Encountering the Glass Ceiling
Gender, Values, and the Structure of Work

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"That's how I build a team: around a common view of the world."

[Executive Vice President of a Fortune 100 firm describing his management style, interview notes, 1993]

INTRODUCTION

Opposition to diversity takes the familiar form: "You don't look like me, you don't dress like me, and you don't think like me; therefore I don't want to know or understand you." This opposition may only come from a fetish for the familiar, e.g., "like seeking like" or "homophily" (Ibarra, 1993a, 1993b, 1992; Marsden, 1998; Rogers and Kincaid, 1981). But in a positive light, as in the quote above, interpersonal similarity increases ease of communication, improves predictability of behavior, and fosters relationships of trust and reciprocity (Kanter, 1977; Lincoln and Miller, 1979). However justifiable this opposition to diversity may be in some settings, in other settings it only masks the dark side, a fundamental fear of differences.

If this fear of differences can be overcome, there are substantial benefits from diversity: "You don't look like me, you don't dress like me, and you don't think like me; therefore I want to know you in order to learn something new." These diversity benefits are hinted at by the range and reach of a network (Burt,
1992). It differs from homophily in that it refers to differences among contacts within a person’s network. Having a broad range of network relationships provides greater access to instrumental resources (Aldrich, 1989; Burt, 1992). Thus people whose network includes peers, superiors, and subordinates provide greater support for the implementation of a manager’s agenda and the development of power (Kotter, 1982; Ragins and Sundstrom, 1989).

The Myth of the Pipeline

Both approaches to diversity have converged in 25 years of affirmative action. Equal employment opportunities have provided equal access to entry but not promotion within an organization (Morrison and Von Glinow, 1990). What this means is that targeted groups (women, people of color, the disabled) have come through the corporate doors but they haven’t really climbed the corporate ladder in a substantive way. Most firms bring women and minorities into the organization but they are not succeeding in moving them up into the higher tiers of the organization. As a result, the major movement by women and people of color in organizations is in and out.

Corporate America has solved one problem, that of organizational access or entry, while it has created another problem, that of frequent voluntary turnover of these targeted groups. This results in a frantic search for replacements to comply with EEO goals and timetables. Not only is this vicious cycle a waste of money and resources, but it perpetuates a false stereotype, that of women and minorities not being able to “cut it” in organizations. In other words, women and people of color are “in” but not “of” the corporation (White, 1992; Kanter, 1977).

In the United States, this means that glass ceilings and walls mirror a social body that is decidedly white and male. For instance, targeted groups comprise 65 percent of the total workforce. However, women occupy only 3 percent of the top jobs and minorities hold about 2 percent. A typical rationale used to explain these low percentages is historical artifact. The concilia-
tory promise is that the targeted groups are "in the pipeline" for promotion. Unfortunately, historical facts unravel this myth. Women and minorities have been in the corporate pipeline for some time and they still are not getting promoted. The pipeline is plugged. Sometimes the plug is very obvious, other times it is invisible (Schwartz, 1989; Gilligan, 1982).

For the frustrated person of color or woman, this results in their departure from the corporation after a short period of time (Rosen et al., 1989; Taylor, 1986). Once they leave, corporations re-initiate a cycle of recruiting to comply with EEO goals. It is a never-ending story: the targeted groups are recruited, they are excluded from key aspects of organizational life, until they get frustrated and leave in what is "single loop learning" by management. The bottom line is simple: preserving the thin white line of management requires that corporations continuously recruit in "designated" categories and recruiting is costly to the shareholder.

Why this senseless cycle? Why can't corporations hold onto these talented people in the first place? Why aren't women and minorities meaningfully integrated in the corporate culture? Why aren't organizations using all of the talent within them, "no matter how they are packaged"? Here I will try to answer these questions by illustrating how the invisible networks exclude others in organizations. Then I will outline a program for what executives can do to spot these dynamics, measure them, and monitor organizational progress through continuous improvement.

**How the Pipeline Gets Plugged**

Rather than endlessly debate why the pipeline is plugged, I will show how the pipeline becomes plugged and what senior managers can do about it. Figures 1 through 5 are different snapshots of the same managers and professionals in a financial services company. Each figure depicts a network based on work and social interactions around the office. The data are real and are derived from the organization's hierarchy and from surveys administered to employees. The lines drawn connecting individ-
uals with each other represent two-way communications/relationships. The thickness of the lines denotes the intensity of a relationship, with thicker lines representing relationships of higher intensity. Any mismatch (that is, person A reports an interaction with person B, but person B does not verify this) was followed up with individual interviews and resolved.

The Organizational Chart

Figure 1 is the standard organization chart of a department of 16 employees in a division of 238 employees, only the chart has been modified to highlight the gender and ethnicity of the employees. Rectangles denote men and circles denote women. The letters AA, A, and H denote U.S. minority categories (African American, Asian, and Hispanic, respectively).

The executive is a Caucasian male; his administrative assistant is a woman of color. Out of the five direct reports, three are male managers, one of whom is a minority. There are two white female managers. Reporting to the managers on the organization chart are nine professionals, two of whom are male. Of those
two, one is a male of color, the other white. Of the seven women professionals, three are Caucasian, four are minorities.

**The Prescribed Network**

Figure 2 is the same organization. This time it is drawn as the prescribed network. All the linkages are the same, only redrawn as a “hub and spoke” network rather than a vertical hierarchy. In the prescribed network all the relationships remain the same, only the executive is redrawn in the center. In this way, decisions flow from the central hub to the managers and professionals on the periphery. The shaded boxes correspond to the
functional working departments on the organization chart in Figure 1.

The hierarchy is reconfigured as a network for several reasons. The conversion from hierarchy to network reveals an interesting pair of assumptions. First, a distinction is commonly made between prescribed and emergent networks or, restated, formal and informal structures. A prescribed network (formal structure) is composed of a set of formally specified relationships between superiors and subordinates who are distributed across functionally differentiated groups.

Second, since the prescribed network is equivalent to the formal hierarchy, the person "on top" of the hierarchy is not at the center of the network. In hierarchies, the goal is to rise to the top; whereas the goal in networks is to become "central"—to be in the center or in the "thick of things." However, an executive in

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**Figure 3. The Work Network**

AA = African American  
A = Asian  
H = Hispanic  
No designation = Caucasian
the center of the prescribed network (e.g., the top of a hierarchy) may not be at the center of other critical networks within the organization.

How Work Gets Done

Informal or emergent networks, in contrast to prescribed networks, involve more discretionary patterns of interaction in which the content of relationships may be work, or socially motivated, or a combination of both. An example of a work network is shown in Figure 3. Employees were asked with whom do they interact or work in order to get their job done in the department. This network is very different from the organization chart in several respects:

- The bulk of the work flows through a white female manager in the lower right-hand corner of the network.
- All managers are working with their professional subordinates with the exception of one white male manager in the work group on the right-hand side of the diagram. There is no link connecting this manager to one of his subordinates.

The Grapevine

Figure 4 is a diagram of the infamous “grapevine,” the informal communication network. This network was determined by surveying employees regarding their involvement in the “rumor mill,” that is, with whom do you talk if you want to really find out what’s going on in the organization.

- The white woman manager through whom most of the work flowed in Figure 3 is not “in the thick of things” in the informal network. Perhaps she is too busy doing her work and the work of others to hobnob by the watercooler. In any event, she talks mostly to other women of equal or lower rank in the organization.
- The white male executive is mostly talking with a white male manager in one of the work groups. Perhaps the
executive is grooming his replacement or this junior manager is his "source" for what is going on in the organization. If the latter, the executive is receiving faulty information because his "source" is not very well connected in the work of the organization (Figure 3). Add to this fact that the "source" is connected with other white men in the organization and not to the female subordinates or minority males. In a figurative sense, the executive's right-hand man is not as knowledgeable as others, relatively disconnected from informed others, and therefore an unreliable source of information.
Climbing the Corporate Ladder

Figure 5 is a network diagram of the support relationships, that is, who informs whom regarding professional career advice, or what it takes to succeed or "get ahead" in the organization. The central players in this network are those who "know the ropes." In this network, informal mentoring relationships may emerge.

- The Caucasian female manager through whom most of the work flowed in Figure 3 is not in "the thick of things" here either. She is integrated in the work networks but socially isolated. In all probability, she may grow frustrated and leave. Most likely her knowledge resides in her head and not in the written procedures of the organization.
What impact will her departure have on the work flow in that department?

- Earlier I suggested that the executive may have been informally training an heir apparent. This initial insight is confirmed in the support network. Certainly these two white males are strongly connected in two networks. On closer inspection we see that these strong non-work connections overshadow their actual working relationship. This high-level but strong association may generate gossip and suspicion.

- Relatively isolated are a male professional of color and a male manager of color. They are unique in the department because they are the only ones with their particular gender/ethnic mix. Perhaps they feel they have no one to turn to who is like them and who can advise them.

Discussion

Organizational research has indicated that persons who become part of key networks and information flows in organizations tend to be more committed to and successful in their organization (Burt, 1992; Putti et al., 1990; for a more technical approach, see Bienenstock and Bonacich, 1992). On the other hand, surveys have found that exclusion from these same networks and the information contained therein is a major reason given by women and people of color for leaving their employer.

A careful evaluation of the percentages of women and minorities throughout the hierarchy will give a picture of diversity in the formal organization. If a great disparity of women and minorities is found between two adjacent management levels in the hierarchy, then it is postulated that a glass ceiling exists between these two levels preventing numbers of targeted groups from advancing beyond the lower level. It is fairly easy to observe the glass ceiling in an organization (Ellis, 1988; Taylor, 1986). The more difficult assignment is to determine what keeps this obstruction in place in spite of concerted efforts to remove it.
On this point, human capital theory attempts to explain continued sex- and race-related differences in management by suggesting that individuals are rewarded in their current jobs for their past investment in education and job training (Blau and Ferber, 1987). However, this explanation assumes that investment pays off equally for all groups. Recent studies suggest that investment yields higher returns for white males than for women and minorities.

A second theory is the rational bias explanation. This psychological theory suggests that discrimination is influenced by contextual circumstances in which sexual or racial bias results in career rewards and punishments (Larwood, Swajkowski, and Rose, 1988b). In this case, a manager's decision to discriminate is based on whether such discrimination will be viewed positively or negatively by relevant stakeholders and on the possibility of receiving rewards for discriminating. Rational bias illustrates why discrimination can continue to occur despite substantial regulations against it (Larwood et al., 1988a, 1988b).

A third set of theories highlights structural discrimination. Intergroup theory (Thomas and Alderfer, 1989) suggests that two types of groups exist in organizations — identity groups (based on race, ethnicity, family, gender, or age) and organizational groups (based on common work tasks, work experiences, and position in the hierarchy). When the pattern of group relations within an organization mirrors the pattern in society as a whole, then evaluations of members of low-status groups are likely to be distorted by prejudice or anxiety as racist assumptions go unquestioned (Nkomo, 1992).

A subset of the structural approach is that interaction patterns which are embedded in the organizational context generate, or at the very least influence, race and gender differences in network patterns (Ibarra, 1993). The structural perspective argues that organizational characteristics in society, not individual traits, account for most observed differences in behavior and organizational experiences (Moore, 1990). Therefore, it is postulated that there is preference for interacting with same-sex or same-race
individuals. Because white males tend to dominate in positions of power and authority, their group identity or network homophyly is not in direct competition with access to their instrumental resources in the organization, that is, the networks of similar others (white males), and instrumental resources overlap or are one and the same.

This is not so for the networks of women and minorities within the firm. Women’s and minorities’ networks will have weaker and sparser network ties than their white male counterparts. Thus, personal networks are bolstered by structural arrangements in the organization that impose significant limits on women’s and minorities’ abilities to develop instrumentally useful heterophyllous ties, that is, ties with different others (“different” in this context means white male).

These theories are embedded in a structural epistemology which has its roots in the sociological and anthropological disciplines. Essentially, the body politic, be it corporation or tribe, is organized around norms of inclusion and exclusion (Douglas, 1986; Barnes, 1969; see also “ascending and descending individualization in Foucault, 1977). There will always be categories of people excluded from privilege or security based on some societal or organizational attribute. Normative principles of inclusion and exclusion virtually guarantee that preordained groups of people will be systematically excluded and judged as politically ineffectual, dispensable, and disadvantaged. These individuals will seek one another and form networks which are homogeneous in that they share the common characteristic of exclusion. A problem for corporations is recognizing and reversing this tendency.

Implications

Navigating Relationships: Obviously many firms have been chasing after windmills by not looking deep enough into the problem. From the previous example, subtle forms of discrimination creep into social behavior. This behavior creates exclusionary hurdles which are felt but not seen. This behavior is
easier for managers to understand if it is reformulated into two kinds of workplace relationships—formal and informal. These relationships can be either strong or weak. Using these two critical dimensions, a 2 X 2 matrix of relationships can be formulated (Table 1).

When coworkers have strong formal (task oriented) and strong informal ties (socially oriented), they are well-integrated both inside and outside the formal hierarchy. When coworkers have strong formal and weak informal ties, their relationship may be “all business.” After all, not everyone can be the best of friends at work. However, the lack of social ties between people who frequently work together could also signal exclusion in the organization.

<table>
<thead>
<tr>
<th>Organizational Relationships Matrix</th>
<th>Strong Formal</th>
<th>Weak Formal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong Informal</td>
<td>Great working relationships</td>
<td>Friends &amp; acquaintances outside the hierarchy</td>
</tr>
<tr>
<td>Weak Informal</td>
<td>Strictly business (may be exclusionary)</td>
<td>New hires or strangers</td>
</tr>
</tbody>
</table>

Table 1. Organizational Relationships Matrix

For instance, the white female manager in Figure 3 had strong working relationships with her coworkers which did not carry over into other more “social” networks. This comparative analysis could indicate several problems. First, numerous and intense work ties concentrated in one person could signal a work process gone awry. Second, this asymmetrical pattern of communication dependency on one person makes a department “vulnerable” in the event the central person is unable to report to
work or becomes counterproductive and sabotages work. Finally, on comparing her weak, almost nonexistent informal social ties to those of her white male superiors in Figures 4 and 5, we see she is most certainly excluded from the dominant coalition.

Weak formal and strong informal ties generally represent clubs, softball teams, and links outside the hierarchy. These informal ties can be instrumental in making work run smoothly when new responsibilities emerge or goals requiring cross-functional cooperation must be achieved. The organizational context helps to determine how this particular pattern of ties should be interpreted. For instance, the white male manager “heir apparent” was strongly connected at an informal level to the executive, but weakly connected in a work network to his work group and the department. If he were to be promoted and assume executive responsibilities, he would have a greatly diminished understanding of how work gets done in the department. This lack of appropriate work knowledge may hinder his abilities as an executive.

Finally, weak formal and weak informal ties may represent the relative isolation of a new hire or stranger. The absence of ties or the presence of weak ties could also signal stigmatization or rejection. For instance, in firms which have been surveyed before and after a layoff, peripheral people in the network, e.g.,

<table>
<thead>
<tr>
<th>Managerial/professional Population</th>
<th>10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women + People of Color</td>
<td>4,000</td>
</tr>
<tr>
<td>Voluntary Turnover for White Males</td>
<td>6%</td>
</tr>
<tr>
<td>Voluntary Turnover for Women/Minorities</td>
<td>9%</td>
</tr>
<tr>
<td>Turnover Costs</td>
<td>$20,000</td>
</tr>
<tr>
<td>Extra Costs (4,000 X 3% X $20,000)</td>
<td>$2,400,000</td>
</tr>
</tbody>
</table>

Table 2. Costs of Exclusion
those with weak formal and informal ties, were subsequently laid off. Surprisingly, those layoff decisions were made without any knowledge of the network analysis results. What this surprising fact may indicate is that people have an implicit or tacit knowledge of how they and their coworkers are connected in important networks throughout the firm.

**The Costs of Exclusion:** Table 2 is an example of the costly consequences of exclusion. Assume you have a managerial and professional population of 10,000. Of that population, 4,000 are members of targeted groups. Within this total population, voluntary white male turnover is 6 percent while voluntary turnover for the targeted groups is 9 percent, a difference of 3 percent. At first glance this does not appear to be a large difference. A rough estimate for turnover costs, including recruiting, training, and loss of productivity is approximately $20,000 per exempt employee. The difference in voluntary turnover between white males and that of women and minorities is an added cost of $2,400,000 dollars.

Some companies shrug off these expenditures and justify them as the “costs of compliance.” The “cost of compliance” argument may have worked in the past, but these practices have ripple effects which derail productivity and organizational learning, costing the company even more dollars. In an increasingly lean and competitive environment, an organization must utilize all of its talent.

**Training:** Education and training help managers work together within a diverse workforce to reduce discrimination (Hauser and Woodard, 1992). The value of programs on managing diversity is bringing issues into the open allowing people to discuss their beliefs. This type of training is likely to be most useful in areas such as career and leadership development.

**Succession Planning:** If the heir apparent is indeed the next real heir to the executive post, ambiguity can be diminished by implementing an explicit succession plan. Explicit recognition of who’s next in line helps to eliminate wasteful and sometimes harmful competition between those eligible.
Mentoring: Some research suggests that bias is most effectively decreased by exposure to and experience with members of the opposite sex and other races (Powell, 1988). Mentoring programs offer one way of creating opportunities and environments for people of diverse backgrounds to work together (Martin, 1990). For example, the white male "heir apparent" could be paired with the white female manager who was virtual leader in the work network. By working together, they may come to better appreciate one another's roles in work and leadership.

Teams: Two recent findings that appeared in the Wall Street Journal further point to diversity's advantages. An investment firm found that the 20 percent of companies rated highest for hiring women and minorities outperformed the stock market by 2.4 percent from 1988 through 1992. For the same time period, the worst 20 percent trailed the market by eight points (WSJ, 1993). In addition, research on the task effectiveness of diverse teams versus homogeneous work groups showed that although diverse work groups lag in the early stages of a task, they have obtained superior results at the completion of the effort.

General Management: Networks are subtle forms of communication which require equally subtle forms of management. It is clear from a comparative analysis of the networks that the white female manager is isolated from social and career opportunities. Her heavy involvement in work, coupled with "social" isolation may result in her voluntary exit from the organization. Perhaps more harmful, she could become disgruntled and because of her central location, could impact the quality of work and morale in the organization. In either case, these are undesirable outcomes.

On viewing these graphs, the executive suggested a promotion for his female manager. However, simply implementing a promotion for retention purposes may backfire. Her sudden and obvious elevation in the hierarchy may compromise her informal work relationships. Her coworkers will wonder if they can trust her. This change in status may make her less effective in the work network. Networks are invisible or subtle forms of working.
Therefore, other less obvious incentives such as training, development, or bonuses may be useful in the short term to encourage her to remain with the firm. Pairing her up with her senior colleagues in a mentoring relationship will ensure a more successful, subsequent promotion.

CONCLUSION

The final irony of diversity is that “by the numbers” the department is exemplary in terms of EEO compliance. The workforce is comprised of approximately 40 percent men and 60 percent women. The racial/ethnic mix is 56 percent white and 44 percent people of color. No matter what the numbers indicate, women and minorities are not being integrated into the workplace in this example.

Typically, companies reevaluate their human resources programs and policies and institute training programs in managing or valuing diversity in an effort to get their organizations sensitized to cultural diversity issues. However, these programs may miss the mark because they have few clues as to the real extent of their progress and the subtle aspects of human dynamics. Most companies do not document whom they let out the back door through voluntary turnover. A closer look will reveal that those statistics are related to who is invited in the front door.

The relationship between personal network structure and outcomes such as career mobility, managerial effectiveness, and job satisfaction is a new area of research (Burt, 1992; Ibarra, 1992, 1993) the results of which pose interesting dilemmas for practitioners. The example given here suggests that there is indeed reason to believe that personal networks differ enough to account for differences in opportunities. One possible and major implication is that because structural constraints differ by race and gender, network characteristics associated with success and effectiveness for white males may not be the same as those that will be associated with success and effectiveness for women and minorities. Further research is needed to test the assertion that
women and minorities must develop the ability to attain similar results using different means or by pursuing different approaches to access the same channels (Stephenson and Krebs, 1993; Rizo and Mendez, 1990). This research will lend needed insight into what appears to be differential returns for similar investments.

From a business strategy perspective, competition through product differentiation may be enhanced by an understanding of how human networks work. Competitive advantage in an information economy may mean the quick and effective combination of different information streams into new products and services. Therefore, any corporation that can leverage the incipient diversity in its human resources will have the upper hand. Many countries and companies have optimized on homogeneity by default, leaving heterogeneity as a latent strength. In reshaping the firm to meet the challenges of globalization, competitive advantage may increasingly rely upon organizationally integrating and leveraging the latent strength in internal labor markets (Peters, 1993).

ACKNOWLEDGMENTS

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