must be a secretary . . . and probably someone who's not that important or worried about getting promoted.

Bottom-up profiling

By contrast, Jackson et al. (1997) report that experienced police detectives rely on a bottom-up cognitive processes in which they start by constructing a detailed picture of the crime itself (based on physical evidence from the crime scene) as a means of establishing a criminal motive (Jackson et al., 1997). Only when motive has been established will they begin to think about the traits of the offender. Further, this research suggests that the police detectives' main concern is *not* developing a prototype of the offender, but matching the physical evidence to an established list of potential suspects (i.e., a set of criminal exemplars).

Also in contrast to instances of top-down profiling, instances of bottom up profiling were characterized by participants' resistance of quick assessments of a person from a few salient artifacts in the office. As one participant noted, in an instance of bottom-up profiling,

I've noticed when I walk into an office and it's nice or they have awards, I'd say well that's interesting. I do notice things. But I don't necessarily say oh, okay, that must mean they have it all together. I tend to look more carefully at everything they have and try to get a more complex picture of the person.

As a result, in instances of bottom-up profiling, participants tended to notice and remember a great deal of detail about many markers included in the offices of co-workers, without making a snap judgment of their identity. In addition, many of these markers were not visually salient, and had to be searched out. For example, one participant recalled seeing a manager's office for the first time:

It was very organized. It was not terribly clean as far as, there was nothing on it. There were plenty of things going on it looked like but they were all arranged quite, I would say fairly meticulously. Everything looked like it was meant to be there on purpose, not just a dirty place or a messy place. There weren't tons of stacks. It seemed like every stack was one individual thing that was going to be done and could move on. It wasn't individual things that were stacked upon one another six to eight inches high. And I noticed that most of the stacks were of recent work projects, not stuff that was three years old.

Third, in instances of bottom-up profiling, participants appeared to make assessments about a person's underlying motives for displaying many of these markers. Because this involved analyzing a number of markers, bottom-up profilers tended to arrive at more complex (and perhaps conflicting) assessments of the displayer's identity. Further, it appeared that bottom-up profilers took care to make these assessments of motives without using common stereotypes. Thus, the second participant quoted above went on to note:

Sometimes I have seen a neat desk belong to a person that is more of an internal type person, more of an introverted person that's very neat. But in this case, I think it was more of a practical purpose.

Because it wasn't just overly neat, but organized, and easy for someone to find something if they came by and she wasn't there. So, I thought she must be one of those people that just feel like it's not really a small enough space and, you know, or a private enough space and they don't really adorn it. It just seemed to me that she was just being deferent to the open space. You know, considerate of people who might walk by.

Fourth, in many instances of the bottom-up profiling, participants formed impressions of co-workers' identities by comparing the worker's office decor to specific others that they had encountered in work contexts. In this way, they relied on comparisons to recent exemplars (vs. general prototypes) as benchmarks for identity categorizations (Elsbach & Simon, 1992). For example, one participant claimed that he viewed one manager as a heavy-hitter in the company because that manager's office looked a lot like the offices in their executive headquarters. As he noted:

I've been back to our business headquarters in Plainville, and that's where you know the office of the CEO who runs [XX] Industrial Systems, the parent company of who I belong to, it's about an \$8 billion company just on its own. So the CEO of that business is pretty powerful. And this guy, Joe, the guy in Los Angeles, his office would have fit in Plainville.

These matches appeared to be based on their familiarity with the details of the exemplar's office, as well as information about the motives of the exemplar that may have matched the motives attributed to the office occupant. As another participant noted in a case of bottom-up profiling:

Well, I pictured him as similar to his predecessor who was very fit and athletic. And the running posters, and the neatness of the place made me think that he would be just like his predecessor. It seemed that he was very relaxed and friendly, but also very driven just like the guy who used to have his job.

How does the independence of physical markers from their displayers contribute to identity interpretations?

Markers viewed independent of their displayers (i.e., in cases where the office was observed prior to meeting the occupant) were most often interpreted as indicators of status in instances where observers used top-down profiling, and as indicators of distinctiveness in instances where observers used bottom-up profiling. Markers viewed dependent of their displayer (i.e., after the observer had come to know the displayer) were most often interpreted as indicators of distinctiveness when either top-down or bottom-up profiling was used.

Together, these data suggest that, in general, physical identity markers are most commonly interpreted as cues of a displayer's distinctiveness. Only in situations where those markers are both interpreted through a top-down method of identity profiling and viewed independent of their displayer will they be likely to be interpreted as cues of a displayer's status. This data suggests that the independence of markers from their displayer may be important in cases of top-down profiling. This evidence is summarized in Table 3.

Instances of markers viewed independent of displayers

In instances where *top-down* profiling was used, participants most commonly categorized markers that were viewed independent of their displayers as cues of *status*. For example, one participant recalled an office she saw prior to meeting its occupant, and noted how the quality of the furniture seemed 'over the top' even for a top manager in this corporation. According to the participant, this component of

Table 3. Effects of marker independence and permanence on identity profiling^a

Identity profiling context	Physical marker dimension examined	Focus of top -down profiling *Common markers	Focus of bottom -up profiling *Common markers
Identity attributions based on office décor that was seen <i>prior</i> to meeting occupant	Independence of markers from their displayers	<i>Status categorizations</i> Strong evidence *Austere furniture, artwork, clean space, awards, diplomas	<i>Distinctiveness categorization</i> Strong evidence *Messiness, mementoes, work photos, hobby artifacts
		<i>Distinctiveness categorizations</i> Moderate evidence *Office equipment, mementoes, conversation pieces	<i>Status categorizations</i> Moderate evidence *Stacks of work, furniture arrangement, quality furniture
		<i>Distinctiveness categorizations</i> Strong evidence *Family photos, seasonal decoration, hobby paraphernalia	<i>Distinctiveness categorization</i> Strong evidence *Toys, coffee mugs, artwork, knick-knacks, relaxed furniture, posters, cartoons, hobby artifacts
How interpretations of identity markers evolved over time	Permanence of markers	<i>Status categorizations</i> Weak evidence *Diplomas, awards	<i>Status categorizations</i> No evidence
		<i>Consistency in status</i> Moderate evidence *Messiness of office, office equipment	<i>Consistency in status</i> Moderate evidence *Mementoes, hobby artifacts
		<i>Consistency in distinctiveness</i> Moderate evidence *Toys, knick-knacks	<i>Consistency in distinctiveness</i> Moderate evidence *Work-related artifacts, knick-knacks, lamps
		<i>Change in status</i> No evidence	<i>Change in status</i> Moderate evidence *Wackier toys, added awards
		<i>Change in distinctiveness</i> No evidence	<i>Change in distinctiveness</i> Moderate evidence *Taken down hobby artifacts, put up ideological artifacts

^aBased on Study 2 evidence. Strong evidence = clearly indicated in most profiling instances; Moderate evidence = clearly indicated around half of all profiling instances; Weak evidence = indicated in fewer than a quarter of all profiling instances; No evidence = indicated in no profiling instances.

décor symbolized a status dimension of the displayer's workplace identity. As the participant recalled in an instance of top-down profiling:

This office that I saw had . . . dark wood, everything kind of heavy, substantial. It seemed showy, comparatively to what else goes on around, what I previously knew about the place of employment. I would say that it was kind of over the top. *The quality of the furniture, in particular, seemed to indicate a level of separateness.* As if the person wanted to be distinguished from the rest. [emphasis added]

Similarly, in another instance of top-down profiling, a participant recalled how nicely framed photographs of large cargo ships was a key symbol of an office occupant's status. As he recalled:

He must have spent a lot of his career in the shipping business because he had pictures of huge cargo ships, container ships. Really nicely framed. You know, I think the reason why I mentioned the big ships was because my main impression was 'the big ship', you know big deal, important.

By contrast, in instances where *bottom-up* profiling was used, participants most commonly categorized markers that were viewed independent of their displayers as cues of *distinctiveness*. For example, in one instance of bottom-up profiling, a participant recalled that she noted a variety of artifacts that indicated friendliness and openness. In this case, it appears that the observer was focusing on the distinctiveness of the office occupant, despite the fact that there were cues about his status (i.e., diplomas). As she recalled:

Well, like the first time I walked into our assistant financial manager, before I met him, I noticed he had a very large, you know 20 × 30 poster of the Twin Cities Marathon poster and then a medallion that was by it. He had a candy jar, and a plant. I think he had you know a CPA certificate and he had I think graduations, so like a diploma. And I remember envisioning someone you know is athletic, is very neat, is very organized. I just thought probably somewhat generous and inviting. People stop by your office if you have candy out, and so you've got to want to have visitors.

Evidence of markers viewed dependent of displayers

In instances where top-down profiling was used to interpret office décor dependent of the displayer, participants most commonly focused on the distinctiveness cues signaled by that decor. For example, in an instance of top-down profiling, one participant recalled how seeing a remote colleague's office for the first time helped to validate all of the distinctive traits he had assigned to the colleagues workplace identity, even though there were some unexpected dimensions (also note the top-down profiling cue of using a stereotype). As he recalled:

The workspace was smaller than I had expected from you know what I would have imagined the workspace to be. But it did definitely reflect all those cultural things I had imagined about him. It had his diplomas from all over the world. It had art that the person had done himself. Bookcases with travel books and art books. So I think it sort of validated the person, what I thought the person was, to me. I remember that day thinking, okay, this person is a traveler, and someone with very fine taste in cars and art and stuff. Basically, he's a very cultured person. Like my image of a sophisticated European art collector.

It was also the case that, when bottom-up profiling was used to interpret the office décor of a known colleague, participants appeared to focus on distinctiveness cues. That is, bottom-up profiling focused on distinctiveness cues both when office décor was viewed independent of its displayer and when office decor was viewed with knowledge of its displayer. For example, in one case of bottom-up profiling, a

participant recalled how a colleague's office led him to see her as more adventurous than he had previously thought she was (also note the typical bottom-up profiling cue of mentioning a motive for the use of decor):

She had a picture of her sailboat. And I think there was, I think there's a sculpture of a sailboat and there might be one other thing, as far as like personalized items. And then she had a simple like freestanding desk, just wood and wraps around. So everything in her office is simple, tidy, and organized. I never knew that she sailed. And then it just kind of brought up kind of something to talk about, like oh, you know, you sail? It's not something I do, but I knew people who did and we started talking about it and she did all these kinds of races and so that was pretty interesting. You know you learn that she is way more adventurous person than you'd think she was. So one, she's sailed all these crazy sailboat races out in the Pacific. So I think for her, the sailboat is more of a conversational piece, because I think sometimes she finds it hard to break the ice with people. So it was her way of breaking the ice or, you know, for the other person to break the ice. So if you came in the office and you wanted something to say, you could say oh, you've got a sailboat?

How does the relative permanence of physical markers contribute to identity interpretations?

Over time, participants viewed physical markers as indicators of *consistency* in workplace identity in instances where either bottom-up profiling or top-down profiling was used. By contrast, they viewed physical markers as indicators of *change* in identity only in instances where bottom-up profiling was used. This evidence is also summarized in Table 3.

Evidence of consistency in identity perceptions

Analysis provided moderate evidence that top-down profiling was used to identify consistency of both status markers and distinctiveness markers over time. For example, in a case of top-down profiling, one participant gave the following initial impression of a co-worker's office:

This would be one of the offices where it's just unbelievable. There's stuff stacked up, like nothing ever gets thrown away. Just classic pack rat and you know. There's not a horizontal surface that doesn't have something on it. If you've got to put down a cup of coffee somewhere, you couldn't just put it down because it would slide off a stack of magazines. I thought, boy this guy is so disorganized, he's never going to make it in this organization.

This description suggested that the mess in the office signaled both a distinctiveness cue (i.e., the stereotypical 'pack rat'), and a cue of low status (i.e., the disorganized worker who is 'never going to make it' in the company).

When asked how the office and his interpretation of it had changed over time, the participant recalled that the continued presence of the messy markers had reinforced his initial profile of the co-worker as a pack rat, and as a low-status worker:

It's kind of grown, you know. He's really confirmed himself as a pack rat. And it hasn't quite spilled out into the hallway, although he did kind of go into the cubicle next door and started making a big mess. There are probably ten reasons why he's not going to move up, and while the messy office might be down on the list, it's probably a contributing factor.

In a similar manner, there was moderate evidence that bottom-up profiling was used to identify consistency in both status and distinctiveness dimensions of workplace identity over time. For example, in

an instance of bottom-up profiling, one participant recalled how a co-worker who kept spare parts for office furniture in her cubicle was viewed as both distinctively warm and friendly, but also low status. As she recalled:

She is very open, very warm, very caring. Looks out for everybody. If you ever need anything, the odds are she has it. I mean literally one time, I needed arms for my office chair and she has them in her cubicle. It was hilarious. I said yeah, can you order me these, and she came by five minutes later with these arms. Like where were those, you know? They were in the drawer. So in terms of you know taking care of people, if you need something she's probably going to have it. She really likes people to come to her for those sorts of things, you know? I mean I think that that's a part of feeling good about her job and her function in the department. In terms of the cubicle status, that's a whole different thing. It's actually kind of a sore subject. People consider it an eyesore. It has too much clutter in it. It's not professional looking.

Over time, the participant recalled that the decor in this office remained the same, even when she moved to a new cubicle. This consistency in her display of 'office junk' in her cubicle helped reinforce her distinctiveness and status over time, even though she had moved to a higher, formal rank. As the participant noted:

Our department moved from one half of the building to the other half of the building, and it took her like 25 boxes and an inordinately long period of time to pack. So there was a lot of resentment about her boxes everywhere and stuff everywhere and in the way. And some of her stuff lopped over into other people's cubicles and they felt kind of invaded. And so there this was whole sense of you're taking up more than your fair share of space. You know, kind of the unfortunate thing is she is one of the ones who came in as an associate analyst and worked her way up. And she did do a lot of administrative duties when she started. And she's worked hard and been promoted. So she's not an admin, but she still gets asked to do things that I consider administrative, like you know keeping attendance and you know taking care of administrative matters for the vice-president. That kind of thing. So even though she isn't technically an admin, she does get assigned administrative duties. I think that it's perpetuated somewhat by the sense that there's so much personal stuff. So it looks less professional. I've heard lots of people make that comment. And when she moved, she ended up having to take up two cubicles. People love to laugh about it, and still go to her for help, but it does hurt her status.

Evidence of change in identity perceptions

Only in cases of bottom-up profiling were there mentions of changes in workplace identity over time. For example, in one bottom-up profiling instance, a participant noted how changes in décor accompanied and signaled changes in the status of a co-worker. As he recounted:

When I worked there a few years ago he didn't have a lot of stuff in his office. He always had some kind of funky toy or something there, but not too much. But then I left and I came back, you know visiting three or four years later, and he had a whole lot more stuff. A lot more funkier toys and different things and wackier innovations. I think that as he moved up, it was a signal that, you know, the more important you are the messier your office can be, the more weird you can be because you're higher up. I think he wanted to signal that change.

In another instance of bottom-up profiling, a participant noted how changes in office décor had led to changes in the distinctiveness dimensions of a colleague's identity. In this case, the co-worker was viewed as less friendly and open than before. As the participant put it:

Other co-workers used to say that she was fun-loving, outspoken, chatty, personable, outgoing. She was a runner and had a lot of running bib numbers up, which were a good conversation piece. But since she has since taken down these bib numbers, I think she's not as approachable as before. It seems that she's trying to be neater and look more corporate.

Discussion

In corporate settings, office décor sits on the front lines of social judgment processes. Findings from the present research suggest several insights about how corporate employees may interpret office décor as cues of workplace identity. First, the present findings suggest that the cognitive processes that people use to judge workplace identity based on office décor may involve either (1) a detailed, bottom-up process, based on all types of markers, which is likely to lead to a complex assessment of the office occupant, or (2) a more quick, top-down process, based on visually salient markers, which is likely to lead to stereotyped assessment of the office occupant. Second, the present findings suggest that, in cases of top-down profiling, the ability to view office décor independent of its displayer is associated with a focus on status (vs. distinctiveness) dimensions of workplace identity. Finally, the present findings suggest that, in cases of top-down profiling, the ability to repeatedly view office décor is associated with a focus on consistency (vs. change) in workplace identities. Together, these findings provide a framework (see Figure 1) for understanding how the dimensions of physical identity markers may be associated with styles of identity profiling and perceptions of workplace identities in corporate settings. I discuss below the implications of this framework for theory and practice.

Theoretical implications

The theoretical implications of the current findings may be discussed in relation to the three major findings outlined above, i.e., (1) the processes of identity interpretation based on physical markers, (2) the association between marker independence and identity interpretation processes, and (3) the association between marker permanence and identity interpretation processes.

The interpretation of physical identity markers

First, the findings from the current set of studies suggests that observers cognitively interpret physical identity markers in much the same way as they have been shown to interpret behavioral identity markers; i.e., through either a theory-driven, top-down approach, or a data-driven, bottom-up approach (McCrae & Bodenhausen, 2000). The present findings confirm that these two types of cognitive assessment processes are used to form identity profiles of corporate employees—not only through verbal and behavioral markers, as previously suggested, but also through relatively permanent physical markers that exist (and are observed) independent of their owner.

In addition to confirming the use of these profiling processes, the present findings provide *details* about the ways that profiling processes are carried out. When using a top-down profiling process, for example, participants appeared to develop checklists of physical artifacts that corresponded to particular prototypes of managers. That is, in addition to the behaviors and titles that are part of managerial prototypes, there appears to exist a set of physical accoutrements that are linked to managerial prototypes (Cialdini, 1984). By contrast, when using a bottom-up profiling process, employees appeared to consciously and deliberately attempt to avoid using prototype comparisons (even though they knew

Figure 1. Framework of identity profiling through physical markers. Suggested relationships between profiling style, dimensions of physical markers, and dimensions of workplace identity

these prototypes) and think, instead, about the motives of the person displaying the markers. Participants' comments suggest that this may have been due, in part, to the fact that some prototypes of corporate managers have markers that are so well known and agreed upon that their presence is almost required, and thus does not provide unique information about their displayer. For example, many bottom-up profilers noted the low interpretive value of diplomas because they were so common and could not reliably be tied to one kind of person. This notion is also supported by research on the recall of prototypical behaviors (e.g., leadership behaviors exhibited during a meeting), which has shown that

observers are less confident and accurate at recalling behaviors as they become more prototypical (Foti & Lord, 1987).

Finally, and perhaps, most interestingly, the present findings provide some new insights about the conditions under which top-down vs. bottom-up profiling might be used. As noted in the introduction, research on the interpretation of behavioral identity cues (Macrae & Bodenhausen, 2000) suggests that observers will use (1) a top-down, theory-driven approach when they lack the motivation, time, or cognitive capacity to make careful assessments of others, or when they are motivated to make efficient or biased assessments (e.g., to bolster their own egos), and (2) a data-driven, 'intuitive detective' approach when they are motivated to be careful (e.g., required to be accurate), and when they don't have access to a relevant stereotype (i.e., they haven't developed a simplified schema that applies in the current situation or the relevant stereotype is not obvious).

Although the current findings could be explained by any or all of these situational variables, the data available highlights the importance of the last of these situational variables; i.e., the importance of salient physical markers for cueing social schemas or stereotypes (Fiske & Cox, 1979). In particular, the data summarized in Table 2 suggests that identity categorizations that are cued by highly visible and easily recognizable artifacts are most likely to be associated with stereotype-driven, top-down processing. The common categorizations resulting from top-down profiling (e.g., professional, unprofessional, and high status) are associated with highly visible and salient markers (e.g., quality of furniture, orientation of furniture, and awards/diplomas). Such markers are often physically large and/or often prominently displayed in an office, making them salient. By contrast, bottom-down profiling results in many categorizations (e.g., family oriented, off-beat, well-rounded, company expert) that are cued by physical markers that are smaller and/or less prominently displayed in an office (e.g., family photographs, hobby artifacts, project memorabilia, recentness of work memorabilia and photos). Observation of these less salient markers requires a more careful investigation of the office and its contents.

These findings support research suggesting that such highly salient behaviors may prompt observers to rely on well-established social schemas or stereotypes in interpersonal perception and attribution processes (Secord & Berscheid, 1963). In this vein, research on perception of visual cues has shown that traits or categorizations that are identified by easily visible cues (e.g., a 'happy person' is identified by a smile) are more well agreed upon (and thus, more likely to be stereotyped) than categorizations that are identified by less easily visible cues (e.g., an 'anxious' person is identified by nervousness) (Funder & Dobroth, 1987). The current findings suggest that similar processes may be at work when physical artifacts are viewed as indicators of individual identities.

Effects of marker independence on identity interpretation

A second theoretical implication of the current findings is that physical identity markers appear to be most commonly interpreted as cues of a displayer's distinctiveness. Only in situations where those markers are both viewed independent of their displayer, and interpreted through a top-down method of identity profiling, will they be likely to be interpreted as cues of a displayer's status. These findings confirm recent research on the meaning of physical markers as symbols of workplace identity (see Elsbach, unpublished, 2003). This research suggests that physical identity markers are most commonly displayed to denote social distinctiveness (vs. status), and that the loss of ability to display such markers may motivate employees to signal distinctiveness through other means (e.g., through behavioral identity markers).

From a different perspective, however, these findings suggest that interpreting the status of a co-worker through office décor may be a priority in situations in which an observer does not know that occupant, but is motivated to maintain status hierarchies. For example, if an employee anticipates meeting a new co-worker, and is worried about maintaining norms related to rank, the employee

may look into the co-worker's office to gain some clues about his or her status, and may use top-down profiling to match the employee to stereotypes of status and rank.

This tendency to maintain and justify existing status hierarchies, even in situations where those hierarchies are detrimental to one's own well-being, has been documented by proponents of *systems justification theory* (Jost & Banaji, 1994; Strangor & Jost, 1997; Jost, 1997). According to the systems justification perspective, individuals may come to view social arrangements as just, legitimate, and even natural, in situations where they are highly socialized to accept that system of social arrangements (Jost & Banaji, 1994). Such socialization may be common in corporate settings, such as the ones occupied by participants in the current study. Further, these theorists suggest that such a tendency toward maintenance of the status quo may lead individuals to maintain stereotypes of groups of individuals as a means of justifying their status position (Jost & Banaji, 1994, p. 12). The current findings suggest that one means by which individuals come to know and maintain the status quo is through physical identity markers. In particular, the current findings suggest that, because physical identity markers may be viewed independent of their displayer, they allow individuals opportunity to engage in status maintenance, or system justification, in the absence of interpersonal interaction (i.e., they can build and maintain perceptions of the status hierarchies in their organization based solely on physical markers). This finding, that independence physical markers may help individuals interpret status relationships in cases of top-down profiling, adds to the list of possible conditions that prompt system justification effects (Jost & Banaji, 1994).

Effects of marker permanence on identity interpretation

Finally, findings from the current study suggest that, in cases of top-down profiling, the relative permanence of office décor may contribute to observers' focus on consistency (vs. change) in workplace identities. In general, these findings suggest that the same types of cognitive biases that occur when interpreting social behavior as evidence of social identities may also occur when interpreting physical artifacts as evidence of social identities in instances where top-down profiling is used (Fiske & Taylor, 1991). Further, these findings suggest that the ability to repeatedly confirm these biases by repeatedly viewing permanent physical artifacts may make such biases more prominent in identity interpretations involving physical markers than behavioral markers.

It seems likely that one explanation for the greater focus on identity change by bottom-up (vs. top-down) profiling is the presence of more careful and comprehensive observations in instances of bottom-up (vs. top-down) profiling. Such careful observations are more likely to identify changes in identity markers, especially if those changes are to markers that are not highly salient (due to their size or location in the office).

In addition, the reliance of top-down profiling on stereotypes may have contributed to biased information search and processing, in which observers only attended to office décor that confirmed their existing perceptions of co-workers' identities, and it turn, focused their attention on the consistency of identity markers. For example, search biases resulting from the use of cognitive heuristics (e.g., the availability heuristic) can lead individuals to overestimate the persistence of identity markers because those markers are easy to imagine (Gabrielcik & Fazio, 1984), salient (Taylor, 1982), and strongly associated with other dimensions of a person's identity (Hamilton & Rose, 1980).

Limitations

Despite their support by data and extant literature, the findings reported above are not without their potential limitations. A first potential limitation of the findings is related to the participant sample. The participant sample sizes for Studies 1 and 2 were relatively small, and participants self-selected into the study, making their data potentially unrepresentative of managerial office workers. Despite these potential limitations, these sample issues may have been mitigated by two factors. First, the self-selection

of participants into qualitative studies commonly leads to participation by informants who are most aware of and/or interested in the topic of the study. While such a sample may not be suitable for a theory-testing study, they are often used in theory-building as a means to identify the extreme or pure cases of a phenomenon, with the understanding that, in practice, such phenomena may exist at varying levels (Lee, 1999). Second, the effects of the small participant size were mitigated by the use of 'profiling instances,' instead of participants, as a unit of analysis (i.e., there were substantially more 'profiling instances' than there were participants).

A second potential limitation of the findings is that they were based largely on the recollections of participants about their recent interpretations of office décor. Such post hoc recollections may be affected by a number of cognitive biases that reduce their accuracy (Fiske & Taylor, 1991). While this limitation is common in qualitative studies that rely on interviews about past events, qualitative researchers have suggested that it may be less troublesome in interviews that focus on issues of 'kind,' instead of issues of 'degree' (Lee, 1999). In the former case, such as in the current study, the interviews are used to define the kinds of variables that came into play in the event, rather than to describe the degree to which these variables affected the event. Interviews that focus on defining 'kind' are not as prone to error in recall as interviews that focus on defining degree.

Practical implications

Finally, it is important to note some practical implications of the current findings. These findings suggest that physical identity markers are important because they allow observers to form initial identity profiles, often before an actual interpersonal encounter takes place. Further, because physical identity markers in the form of office décor may be salient, independent of the displayer, and relatively permanent, these profiles may be established quickly and may be repeatedly reinforced over time. In particular, it appears that the use of top-down profiling methods may lead observers to make snap judgments about an office occupant, based on a few salient artifacts, that focus on the consistency and status of the occupant's identity. Because such judgments are based on only a fraction of the available evidence relevant to workplace identities, they are likely to be inaccurate.

As a result, the management of physical surroundings in organizations may be important beyond issues of comfort and practical use. Organizational managers may be faced with the tough question of whether or not to regulate office décor to insure that employees' identities fit with their desired corporate roles. For example, to the extent that displayers wish to indicate distinctiveness dimensions of identity or change in identity over time, managers may wish to encourage a more bottom-up method of identity profiling in observers (e.g., provide observers with the time and motivation to engage in a careful analysis of identity markers).

Such management intervention may be especially important in alternative office environments (such as non-dedicated offices, or drop-in centers) that severely limit employees' ability to display identity markers (Elsbach, 2000). Office decorating guidelines could conceivably affect whether employees view each other as 'accessible, team players,' vs. being 'unapproachable' or 'intimidating.' Recent research suggests that it is common for corporate managers to hold stereotypes about what a 'productive office' should look like, i.e., it should aspire to the goals of 'orderliness, tidiness, cleanliness, and uniformity; a disciplined place in which individual freedom of expression is restricted.' (Donald, 1994, p. 26). In his study of three British firms, Donald (1994, p. 26) found that adherence to such stereotypes was so important that:

[s]enior managers would walk around the building during the evening noting any workstation that was left untidy. The person responsible for that workstation would then be reprimanded the following day.

He found that even small deviations from uniform décor were discouraged. As he noted:

[F]acilities managers [went] around the building looking to see if there were indentations on the carpet in the office that might indicate that something had been moved. (Donald, 1994, p. 27)

Taken to extreme, such attitudes could mean that uncensored personalization of office dress and décor may lead to situations in which certain individuals are shunned from projects and promotions because they are incorrectly identified as 'non-managerial.'

Yet, strict control over office personalization (as a means of preventing misinterpretations of office décor) has its own downside. Recent research suggests that physical markers used to denote distinctive identity traits are highly important to employees (Elsbach, unpublished, 2003). This work shows that when the display of distinctiveness markers is restricted, such as in non-dedicated work spaces that are reserved on a daily basis, employees will go to great lengths to replace these markers with behavioral markers (e.g., sitting in a 'high-profile' office location every day), or with 'illegal' physical markers (i.e., putting up permanent artifacts in a non-dedicated office) (Elsbach, unpublished, 2003). While these behavioral and illegal 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 identity-constructing behavior that is often required of new employees (e.g., corporate consultants that must learn the 'style' and 'language' of their profession (Ibarra, 1999)).

In the end, employees may need to gauge for themselves the costs and benefits of displaying workplace identity markers in their specific work context. Employees working in organizations that place a premium on office space and quality of furnishings (dispensing the best offices and furnishing to those highest in rank) may want to carefully select identity markers as a means of signaling a desired identity. By contrast, employees working in organizations that don't seem to connect physical surroundings to rank or to functional expertise may have more leeway in their display of physical identity markers. In either case, the present findings suggest that employees ignore office décor, as a signal of workplace identity, at their own peril.

Author biography

Kimberly D. Elsbach (PhD, Stanford University, 1993) is an Associate Professor of Management and Chancellor's Fellow at the Graduate School of Management, University of California, Davis. Kim's research focuses on the perception and management of individual and organizational images, identities, and reputations. She has studied these symbolic processes in a variety of contexts ranging from the California cattle industry and the National Rifle Association, to radical environmentalist groups and Hollywood screenwriters. Using a combination of qualitative field methods and experimental lab methods, her work aims to build theory about the cognitive and emotional processes organizational members use in perceiving their organization, their co-workers, and themselves.

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Appendix A: Coding Scheme for Bottom-up vs. Top-down Profiling

Definitions

1. Bottom-up profiling

View all physical identity markers (especially visually salient items) as pieces of evidence describing the underlying motives of an employee, and thus his or her managerial 'fitness.' Main concern is not developing a prototype of the person, but matching the physical evidence to a set of known managerial exemplars (i.e., their most recently viewed managers). More of a bottom-up, intuitive detective cognitive process—looks for adequacy of evidence.

2. Top-down profiling

View key physical identity markers as cues about a person's likelihood of fitting a number of employee-prototypes, including a 'managerial' prototype (a well-established definition of a manager based on many years of observation and practice with managers). Use 'selection rules' to identify key clues (e.g., type of violence) that are important indicators of managerial prototypes. More of an intuitive politician cognitive process—looks for legitimating cues.

Cues of profiling type for which to code

1. Bottom-up profiling

- Mentions motives for dress/decor (e.g., wants to move up, corporate aspirations)
- Mentions many types of salient evidence for conclusions
- Compares person to specific others the observer has known or seen
- Desire to avoid forming a quick image

2. Top-down Profiling

- Mentions stereotypes or prototypes of managers that use similar kinds of markers. Uses managerial role requirements or in-role behaviors to explain markers
- Focuses on a few key physical artifacts—may not be the most salient artifacts
- Compares the person to a general prototype rather than a specific person
- Desire to form quick image

Coding rules

1. Read an entire description of a person before coding
2. Code each description of a person separately within each interview
3. Look for trends in profiling across person descriptions (e.g., within subject trends)
4. Look for trends in profiling across subjects

Appendix B: Interview Questions for Study 1 and Study 2

Study 1

1. What is the identity of your work organization?
2. Describe the norms or expectations about physical identity markers at your workplace. Are there any formal rules about dress or décor?
3. How do co-workers use office décor (e.g., furnishings, personal artifacts, work-related artifacts/tools, etc.) to both mark themselves in your work environment, and to affirm or cue their identities?
4. Think of a specific example of a co-worker displaying an identity marker.
 - What was the intention in using these markers?
 - What do you think were the personal consequences of these markers?
 - What, if any, are the consequences for your organization of this marking?

Study 2

1. Recall an instance where you noticed the physical identity markers (e.g., aspects of office décor that you perceived as cues of the person's workplace identity) of a co-worker prior to meeting him or her.
 - How did those markers affect your perception of that person? What did those markers say to you about that person? Why did you think that person displayed those markers? What would other co-workers say about that person's identity? How would the physical markers they displayed come into the accounts or stories about that person? Do you recall how these markers changed or stayed the same over time? Did new markers alter previous conceptions?
 - Did certain markers carry more weight?
2. Recall an instance where you noticed the markers of a co-worker after meeting him or her. (Answer all questions above for this instance as well.)
3. When you observe a person's office, do you have a typical way of evaluating the meaning of their décor? Describe what you typically do when you evaluate a person's identity based on their office décor. Did you use this process when evaluating the cases described above?