

ORGANIZATIONAL DEMOGRAPHY AND INDIVIDUAL CAREERS

Structure, Norms, and Outcomes

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Careers, the evolving sequences of individuals' work experiences over time, and the factors that shape them, have long fascinated both popular and academic audiences (Arthur, Hall, & Lawrence, 1989). Individuals want to know how their personal attributes, perhaps their intelligence, gender, or experience, propel them along the pathways they desire. They are curious about what sorts of organizational conditions facilitate mobility or create barriers along the way. Organizations want to discern the conditions that allow them to attract and retain the best employees and comprehend how internal and external labor markets affect the desirability of the career inducements they offer. Understanding the impact of organizational demography on individuals' career choices and on the opportunity structure that

confronts them is relevant to both of these perspectives.

As the terms *career choices* and *opportunity structure* suggest, demographic influences on careers operate at multiple levels of analysis: at the individual level, on individuals' perceptions of work environments and career decisions, and at the organization level, on group dynamics and organizational selection processes. However, there are few theories that explicate the processes that bridge these levels (Arthur, Khapova, & Wilderom, 2005; Khapova, Arthur, and Wilderom, Chapter 7). What are the dynamics by which demographic patterns influence an individual's career choices? Similarly, how do individual actions shape the processes of demographic change within organizations? This chapter presents one approach to exploring such questions.

The argument we develop involves different literatures and concepts at different levels of analysis. Although we offer several propositions about the causal relationships between the demographic composition of organizations and individual careers, we do this with two understandings. The first is that these relationships are often, in fact, reciprocal. In other words, demographic distributions influence the norms that evolve in organizations, but norms also influence demographic distributions. Similarly, norms influence intergroup relations, but the latter also influence norms. This conception of reciprocal relationships is consistent with Giddens's (1976, 1984) notion of the "duality of structure." The second understanding is that a construct's relative fixity or permanence influences the primary direction of its effect (Rosenberg, 1968). For any one individual, for example, an organization's demography is likely to exert a stronger and more immediate influence on his or her career expectations or outcomes than the other way around. Thus, while we assume reciprocity among all the constructs discussed, we use relative fixity to assign an initial direction of causality in developing our arguments.

STRUCTURE, NORMS, AND CAREER OUTCOMES: CONCEPTS AND RELATIONS

Research focusing on the distribution of attributes, such as age, gender, and race, among the members of an organization or organizational unit (Pfeffer, 1983, p. 303) has linked the demographic composition of organizations to an array of career-related outcomes.¹ For example, studies have shown that men express more dissatisfaction with their jobs and a greater willingness to quit when they are in work groups with a larger proportion of women (Tsui, Egan, & O'Reilly, 1992); that individuals rely on age-graded timetables that reflect the age distribution of organizational members at various ranks in evaluating their own career performance (Lawrence, 1984b); and that organizational compensation practices are significantly influenced by the distribution of women and minorities in various positions (Tolbert, 1986).

Despite considerable interest in organizational demography over the past three decades

(Dionne, Randel, Jaussi, & Chun, 2004; Williams & O'Reilly, 1998), the nature of the interdependencies between individual-level perceptions, career outcomes, and organization-level compositional patterns and norms has received little attention. We build on a conceptual model proposed by Lawrence (1988, 1996) and apply it to the study of organizational demography with a specific emphasis on career-related outcomes (see Figure 20.1). Based on our review of demographic research and this model, we offer multilevel propositions for future research on careers. Given the potential scope of this topic, we cover only a few of the many areas in which additional research is warranted. The following discussion provides working definitions for the individual-, group-, organization-, and high-level concepts used in the model.

A *demographic attribute* is any relatively stable characteristic of individuals that can be used to categorize them. Demographic attributes acquire salience for individuals' career-related decisions, behaviors, and actions because people use them as a basis for social comparison (McPherson & Smith-Lovin, 2001; Tajfel & Turner, 1979). When individuals try to figure out, "What happens to someone like me in this organization?" they often look to others with similar demographic attributes. Do other women hold positions of responsibility in this group? Do people who attended my college have a good chance of receiving promotions? Do others with job experiences like mine hold high-level management positions? Although many demographic attributes, such as functional area (Bantel, 1994), organizational tenure (Wagner, Pfeffer, & O'Reilly, 1984), education (Sobel, 1982), and occupation (Avolio, Waldman, & McDaniel, 1990), can be used as a basis for such comparisons, our discussion highlights gender, race, and age. These attributes have been termed *diffuse status characteristics* (Berger, Fisek, Norman, & Zelditch, 1977; Ridgeway & Erickson, 2000) because they are associated with society-wide, shared evaluations of social status. Gender and age have long been identified as critical social categories (Linton, 1942), and race and ethnicity have become increasingly important with the growing diversity of organizations.²

The *distribution of an attribute* within an organization thus refers to the proportion of

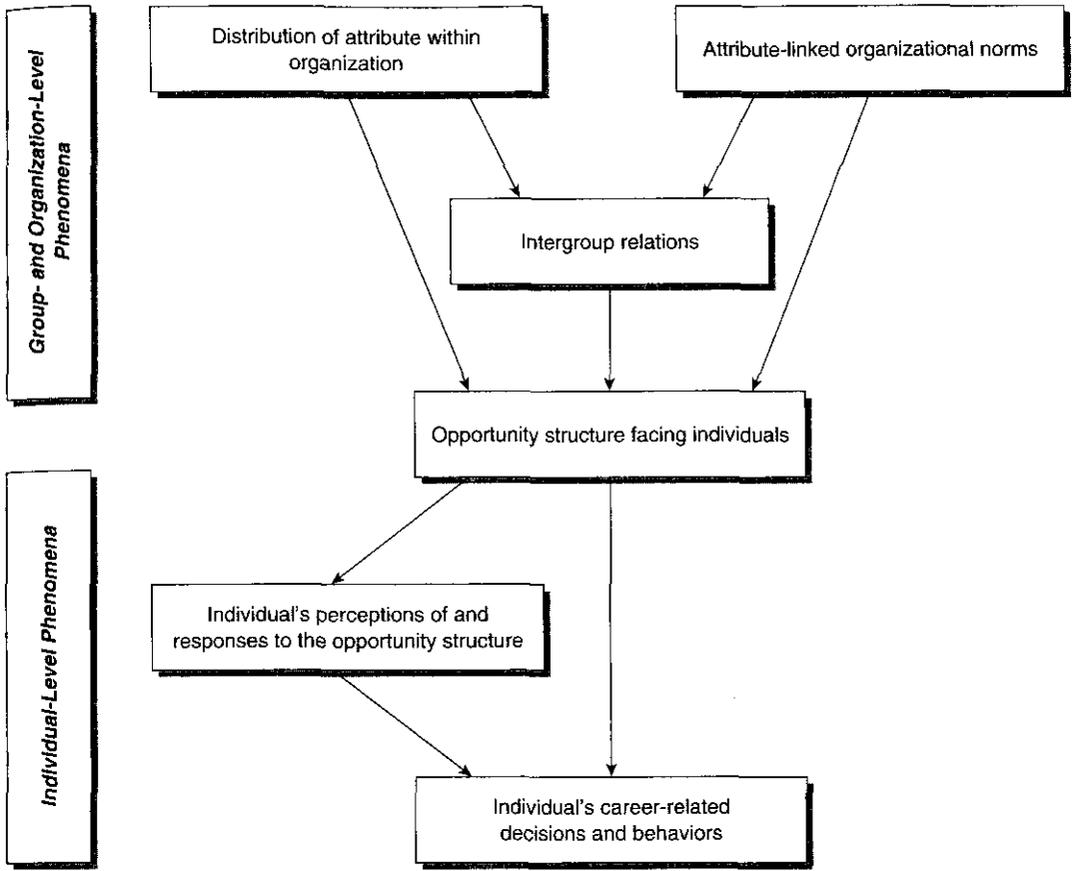


Figure 20.1 A Multilevel Model of the Connections Between Organizational Demography and Individual Careers

individuals that fall within different categories of a given attribute, either generally throughout the organization or specifically within a career-relevant segment.³ Examples include the distribution of individuals' ages within a business unit, the proportion of men among the faculty of a university, and the relative number of members from a particular racial minority in high-level technical positions. *Attribute-linked organizational norms* are shared judgments among organizational members about the typical behaviors, actions, or occurrences that connect individuals' attributes to careers. For instance, if employees believe that most supervisors are men between the ages of 25 and 35, a 50-year-old woman may have difficulty becoming a supervisor. Such norms both affect and are affected by the distribution of attributes in the organization. As we will discuss, norms can

be modified as the distribution changes, but they may also affect the likelihood that a change will occur, through influencing personnel and personal decisions within the organization.

Both the distribution of attributes and attribute-linked norms shape *intergroup relations*, how individuals with a particular attribute respond to and interact with others who differ on that attribute. Insofar as norms define certain attributes as more or less "typical," the entry of individuals with nonconforming attributes into an organization may give rise to conflictual intergroup relations. Research suggests that such relations are conditioned by the relative sizes of groups defined by a given attribute. In this context, the term *majority or minority group* refers to the relative size of such attribute-defined groups rather than to their relative status or power.

The *opportunity structure* refers to the set of probabilities that individuals with given attributes will gain access to career-related rewards. Career-related rewards include formal recognition, such as promotions, salary, and benefits, as well as less formal rewards, such as public acknowledgement, selection for important committees, or assignment to critical tasks and responsibilities. The literature suggests that opportunity structures are contingent on individual attributes. Thus, all else being equal, women typically receive lower wages than do their male counterparts (Blau, Ferber, & Winkler, 1997); racial minorities are less likely to be promoted than members of dominant groups (Zatzick, Elvira, & Cohen, 2003; Prasad, D'Abate, and Prasad, Chapter 10); and older workers are less likely to be recognized as having management potential than younger workers (Rosen & Jerdee, 1976, 1977). An opportunity structure that is unfavorable to individuals with particular attributes, by definition, means that their chances of being promoted, receiving increased compensation, or receiving other forms of organizational recognition and rewards are, on average, comparatively low.

The model suggests that the opportunity structure exerts a direct effect on a wide range of individuals' *career-related decisions and behaviors*. These may involve actions that affect the careers of others, as well as individuals' own careers. For instance, an individual who perceives the opportunity structure as unfavorable may decide to leave the organization, give up on trying to positively influence supervisors' assessments of his or her work, or bring a lawsuit against the organization. A manager may write performance evaluations based on the criteria that he or she perceives as valued by the organization, perhaps including the individual's age or functional area. Most work to date on organizational demography, however, has focused on individuals' job satisfaction, organizational commitment, promotions, and turnover as key career outcomes.

Career-related decisions and behaviors are conditioned by individuals' *perceptions of the opportunity structure* or their estimates of the probability that an employee with specific demographic attributes will receive career-related rewards. Objective indicators of the opportunity structure of an organization—for example,

actual rates of promotion for individuals with particular attributes—may be only loosely related to individuals' perceptions of the opportunity structure. Research shows that people often misperceive demographic phenomena, such as attribute distributions or norms (Lawrence, 1988; Rosenbaum, 1989), and sometimes respond in unexpected ways to variations in opportunities. For example, many studies document that women are less dissatisfied with their jobs than men, despite the fact that they have lower promotion rates. One explanation for this is that they compare themselves with other women rather than with men (Crosby, 1982; Tomaskovic-Devey, 1993). Thus, variations in individuals' perceptions of the opportunity structure determine how they respond to it.

The model involves two types of connecting relationships: direct and indirect (Lawrence, 1997, p. 7). A direct relationship is deterministic in the sense that the result can be predicted without knowledge of other factors. For instance, assuming no changes in the labor force, no intra-organizational mobility, and a standard retirement age, the age distribution of an organization's employees in Year 1 predicts its age distribution in Year 10 and thus projects the opportunity structure facing individuals at that time. In contrast, an indirect relationship is one whose effect is conditioned by a third variable. In our model, the impact of attribute distributions on the opportunity structure operates, in part, through its effects on intergroup relations. In another example, the opportunity structure reflects probabilities, but its effect on career outcomes depends on how individuals perceive those probabilities and how they interpret what they observe.

As noted, we view the relationships among components of the model as being reciprocal. However, for ease of discussion, we begin by considering the exogenous forces that initially shape the demographic composition of an organization and then consider the dynamics implied by the model.

WHAT DETERMINES THE DISTRIBUTION OF ATTRIBUTES?

The representation of individuals with particular attributes in an organization reflects the influence

of larger social institutions, particularly work and family arrangements, that exist at the time organizations and occupations are created. These institutions, in turn, are influenced by changes in population, world events, the economy, and technology. Easterlin's (1987) analysis of variations in the size of U.S. birth cohorts—variations that reflect responses to natural catastrophes, wars, and other historical conditions—shows how such variations affect a generation's marital and employment opportunities.

Easterlin (1987) argues that small birth cohorts enjoy greater employment opportunities than large birth cohorts. For instance, the population cohort born in the United States during the Great Depression of the 1930s was relatively small. The birth rate declined from around 26 per 1,000 in the 1920s to around 17 per 1,000 in the 1930s. When members of this cohort entered the labor market in the post-World War II years, they faced little competition for jobs and thus experienced relatively high advancement opportunities and earning power. In a context where social norms strongly supported the traditional patriarchal, single-earner family, this contributed to a decline in the representation of women in the paid labor force. Relatively high wages made it feasible for families to exist with a sole breadwinner. Although Easterlin does not discuss it specifically, this had implications for changes in the demographic composition of organizations, many of which had relied heavily on women to constitute their workforce during the war years (Kessler-Harris, 2003).

It also contributed to the production of a relatively large birth cohort, the Baby Boom, born between 1946 and 1964. With most mothers staying at home during this time, couples could afford to care for larger families. The Baby Boom thus reflected a return to higher birth rates, which increased from 17 per 1,000 during the 1930s to 25 per 1,000 in the 1950s. Unlike their parents, members of this cohort experienced stiff competition from peers for stable jobs that paid well. It became more difficult to support a family on a single income and this, in conjunction with the greater economic independence for women promoted by the Women's Movement, led to a major increase in the proportion of women in the labor force (Blau et al., 1997). Increased economic competition for jobs led to increases in the ages

of those who started families as well as increases in their rates of marital stress and divorce. Moreover, it altered the age distribution of working men and women, transforming the career norms and timetables that evolved.

Such generational swings in birth rates thus play a major role in fashioning the social and economic environment in which organizations and occupations evolve. Evidence suggests that social conditions at the time organizations are founded leave an enduring impact on their structure (Stinchcombe, 1965). As employees tend to hire others similar to themselves, variations in attribute distributions are likely to reflect, to some extent, differences in organizational age and founding dates.

Proposition 1: The distribution of a given attribute within an organization is a function of the distribution of individuals with that attribute in the workforce at the time of the organization's founding.

Likewise, technological changes that lead to the growth of new occupations or to the decline of older ones also affect the demographic composition of organizations as organizations incorporate these occupations as part of their structure (Abbott, 1988; Barley & Tolbert, 1991). The forces that shape the demography of occupations are beyond the scope of this chapter (but see also Correll, 2004; Reskin & Ross, 1990; Wright & Jacobs, 1994); however, since occupations often acquire distinct gender, age, and racial identities, changes in occupationally based specializations are likely to alter the demography of organizations. Thus, for example, changes in office technology around the turn of the century resulted in the addition of typists and stenographers to many businesses; because these occupations were female dominated, the additions produced a substantial increase in the proportion of women in employing organizations (Davies, 1982; DeVault, 1990). In contrast, changes in the switching technologies used in communications organizations, making operator-assisted phone calls the exception rather than the rule, have led to a substantial decline in this female-dominated occupation. Systematic instruction in and use of computer technology began in the 1970s. Consequently, individuals

who became familiar with this technology first were primarily those still in school when the technology began to spread. This affected the age distribution of individuals who had the skills needed to enter computer-based occupations in organizations.

Proposition 2: The distribution of attributes in an organization is a function of the demographic composition of occupations that are represented within the organization.

General social norms that define individuals with certain attributes as typical employees also serve to shape the demography of organizations. Until the past few decades of the 20th century, women in most Western countries were discouraged from participating in paid work (Kessler-Harris, 2003).⁴ Consequently, most work organizations were male dominated. Shifts in the normative environment that began in the 1960s, supporting the employment of women and racial and ethnic minorities, led to major changes in the composition of the labor force in many countries and, hence, in the demography of many organizations. As age discrimination became less politically acceptable in the United States, it was codified into law, and many organizations removed age-based retirement provisions. This contributed to a significant increase in the average age of employees in some organizations, such as universities, during the past few decades (see also Porter, 2004).

Proposition 3: Changes in general social and occupational norms lead to changes in the distribution of demographic attributes in organizations.

WHAT DETERMINES ATTRIBUTE-LINKED ORGANIZATIONAL NORMS?

Norms are shared beliefs about typical behaviors, actions, or occurrences in a given social situation.⁵ When many individuals traverse the same sequence of jobs in an organization, the path comes to be viewed as a typical career. People want to make sense out of those who traverse these typical paths. Independent of any formal explanation, such as "She was the best person for the job," individuals create their own

sense and nonsense of who and what the organization values. The observable attributes of successful individuals play a large role in this process. They act as signals (Spence, 1973), providing important information about what kind of person is esteemed.

During the Silicon Valley dot.com revolution in the 1990s, the generational distribution of computer skills produced entrepreneurs who were in their 20s. This age-based norm acquired a meaning among venture capitalists that founders of computer companies should be young, and with this interpretation came age-linked explanations for success. Young founders were seen as being more up-to-date technically, less risk averse, and more willing to work hard than older founders. As a result, venture capitalists were unlikely to fund older entrepreneurs, which, in turn, increased the number of young entrepreneurs and reinforced this age norm. Interestingly, on the other side of the ocean, entrepreneurs in Britain faced a very different situation. Here, venture capitalists viewed young people as lacking the requisite management experience and as being too inclined to take risks. Hence, in direct contrast to those in Silicon Valley, British entrepreneurs found it very difficult to get funding unless they were more than 30 years of age (Lawrence, 2004).

Proposition 4: The higher the proportion of individuals who follow the same career path and share a particular demographic attribute, the greater the likelihood that the attribute will become normatively identified with the career.⁶

The development of attribute-linked norms also depends on the general social significance attached to the attribute, and this may differ across groups, organizations, or societies. The higher the salience of an attribute, the more likely it is for people to use it in defining careers. For instance, Earley (1999) found that an individual's education and the prestige of the institution that provided it are critical to his or her status in France, whereas in the United States, gender and race are more important. In Thailand, age and education top the list of status determinants. Thus, career norms in these different societies may be differentially shaped by attribute-linked status norms.

Proposition 5: The greater the cultural salience of a given attribute, the greater the probability that career-related norms involving the attribute will develop.

Given Proposition 4, that norms evolve when many individuals follow similar career paths, attribute-linked norms should change with changes in the distribution of attributes in an organization. However, it takes time for people to observe and make sense of change. Thus, it seems likely that changes in norms will lag behind changes in distributions. This process is reflected, for instance, in the experience of one utility company, in which a gradual shift occurred in the selection of people for top management positions. While field engineers were once the dominant group in these positions, over time, people from marketing became more heavily represented. This shift required repeated decisions before employees began to perceive the pattern. The first marketing promotions were treated as deviants, with reactions such as "That promotion was a fluke" or "The person who got the job was very good, so it didn't matter where she came from." However, over time, the pattern became more pronounced, and the norm changed (interviews by the first author).

Proposition 6: Attribute-linked norms change when individuals perceive a systematic shift in the attributes of those rewarded by the opportunity structure.

Change also depends on how salient individuals feel the attribute is to successful organizational careers. In the case of the utility company described above, employees saw functional background as an important selection criterion for positions at the highest levels of the company. As a result, they paid attention when the functional background of newly selected top managers changed from operations to marketing. In general, the attributes of employees hired or selected for important positions and the attributes of employees who are fired or demoted from important positions are likely to be observed more quickly and by more observers than the attributes of people hired for or fired from unimportant positions. Consequently, the norms linked to such achievement-relevant

attributes may change more rapidly than those linked to less salient attributes.

Proposition 7: The speed with which attribute-linked norms change increases with the increasing salience of a demographic attribute for successful careers within the organization.

The pace of change in attribute-linked norms is apt to decline as an organization gets larger or more geographically dispersed. The difficulty of observing change in such settings attenuates the impact of distributional change on norms. For instance, in a 20-person organization, one new employee is scrutinized by everyone, whereas in a 100-person organization, one new employee may or may not be noticed depending on which office he or she works in and what job he or she assumes.

Proposition 8: The larger or more dispersed the organization, the longer the lag between changes in demographic distributions and changes in attribute-linked norms.

The pace of change in attribute-linked norms is also slowed down by selection processes, which both reflect and reinforce existing attribute distributions. One of the most consistent results in social network research is that individuals prefer demographically similar others (McPherson & Smith-Lovin, 2001). Appold, Siengthai, and Kasarda (1998), using data from 114 multinational firms in Japan and the United States and 40 domestic firms in Thailand, found that preferences for similar others were more important than either market incentives or national culture as predictors of the inequitable distribution of women in high-skill jobs. People frequently use demographic attributes such as age, gender, race, organizational tenure, and educational background to define salient similarity categories. Thus, an Intel engineer who graduated from Arizona State may be more likely to hire other engineers from Arizona State than equally qualified engineers from Ohio State. This process, called attraction, selection, and attrition by psychologists (Schneider, 1987) and homosocial reproduction by sociologists (Kanter, 1977), means that over time and if other factors are held constant, attribute distributions

in careers tend to become more pronounced. As individuals whose attributes vary from the majority leave (O'Reilly, Caldwell, & Barnett, 1989), similar-attribute others are apt to be selected to take their places, and the diversity of the population decreases.

Proposition 9: The longer an attribute-linked norm has been linked to a career outcome, the more entrenched that norm becomes and the more difficult it is to change.

This raises the question of whether attribute-linked norms are more resistant to change in situations where the proportion of minority members is small or in situations where the proportion is more balanced. For example, if the proportion of men and women is equal, is it easier or more difficult to change the norms than if the proportion is skewed—that is, when the proportion of the minority group is small relative to the majority group? One perspective suggests that it is easier. In a study of part-time local union officers, Izraeli (1983) found that women were perceived as having more influence in a balanced group than in a skewed group and that “promale” stereotypes were stronger in skewed groups than in balanced groups. One interpretation of this finding is that as the proportions of minority and majority members become more balanced, it is easier to change norms because there is more support for women playing important roles than in skewed groups. However, it is also possible that changing norms in a balanced group is more difficult. Individuals in balanced groups are more likely than those in skewed groups to be conscious of norms and to actively question or enforce them. Some research suggests that it is only when the proportion of minority members reaches some threshold level that majority members engage in norm-enforcing activities (e.g., Blalock, 1967; Reskin & Ross, 1990; Wharton & Baron, 1987). This increased sensitivity makes majority members more likely to block further changes in the norms. Thus, the direction of the relationship between the proportion of members with a given demographic attribute and the relative resistance of the group to changing its attribute-linked norms is uncertain. Two competing propositions are suggested.

Proposition 10: The larger the proportion of minority members with a given attribute, the less resistance there is to these members and, thus, the easier it is to change attribute-linked norms.

Proposition 11: The larger the proportion of minority members with a given attribute, the more resistance there is to these members and, thus, the more difficult it is to change attribute-linked norms.

Change propositions involve complex relationships with time, and there are many questions here that we do not address. For instance, change in attribute-linked norms likely depends on the speed with which distributions change. A dramatic increase in the minority proportion may produce faster change in attribute-linked norms than a slower increase because it operates as an “unfreezing” event and facilitates a move to new norms. However, it might also engender strong conflict and resistance from the majority group, making change in attribute-linked norms more difficult. Similarly, a slow increase in the minority proportion may be more effective because the gradual change is easier for individuals to accommodate. Alternatively, it may make it easier for individuals to ignore the changes, and attribute-linked norms may remain resistant to change.

HOW DO ATTRIBUTE DISTRIBUTIONS AND ATTRIBUTE-LINKED NORMS AFFECT THE OPPORTUNITY STRUCTURE?

Both the distribution of attributes within an organization and attribute-linked norms shape an opportunity structure—the probabilities that individuals will receive recognition, mobility, and increased compensation. For example, the distribution of attributes, in conjunction with processes of organizational growth and decline, exerts a direct influence on mobility opportunities. Stewman (1986) describes “Venturi effects” in organizations, similar to those in fluid mechanics, in which mobility is constrained by bottlenecks in personnel flows.⁷ An example of such effects is illustrated by the case of an organization with a large cohort of employees at Level 1, originally hired during a period of

organizational expansion. These employees are apt to find themselves competing for a relatively small number of available jobs at Level 2. There are few winners for the Level 2 competition and, consequently, the percentage of Level 1 employees who get to Level 2 is low. However, if Level 3 has a larger number of job openings, the percentage of those who achieved Level 2 who then move on to Level 3 will be high. Thus, the relative size of a cohort compared with the number of job openings affects the occurrence of bottlenecks or cascades in promotion chances.

The U.S. defense industry provides an example of such vacancy chains. When government defense spending declined in the 1970s, the number of young engineers hired by aerospace firms declined, producing a bimodal age distribution that was common throughout the industry. During the 1990s, the older engineers in this distribution began to retire, and there were insufficient numbers of mid-career engineers to replace them. Organizations had to reexamine employees of all ages to find the best replacements from the available pool. This created advancement opportunities for young, experienced engineers that had not existed previously. It also created fresh opportunities for older engineers who had been passed over earlier as "too old." Finally, it created a new career entry port. When qualified, internal candidates could not be found, many firms rehired older employees as consultants (Lawrence, 2004). Thus, demographic patterns may undermine the operation of internal labor markets—that is, systems of organizational advancement that are based on strong norms about appropriate points of entry and job ladder connections (Hollister, 2004; Osterman, 1984; Osterman & Burton, 2006).

Proposition 12: When an attribute is closely connected to career success, gaps in the attribute distribution produce greater opportunities for others without that attribute than they would otherwise experience.

The distribution of attributes also affects an organization's opportunity structure through its influence on social network connections, which serve as sources of information about career opportunities, social support, and social capital

(Brass, 1985; Burt, 1992; Cleveland & Hollmann, 1990; Ibarra, 1992, 1995). Because individuals prefer interacting with similar others (Mollica, Gray, & Trevino, 2003), the social networks of organizational members whose attributes fall in the demographic majority are likely to be larger than those of individuals who are members of demographic minorities (Ibarra and Deshpande, Chapter 14). The latter are thus less likely to gain access to the career-related information (Friedman, Kane, & Cornfield, 1998) or social capital that flows through networks (Burt, 1992). Moreover, fewer minority group members than majority group members are apt to be in positions of power. As a result, network access to people who can serve as career mentors and sponsors is apt to be more restricted for individuals who belong to demographic minorities. The more skewed the attribute distribution, the more unfavorable the opportunity structure will be for minority members.

Proposition 13: The less common the representation of a minority attribute among individuals occupying higher-status positions in an organization, the less access minority members have to social capital, and thus the less favorable the opportunity structure is for them.

The opportunity structure is also shaped by attribute-linked norms. An array of studies provides evidence that the opportunity structure is more favorable for individuals whose attributes are consistent with attribute-linked norms (Smith, 2002; Tomaskovic-Devey, 1993). The reason for this, in part, is that people tend to perceive others with the typical attributes of successful employees as performing better than those who lack such characteristics (Carli, 2001; Cohen & Roper, 1972; Pugh & Wahrman, 1983). For example, in a study of mobility in a large corporation, Rosenbaum (1984) found that employees who were not initially successful in getting promoted faced declining chances of promotion. This decline reflected the perception that these individuals had been passed over and were too old to be "rising stars," a definition that affected their performance evaluations. Such perceptions may be more likely to operate in organizations characterized by well-defined internal labor markets

(Osterman, 1984). Likewise, Eagly and Karau's (2002) review of research on women as leaders concluded that because men are generally expected to hold leadership roles, women in these roles are often evaluated as performing worse than their male counterparts, even when they exhibit the same behaviors.

Lawrence (1988, 1990) found that the age distribution of individuals in an organization created an age-based opportunity structure for managerial careers. This structure defined which ages were seen as typical for a given career level. Individuals who were younger than what was typical for their level were seen as ahead of schedule, and individuals who were seen as older than what was typical were viewed as behind schedule. This perceived timetable appeared to be based on the distribution of ages within the organization; however, there were also interesting differences. Individuals seemed to overestimate the ages of the youngest employees and underestimate the ages of the oldest employees in a given career level. Moreover, they created age differences between levels that did not exist in reality. Thus, being ahead of, on, or behind schedule appeared to influence individuals' perceptions of work and the probability that they would receive high performance evaluations.

The stronger an attribute-linked norm, the greater and more consistent is its impact on the opportunity structure. The strength of an attribute-linked norm refers to the extent to which organizational members accept or agree with the norm. Using the example above, if all managers agree that entry-level applicants are typically 20 to 23 years old, then this age bracket will exert a greater impact on the opportunity structure than if only half of them agree. The probability that a 30-year-old applicant will be hired is lower when agreement is high than when it is low. The strength of this norm also depends on the status of the agreeing managers. If the 50% who think 20 to 23 years is the right age include most of the highest-status managers, this attribute-linked norm is likely to exert a larger impact on the opportunity structure than if the 50% include no high-status managers.

Proposition 14: As agreement on an attribute-linked norm increases, its impact on the opportunity structure increases.

Proposition 15: As the status of those who agree on an attribute-linked norm increases, its impact on the opportunity structure increases.⁸

Individuals in an organization or work group may not be conscious of how demographic norms shape the opportunity structure until changing conditions require a shift in established personnel practices. For instance, Sea World in California faced a dilemma in the 1990s. They were used to hiring young people of college age to host their "guests" at the park. No one questioned this age norm until they began experiencing difficulties finding enough young people to fill the positions. When this occurred, they had to rethink their hiring criteria. The theme park ended up realizing that their criteria—friendly, helpful, and able to work part-time—could be filled equally well by another employment group: retirees. These new employees more than adequately met the park's performance criteria: They had lower absence rates and were more likely to remain at the park than college students (Lawrence, 2004).

HOW DO INTERGROUP RELATIONS AFFECT THE OPPORTUNITY STRUCTURE?

In addition to their direct effects on the opportunity structure, attribute distributions and attribute-linked norms also have indirect effects through their impact on interpersonal and intergroup relations. Members of formal organizational units, such as teams, departments, or divisions, frequently divide themselves informally into groups based on attribute-linked norms. For instance, a person belonging to a racial minority hired into a task force composed primarily of members from a majority group may feel more comfortable discussing his or her questions with other minority members, and majority task force members may avoid talking with the minorities because they find it uncomfortable. This creates two informal groups within the task force.

Intergroup relations, thus, refers to the interactions among such informal groups. The ease of intergroup interactions depends on the attribute-linked norms that evolve. When demographically different members join a work group

or organization, existing members may react positively through support and acceptance or negatively by engaging in overt or covert discrimination. If attribute-linked norms increase the conflict between minority and majority group members, or even the resistance of majority group members to the minority, this is likely to create an opportunity structure that is disadvantageous for minorities. The processes that connect attribute distributions, attribute-linked norms, and intergroup relations are difficult and perhaps not possible to separate. Thus, some of the empirical evidence in this section builds on ideas developed previously. However, rather than focusing on how this literature connects the distribution of attributes to the development, strength, and change of attribute-linked norms, we use it to explore how intergroup relations produce conflicts that shape the opportunity structure.

Exactly how the proportion of minority members—that is, individuals whose characteristics don't conform to the norms—affects group dynamics is the subject of some debate in organizational demography (Tolbert, Graham, & Andrews, 1999). Some research suggests that conflictual group relations are most likely to ensue when there is only a small shift in the demography of a previously homogeneous group. Members react negatively to initial violations of demographic norms, but as the demographic pattern continues to change, so do the norms, thus leading to less conflict. Other studies suggest that reactions to initial, small changes in demographic patterns are likely to be minimal and that conflict is more likely to occur when the number of "violations" of a demographic norm reaches some threshold level.

A Social Contact Approach: Small Minority Groups Produce Conflict

Kanter's (1977) analysis of the entry of women into a traditionally male work group supports the first view. She noted that men responded to their new female colleagues in a number of ways: They exhibited acute awareness of the women's actions and behaviors, increased solidarity with other men, and a propensity to cast women in more traditional, "female" roles when interacting with them. Whether intended or not, such reactions created

a relatively uncomfortable work environment for the women, affecting their perceived (and probably actual) opportunities for advancement. Kanter predicted that as the proportion of women in the group increased, men's negative reactions to women's presence would decrease, presumably as the demographic norms changed. This prediction is consistent with the general logic of social contact theory (Brown, 2000), which suggests that stereotypes and negative perceptions of members of other social groups flourish under conditions of limited social interaction between group members. Increased intergroup contact, resulting from the expansion in the number of minority members in a group, is expected to result in the reduction of such prejudices (Blau, 1977; Brown, 2000).

Several empirical studies favor this general argument. For example, a study of officers in the Israeli army (Pazy & Oron, 2001) found that women officers were evaluated more negatively than their male counterparts when there were few women in the unit. Women's performance evaluations improved, however, as the proportion of women in the unit increased. Similarly, studies of business firms by Blum, Fields, and Goodman (1994) and Huffman (1999) indicated that organizations with a higher proportion of women overall had a higher proportion of women in management positions. Likewise, another result from the Izraeli (1983) study cited earlier found that women on committees with relatively few women were significantly more likely to feel constrained by gendered role expectations than women on committees with better gender balance. And Konrad, Winter, and Gutek's (1992) study of white-collar work groups showed that women's sense of social isolation decreased and their job satisfaction increased as the proportion of women in their work group increased.

Research by Chatman and Flynn (2001), suggesting that demographic heterogeneity affects the development of norms that help regulate intergroup relations, is also consistent with a social contact approach. In two studies, one with MBAs and the other with financial services officers, groups that were demographically heterogeneous on a composite relational measure of sex, race, and citizenship were less likely than demographically homogeneous groups to form cooperative norms in the early stages of the

groups' existence. Their explanation is that initially, people respond to visible, status-linked differences by assuming that those who are different are not going to be as cooperative as those who are similar. However, their findings also indicate that over time, as relationships become based in experience, the impact of such differences decline. This would suggest that the impact of intergroup relations on the opportunity structure declines as interactions among minority and majority members accrue over time.

A Social Competition Approach: Larger Minority Groups Produce Conflict

Other work, however, indicates that negative reactions by majority members to minority members are most likely when the proportional representation of the minority in the organization becomes relatively large. That is, reactions to violations of demographic norms may not occur until a certain threshold representation of minority members is reached, and this may exacerbate, rather than reduce, these reactions. Initial studies supporting this argument focused on the indices of racial conflict and discrimination in U.S. communities (Blalock, 1967), but it has also received support in research on gender inequality and discrimination in organizations. For example, a study of the Israeli civilian labor force by Kraus and Yonay (2000) found that women were less likely to rise to positions of authority when they were in occupations with a large proportion of women than when they were in male-dominated occupations; they argue that increases in the proportion of women in an occupation lead to increased competition between men and women and to discrimination against women.

Likewise, a study of a federal agency found that women who worked in departments with higher proportions of women reported that they received less support, on average, from their male colleagues than women in departments with fewer women (South, Bonjean, Markham, & Corder, 1987). Tsui et al. (1992) found that increasing the proportion of women and minorities exerted little impact on their own experiences, but white men experienced decreasing psychological commitment, increasing

frequency of absences, and decreasing intent to stay. More indirect evidence of a relationship between the size of a minority group and discrimination is provided by a number of studies that show that women in organizations with a higher proportion of women at a given job level are likely to receive lower levels of compensation than men at those levels (Martin & Harkreader, 1993; Pfeffer & Davis-Blake, 1987; Tolbert, 1986).

Although there is little agreement on the sources of inconsistent evidence on the question of how the relative size of a minority group influences conflict, there is agreement that changes in the proportion of individuals who hold a given demographic attribute do produce changes in the frequency of such a conflict. Thus, the two literatures suggest competing arguments about how attribute distributions influence intergroup relations and, in particular, how they affect the propensity of members of dominant groups to discriminate against members of minority groups.⁹ This, in turn, affects the kinds of opportunity structures that minority members face. The first literature suggests the following:

Proposition 16: The more skewed the attribute distribution in an organization, the greater the level of conflict among attribute-defined groups and the more likely that the opportunity structure will reflect discrimination against members of a minority group.

In contrast, the second literature suggests the following:

Proposition 17: The less skewed the attribute distribution in an organization, the greater the level of conflict among groups and the more likely that that the opportunity structure will reflect discrimination against members of a minority group.

One explanation for this controversy may be that attribute-linked norms vary across organizations in ways that mediate the impact of group proportions on intergroup conflict. For example, Ely and Thomas (2001) found three distinctive perspectives on diversity that appear to operate as norms in a bank that they studied. In branches with an integration-and-learning perspective,

employees perceived diversity as an indicator of the group's potential for new insights and skills required for business performance. In branches with an access-and-legitimacy perspective, employees valued diversity as a mechanism for the organization to gain access and legitimacy in culturally diverse markets. Finally, in branches with a discrimination-and-fairness perspective, employees viewed diversity as demonstrating the morally correct stance of providing equal opportunities to all employees. While all three perspectives motivated managers to increase the diversity of their employees, only the first produced attribute-linked norms that used an individual's minority background as a positive evaluation criterion.

Unfortunately, with few exceptions (e.g., Chatman & Flynn, 2001; Cohen, Broschak, & Haveman, 1998), studies of demographic composition and group relations have relied on cross-sectional data. More research using longitudinal data might help us better understand the processes through which demographic changes lead to or reduce the intergroup conflict that leads to discriminatory behavior in the opportunity structure. In addition, comparative research on the impact of different attributes is needed to determine whether, as seems likely, the strength of reactions to violations of demographic norms is affected by the cultural salience of the attribute. For example, based on the Earley (1999) study cited earlier, changes in age-based patterns in organizations may generate less resistance than changes in gender or race, at least in the United States, whereas they may generate more resistance in Thailand.

HOW DOES THE OPPORTUNITY STRUCTURE AFFECT CAREER-RELATED DECISIONS AND BEHAVIORS?

Our model suggests that the relationship between organizational demography and individuals' career-related decisions and behaviors is complex. To the extent that the opportunity structure that individuals face is contingent on their demographic attributes, individuals with the same apparent qualifications do not have equal access to organizational rewards. Logically, this influences individuals' work within the organization.

Those who make decisions about the careers of others use the opportunity structure as an indicator of the organization's values and use these values for evaluation and promotion decisions. Those who then face less favorable opportunities than others are probably less willing to invest time and energy in their careers and perhaps more inclined to leave the organization.

Perceptions of the Opportunity Structure

The relationship between the opportunity structure and career-related decisions and behaviors is mediated in large part by individuals' perceptions. Research shows that individuals rely on their perceptions of the opportunity structure, even when those perceptions are inaccurate. Lawrence (1984a) found that managers who saw themselves as behind schedule held more negative attitudes toward work than those who saw themselves as on schedule—even when their behind-schedule perceptions were wrong. Several studies suggest that inaccurate perceptions of organizational opportunity structures are the norm, not the exception. In an automobile factory, Chinoy (1955) found that recently hired workers expected rapid promotions and that they continued to hold this faulty belief for some time afterward. Goldner (1970) found that only half of all the managers in a manufacturing firm who expected promotions actually received them. Similarly, Rosenbaum (1989) found that foremen's and managers' expectations for promotion were considerably inflated over reality. Because such perceptions influence behavior, it is important to consider what factors tend to make individuals' perceptions of the opportunity structure more or less accurate.

The literature suggests several explanations for perceptual accuracy. One is that accuracy depends on an individual's social context. In small organizations, everyone knows everyone else. Consequently, to the extent that the opportunity structure can be inferred from observation, the same information is available to all. In large organizations, the situation differs. Research in one large organization suggests that employees do not populate their social context with randomly selected others (Lawrence, 2006). When asked to identify everyone they

knew, employees showed systematic, attribute-based selection patterns. This suggests that individuals in large organizations may not observe representative examples of the opportunity structure. For instance, it would not be surprising if a manager from a female-dominated marketing department had a very different view of the opportunity structure than a manager from a male-dominated R&D department. Even though both may then compete for the same position in the corporate office, their perceptions of opportunity emanate from their observations, and these may not be representative of the position to which they aspire.

This suggests that individuals' organizational experiences, represented by attributes such as their organizational tenure or the number of departments in which they have worked, also influence perceptual accuracy. New employees know few others; thus, their perceptions of the opportunity structure depend on what they have been told or read. Such initial information may or may not be representative of reality. Although many employers value realistic job previews, many want new employees to believe that there is room for growth and may present overly positive possibilities. Moreover, some employers may be unaware of the actual opportunity structure themselves and, thus, may be overly positive because they share their own inaccurate perceptions. Over time, as individuals meet more people and learn more about the organization, the information they receive is likely to become more representative of the opportunity structure, and thus, the accuracy of their perceptions should increase.

Proposition 18: The accuracy of an individual's perceptions of the organization's opportunity structure increases with the increasing representativeness of the other employees he or she knows.

A second possibility is that individuals' motives or needs influence their perceptual accuracy. Social psychologists find that people are motivated to be hopeful and, thus, to see situations as more encouraging than they actually are (Taylor & Brown, 1988). Such unrealistically positive self-evaluations and optimism are essential components of normal mental health and well-being. Studies show that people with

falsely positive views of their health, such as those who believe that they will survive AIDS, live longer than those with a more realistic perspective (Taylor, Lerner, Sherman, Sage, & McDowell, 2003). Thus, individuals may misperceive the opportunity structure because it is in their best interests to do so. Such positive illusions are consistent with individuals' tendency to make upward social comparisons with high-achieving others (Arrowood & Friend, 1969; Festinger, 1954; Gruder, 1971). In the Chinoy (1955), Goldner (1970), and Rosenbaum (1984) studies cited above, employees perceived more favorable opportunities than actually existed. When asked to select others who are the most similar to them in their careers, individuals tend to select others who are at higher hierarchical levels in the organization (Gibson & Lawrence, 2006). As a result, individuals may show a persistent, positive bias in their observations of the opportunity structure.

Proposition 19: The accuracy of an individual's perceptions of the organization's opportunity structure decreases with his or her increasing propensity to view the probabilities of opportunity with a positive bias.

A third possibility is that social encoding influences perceptual accuracy (Fiske & Taylor, 1991). Individuals are more likely to observe the career successes and failures that embody the opportunity structure if the people who experience them, the values they represent, or the decision makers and decision processes they use are salient, vivid, and accessible. These three processes are related, and there is insufficient evidence to detail their independent effects on perceptual accuracy. However, the following discussion presents several examples of how these processes may work.

The salience of events depends on, among other things, status and social identity. When individuals are given a list of women and men, they are likely to overestimate the proportion of women on the list if the women's names are more well-known than the men's names (Kahneman & Tversky, 1972). Thus, we might expect that the higher the status of a job, the more likely individuals will be to observe the attributes of those who hold, are selected for, or

select the person who gets the job. University faculty, for instance, are more likely to remember the attributes of both the applicants and the selection committee for chaired full professor jobs than for assistant professor jobs. The attributes of employees who get selected for key task forces are more likely to be remembered than the attributes of others selected for less prestigious work.

Social identity influences the salience of remembered others because individuals consistently pay more attention to others with similar attributes than to others with different attributes (McPherson & Smith-Lovin, 2001). Thus, an employee is more likely to observe and remember the career successes and failures of others with similar traits and in similar jobs than those of others. This process becomes more complex when individuals are making observations using more than one attribute. Distinctiveness theory (McGuire, McGuire, Child, & Fujioka, 1978; McGuire, McGuire, & Winton, 1979; McGuire & Pawawer-Singer, 1976; Mehra, Kilduff, & Brass, 1998) suggests that when an individual holds two minority identities, he or she will identify with the group that is least well represented. Thus, for example, if there are more women than African Americans in an organization in the United States, a woman will identify with African Americans, whereas if there are more African Americans than women, she will identify with women. The more salient identity should exert a stronger impact on her perceptions of the opportunity structure. In other words, she may pay more attention to the career successes and failures of other women than of other African Americans.

The accessibility of information about the opportunity structure also influences the accuracy of individuals' perceptions. For example, if only 22- to 24-year olds are hired for an associate job in an investment bank, it is likely that individuals' perceptions of their ages will be more accurate than if the range is 22 to 44 years of age. The larger range presents a more uncertain distribution, and this increases the likelihood of regression biases. Similarly, the smaller the number of individuals holding a given position, the more accurate individuals' perceptions are likely to be. It is not surprising that estimates of the ages of high-level managers in an organization are more

accurate than estimates of the ages of lower- and middle-level managers (Lawrence, 1988). In addition to differences in job status, there are much fewer individuals holding the high-level than the low-level jobs; thus, perceptions of the former are likely to be more accurate. Overall, these examples lead to the following propositions:

Proposition 20: The positive association between the accuracy of an individual's perceptions of the organization's opportunity structure and the representativeness of the employees he or she knows is moderated by the salience, vividness, and accessibility of those employees to the individual.

Proposition 21: From the sample of all known individuals, the more salient, vivid, and accessible others are to the individual, the greater the influence of their attributes on his or her perceptions of the opportunity structure.

The Impact of Perceptions on Career-Related Decisions and Behaviors

Inaccurate perceptions may influence career-related outcomes in several ways. First, it seems likely that individuals regard the distribution of attributes as an index, or signal (Spence, 1973), of the opportunity structure in organizations. The second author recalls being strongly impressed by the absence of senior women faculty members in some academic departments when she was interviewing for faculty positions; rightly or wrongly, she interpreted this as a negative sign of her own career prospects in those departments. That organizations take these observations seriously is evident in the careful selection of individuals with diverse demographic attributes for marketing documents, such as annual reports and university admission brochures.

Several studies suggest that people do make career-related decisions based on such observations. Research by Zatzick et al. (2003) found that individuals with a higher proportion of their own racial group in the level above them were less likely to leave the organization than those with a lower proportion. Similarly, Ely (1995) found a negative relationship between the proportion of women partners in a law firm and women associates' tendency to perceive differences

between the attributes of successful lawyers and their own attributes. Geraci and Tolbert (2002) found that universities with a higher proportion of women faculty are more likely than those with a lower proportion to hire additional women. Although this hiring pattern may result, in part, from a university's willingness to make offers to women, it may also result from a greater propensity by women to accept offers from these universities, because they view them as having more promising career opportunities. These studies support the argument that individuals do take the distribution of demographic attributes in organizations as signals of their own opportunities for career advancement (see also Thomas, 1990). If their perceptions of these distributions are wrong, their perceptions of the opportunity structure will also be inaccurate.

Proposition 22: Individuals who perceive themselves as demographically similar to others with successful careers will have more favorable perceptions of the organization's opportunity structure and are more likely to accept job offers than individuals who perceive themselves as demographically different.

Second, individuals' perceptions of the opportunity structure may predict the conditions under which they experience violations of their psychological contract with the organization (Slay and Taylor, Chapter 19). Granrose and Portwood (1987) found that when individuals perceive that their own career plans match those of their organization's, their satisfaction with the organization and intent to stay increase. When this psychological contract is violated, it exerts a negative impact on those career-related decisions and behaviors. Research suggests that managers connect career success with the frequency of job mobility (Herriot, Gibson, Pemberton, & Pinder, 1993; Lawrence, 1984b). Taylor, Audia, and Gupta (1996) found that lengthening job tenure increased the probability that successful managers with high-responsibility jobs decreased their commitment to the organization and increased their probability of leaving it. These managers appeared to base their perceptions of the opportunity structure on continued job mobility. When the frequency of their own job moves declined, they perceived this as a violation of their psychological contract with the

organization regarding their promised rewards for high performance.

Proposition 23: As an individual's perception of his or her probability of success within the opportunity structure increases, his or her commitment to and satisfaction with the organization increases.

Regardless of the accuracy of their perceptions, when individuals perceive the opportunity structure to be unfavorable, their career-related decisions and behaviors may be affected in different ways. One response entails lowering aspirations—not applying for promotions and not being as concerned about performance. As a result, demographic patterns become self-perpetuating. This has been one of the primary explanations for why women consistently exhibit lower pay expectations than men. Women are more likely to compare themselves with other women, and because other women earn less than men, women develop lower pay expectations (Major & Konar, 1984).¹⁰

Alternatively, individuals may respond to perceptions of limited opportunities by changing employers. This may account, in part, for the finding that women have much higher rates of interorganizational mobility than men and for the negative relationship between individuals' rates of inter- and intraorganizational mobility (Felmlee, 1982; Valcour & Tolbert, 2003). A number of studies suggest that turnover decisions are associated with the higher levels of intergroup conflict that accompany demographic change. It seems possible that in addition to or in combination with the conflict, these changes produce unfavorable perceptions of the opportunity structure, which increase the probability of turnover.

Several studies show that men's dissatisfaction with their work and expressed intentions to change jobs increased as the proportion of women in their organizational group increased (Tsui et al., 1992; Wharton & Baron, 1987). Likewise, a study of academic departments by Tolbert, Simons, Andrews, and Rhee (1995) showed that the rates of turnover among women faculty increased as the proportion of women in the department increased; this was attributed to the higher levels of intergroup conflict associated with changes in the attribute distribution. In the same vein, a study of the relationship between the

size of tenure cohorts and turnover behavior by McCain, O'Reilly, and Pfeffer (1983) found that faculty turnover increased in departments with either one particularly large tenure cohort or substantial gaps between tenure cohorts. They suggested that this occurs because such gaps make communication across cohorts problematic, which increases conflict and power struggles.

Proposition 24: The less favorable individuals' perceptions of the opportunity structure are, the lower their job satisfaction and organizational commitment and the greater their probability of turnover.

A third response to perceptions of an unfavorable opportunity structure is to try to *change* the structure, either through bringing legal action or by mobilizing other employees to lobby for changes within the organization. Little is known about the conditions that encourage such proactive responses (but see also Balsler, 2002) or, specifically, how organizational demography may influence different responses to lower expectations of obtaining career-related rewards. This represents a promising avenue for further research on demography and careers.

HOW DO INDIVIDUAL CAREER-RELATED OUTCOMES SHAPE ORGANIZATIONAL DEMOGRAPHY?

We've now come full circle, and although we have focused on one direction in the relationships among organizational demography and individual career-related decisions and behaviors, we would be remiss if we didn't mention what may happen in the opposite direction. The career choices that individuals make can also result in reshaping existing attribute-linked norms and distributions within an organization. Individuals who apply for positions that have traditionally been held by employees with other attributes may make existing norms more transparent, which may, in turn, lead those norms to be questioned and, ultimately, to change. Similarly, organizations that suffer high rates of turnover in segments of their workforce and have problems attracting new employees may be motivated or required to reexamine existing personnel practices. For example, research by Ingram and

Simons (1995) showed that organizations facing tighter labor markets for female employees were more likely to establish "family-friendly" policies. A large number of organizations have established a variety of structural arrangements, including mentoring programs, networking programs, and other "diversity management" programs, all of which have the explicit goals of reducing turnover and promoting demographic diversity in the workforce. While the impact of such policies on organizational norms and actual attribute distributions to date is still unclear (Glass & Estes, 1997), it is clear that individual career choices are taken into account by organizational decision makers in efforts to fashion a more attractive workplace, and in the long run, this is likely to affect demographic outcomes.

It is also worth noting that concerns with issues of attracting and retaining employees have been given added force in the past half-century by the threat of lawsuits and general legal pressures to demonstrate nondiscriminatory practices. In this context, individuals who perceive the opportunity structure in an organization to be inequitable may choose not to leave it but to try to change it through legal action. Work by a variety of researchers (Kelly & Dobbin, 1998, 1999; Leonard, 1990) suggests that legal forces are often key factors in producing change in the attribute distribution and organizational policies (and thus, presumably, in organizational norms).

Thus, there are a variety of ways in which individual actions can, in the long run, produce significant changes in organizational patterns, including demographic patterns (Barley & Tolbert, 1997). The relation between individual actions and changes in organizational demography is likely to be much more difficult to map than the reverse relationship because of the relative fixity of the constructs. Nonetheless, a full understanding of the relation between organizational demography and individual careers requires recognition of their mutual influences.

A FEW SUMMARY THOUGHTS

Our purpose in this chapter was to sketch a broad outline of multilevel questions that research on organizational demography suggests for the study of careers. In some cases, we

have sufficient empirical evidence to be specific about proposed relationships. In others, our contribution is to identify relevant variables, posit alternate explanations, and puzzle about possible outcomes. One variable that emerged in our conversations as a significant, relatively unexplored feature in these hypotheses is time. Although time is always lurking in the background of career studies, it became particularly relevant in exploring these multilevel connections, perhaps because the scale of change for individuals differs so much from that for organizations. Certainly, as we discussed these ideas and others, it became increasingly clear that the relationships we propose merely skim the surface of potential complexities.

Much intriguing territory lies within the processes that connect careers as individual phenomena with careers as social or structural phenomena. Topics such as career success, for instance, are typically studied from either subjective or objective perspectives. Yet it seems likely that they are not independent (Arthur et al., 2005). Attribute distributions are frequently studied as direct predictors of career-related outcomes. Yet including attribute-linked norms and intergroup relations seems likely to offer a more nuanced understanding of this relationship. Individuals base their career decisions on their perceptions of reality, so exploring what happens when perceptions and reality differ may help explain the variability in employees' responses to the opportunity structure. Until we explore these relationships and others like them, we will never really comprehend careers as individual phenomena that are inextricably embedded within social contexts. There is clearly a great deal of work to be done to understand the processes that connect demographic structure, attribute-linked norms, and career outcomes in organizational settings. We hope this chapter encourages additional steps in that direction.

NOTES

1. Studies of organizational demography tend to differ from studies of the relationship between individual demographic attributes and career-related outcomes. The former focus on the compositional effects of demographic distributions, whereas the latter focus

on the individual effects of demographic attributes. Examples of organizational demography studies include McCain et al. (1983), showing that gaps in tenure cohorts are associated with higher turnover, and Tsui et al. (1992), showing that increasing work group diversity is associated with lower levels of psychological attachment. Examples of individual demographic attribute studies include McNeely's (1988) research on human service workers, showing a positive relationship between job satisfaction and age, and Loscocco and Kalleberg's (1988) study, comparing American and Japanese employees in terms of the effects of age on job commitment.

2. We recognize that interactions among demographic attributes also influence careers, but these interactions are beyond the scope of this chapter; hence, our discussion is limited to the effects of single demographic attributes.

3. The term *organizational demography* has been used broadly to refer to the representation of particular attributes in a variety of organizational groupings, including work groups or departments, given levels of management, and whole organizations. To our knowledge, no work to date has focused on the problem of what the relevant unit of analysis is in understanding the influence of demography on any particular outcome.

4. It is worth noting that these norms were briefly redefined during the years of the first and second world wars, when the employment of women was encouraged as an act of patriotism; however, once the labor crises created by the wars were over, the norms constraining women from paid employment were reestablished with amazing rapidity.

5. This definition follows in the tradition of others who define norms as frames of reference or regularities (Newcomb, Turner, & Converse, 1965). It does not include either behavioral expectations or sanctions for deviance. Our interest in how attribute-based norms emerge within organizations suggests that demographic patterns exist before behavioral expectations become attached to them. It is likely that the opposite also occurs: Behavioral expectations associated with demographic patterns outside the organization influence the likelihood that these attributes will become salient inside the organization. However, we treat the two concepts as independent effects and thus consider them separately. We exclude sanctions from our definition because norms defined by sanctioning behaviors cannot be separated from their effects (Cancian, 1975).

6. In these propositions, we discuss the proportion of individuals holding a given attribute rather than the number of individuals. Thus, these propositions examine what happens when the number of women increases relative to the total number of employees or when the number of old employees increases relative to the number of young and middle-aged employees. However, it is possible that an increase in numbers without an increase in proportions might produce the same response. An influx of new minority hires might be quite visible and salient to everyone, even though a company hires other employees as well. Moreover, there is evidence that the impact of proportions on individual outcomes is not linear (Gibson & Cordova, 1999; Izraeli, 1983). Thus, these propositions should be taken as general directions for exploring these topics.

7. The authors thank Hugh Gunz for his helpful elaboration describing this concept.

8. These propositions do not explore intriguing questions about how the interaction between the numbers and status of those who agree influences the opportunity structure and under what conditions agreement is more important than status and vice versa.

9. Another possibility not explored here is that the skewness of the attribute distribution is not the critical factor. It may be that the change from one proportion of a minority to another is what increases or decreases the conflict. Thus, conflict ensues because majority members see the change in the attribute distribution and are uncomfortable with it.

10. Gibson and Lawrence (2006) found that this explanation may be incomplete. In their study, no gender differences in career expectations appeared for employees at low career levels after controlling for the gender and career level of comparison others. In contrast, significant gender differences appeared at high career levels: Women at these levels showed lower career expectations than men, even when controls were added.

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