

WHO IS *THEY*?

INQUIRIES INTO HOW INDIVIDUALS CONSTRUE SOCIAL CONTEXT

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ABSTRACT

When people are asked about their career decisions, they often invoke the influence of *they*. *They* may include family or teachers, but it repeatedly includes some amorphous group of generalized others. This article describes my inquiries into the question: Who is *they*? Initial studies examined individuals' perceptions of career timetables within organizations. The results suggested that individuals experience their social context as an intricate territory informed by self-perceptions, shared perceptions and actual distributions. However, these studies assumed *they* equalled the employee population. Later work showed that in large organizations this assumption is unwarranted. Each individual acquires his or her own non-random version of social context: an organizational reference group. These individual-level reference groups and the neighborhoods in which they cluster are distinctive because they include distant associations defined only by awareness. Both concepts offer opportunities for exploring the social structure that emerges between individuals' informal social networks and the organization.

Keywords

social context, organizational reference groups, careers, career timetables, social norms, time, neighborhoods, social networks, levels of analysis, social information

I have always been interested in how social structure and norms affect people who work. In my first study, I interviewed five women and five men who made radical career changes during mid-life (Lawrence, 1980). After relatively typical work experiences, they had somehow found a way to cross the boundaries between two seemingly orthogonal occupations. Subjects included a supervisor of clerical workers who became a telephone pole lineman for the phone company and a tenured physics professor who became a musician in a major symphony orchestra. I hoped to identify features of social context that facilitated or inhibited these dramatic moves, so I asked them why they had changed careers now rather than earlier or later. One of the consistent explanations was ‘I did it now because if I didn’t, they would say I was too old.’ *They* sometimes referenced spouses, parents or teachers. But *they* often included an ambiguous group of others out there. I started to wonder: ‘Who is *they*?’

Inside large organizations, we know a good bit about formally assigned groups of *they*. We study individuals’ experiences in leader-subordinate relationships, work or task groups, unions, departments, divisions and organizations. Boundaries in each case are designated by formal organizational structures. But my career changers were not thinking about formal structure. They were thinking about informal structure: an amorphous social context lacking defined boundaries and populated by some group of others. As shown in Figure 1, scholars have studied informally defined social context in large organizations at several levels of analysis. Examples include dyads that involve mentors and friends who facilitate an individual’s psychosocial and career development (Kram, 1985); groups, such as people who eat lunch together (Roy, 1959) or share a common occupation (Cressey, 1932); and informal social networks, such as the loosely connected others with whom individuals work and from whom they receive advice or career assistance (Wolff and Moser, 2009).

INSERT FIGURE 1 ABOUT HERE

However, once one moves beyond research on small, informal social networks, there is little social context to be found. There seems to be a glaring hole between the level of analysis defined by informal social networks, which include an average of eight others (Lawrence, 2006: 84), and the overall organization. In small organizations, there is perhaps little social territory between the two. Everyone is aware of everyone else. Significant informal groupings exist, such as those defined by friendship or status. However, everyone knows the population of others who emit and convey social information, the cognitive and affective knowledge individuals acquire about and from others. In large organizations individuals cannot be aware of everyone. As a result, each individual perceives his or her own version of the organization. And contrary to what happens in small organizations, these individually-perceived populations will likely differ. We have many theories involving what individuals do with social information (cf. Salancik and Pfeffer, 1978), but we know little about the people from whom it comes. If I was going to identify *they*, I was going to have to figure out how to find them.

Before proceeding: several product disclaimers. First, this is an inductive story that uses numbers, which is an atypical combination of method and data. Scholars using inductive methods typically eschew numbers, whereas scholars using deductive methods customarily forgo description (Lawrence, 2004). These distinct research traditions make it difficult to present work that combines the two.¹ Second, the data present a photographic collage rather than a movie. The story focuses on description rather than on antecedents and consequences. Many pieces of the collage are missing and require further study. Moreover, while the story assumes that individuals' perceptions both create and are created by social context, the data do not capture

dynamic processes. My purpose is to describe how individuals may organize the social territory between their informal social networks and the organization and discuss why this territory may be important. Rather than examining why people experience organizations similarly, I am interested in why their experiences differ.

Perceived and shared perceptions of career timetables

The studies reported here involve managerial careers within organizations. Although managers are frequently noted as an over-studied occupation, their careers provide several advantages. Managerial careers are formally defined by the number and rank-order of jobs. As a result, the status of each career level holds common meaning among employees. Differences in individuals' perceptions of managers are not conflated with their perceptions of job status. Formal status also means that managers' attributes are likely to acquire subjective interpretations about who is valued and why. Individuals then use this information to evaluate themselves and others (Lawrence, 1984). Thus, the individuals who hold management jobs represent an important and salient social context, a reference group used for social comparison. Finally, because management is an organizational career, it defines a relatively circumscribed population of *they*.² I assumed this limitation would make it easier to expose differences in managers' career-related perceptions. An organization's population is the same for all members, suggesting they have access to the same social information. I learned subsequently that in large organizations this is not a good presumption. But more about that later.

Individual's perceptions of the career timetable

My career changers found it easy to articulate career expectations by age. So I began by examining managers' perceptions of their career timetable, a profile of age-related time differences between career levels. Managers use their perceptions for evaluating themselves and

others as ahead of schedule, on schedule or behind schedule. These categories acquire salient meaning in many organizations and occupations as evidenced by common descriptors, such as ‘fast-track,’ ‘deadwood’ and ‘old-timers.’

Although employee information systems easily identify an organization’s actual career timetable, managers may be unaware of what it looks like. In one organization, I was working with a Human Resource manager and we were perusing a simple table showing managers’ age distributions by level. On viewing the numbers he remarked ‘Oh! I always thought I was behind schedule. I’m really younger than most of these people’ (in my career level). This was good news to him. It was a surprise to me. If one long-tenured manager with experience in both line and staff positions didn’t know the actual age distribution in his own career level, what about others? Managers might perceive career timetables differently, despite the evidence.

I became curious about these career timetable perceptions: what do they look like, where do they come from, and how are they related to work-related attitudes and behaviors? What I found was a social territory in which a complex web of perceived, shared and actual career timetables defines different versions of *they*.

Individuals’ perceptual accuracy. I learned from interviews that when managers are thinking about everyone else, they think generally; they round off. For instance, if I ask them how old managers in middle-level positions are, they are more likely to say ‘They’re around 40, maybe 45’ than ‘the average age is 42.’ They develop impressions. To capture these impressions on a survey, I provided subjects with an age scale for each career level. The scale resembled the markings on a ruler, providing an age range from 18 to 70. Subjects noted their perceptions of managers’ ages in each career level by circling what they saw as the typical age for that level and drawing a line through the scale indicating the range. Figure 2 shows their

perceptual accuracy in one organization (Lawrence, 1988: 326). The x-axis shows subjects' average age perceptions and the y-axis indicates actual ages. Values that fall on the diagonal indicate high perceptual accuracy.

 INSERT FIGURE 2 ABOUT HERE

There are several interesting observations to make about Figure 2. Overall, subjects' perceptions were relatively accurate. Their greatest inaccuracy occurred at lower career levels, where they tend to over-estimate the age of the youngest manager by about ten years. However, as career levels rise and the number of managers decreases, subjects' accuracy increased. These results are consistent with decision research, which finds that the larger the number of objects in a distribution, the higher the uncertainty. When distributions are uncertain, perceptions tend to regress towards the mean (Hertwig et al., 2005; Lichtenstein et al., 1982). In this organization, the lower the career level, the higher the number of managers in each level and the higher the likelihood that subjects' perceived ages varied from and regressed toward actual ages (see Lawrence, 1990 for a more detailed analysis of these perceptions).

Given these patterns, I thought perhaps the Human Resource manager I worked with was atypical. Maybe others were more aware. Figure 3 shows subjects' perceptions of their own location on the career timetable. Subjects who fall on the zero line of the y-axis believe they are the same age as what is typical for their career level. In this organization, the distribution of subjects' perceptions of location on the career timetable is relatively normal if slightly skewed to behind schedule: 4% of all managers fall on the zero line, 47% fall below and 49% fall above with a range of 20 years ahead of schedule to 24 years behind schedule.

 INSERT FIGURE 3 ABOUT HERE

As expected, there is a strong positive correlation between a subject's age and the extent to which he or she perceives him or herself as behind schedule ($r = 0.72$). Promotion opportunities decrease with age and career level because the higher the level, the lower the number of jobs. However, this positive correlation perceived by subjects is higher than the actual relationship between age and years behind schedule ($r = 0.26$). Subjects seem to create a work environment embodied by stronger patterns than exist in reality. My Human Resource informant was not alone. There were many managers in this organization who held inaccurate age perceptions, even regarding their own career level. In other words, these managers perceive different versions of *they*.

So what? Deviating from self-perceptions. The next question was whether these inaccuracies mattered. It seemed possible that managers' work satisfaction and orientation were related to their location on the actual career timetable. Those who are ahead of schedule tend to do better than others independent of perceptions and norms and such differences accumulate over time (Berlew and Hall, 1966; Rosenbaum, 1984). Thus, it seemed likely that managers who see themselves as ahead of schedule hold more positive attitudes about work than those who see themselves as behind. But what happens when managers' perceptions are wrong?

I started with an indirect measure of managers' self-perceptions: the difference between their age and their perception of the typical age for their level. Thus, a 30 year-old Level 2 manager who thinks the typical Level 2 manager is 25 is measured as seeing him or herself as five years behind schedule. This represents an indirect measure because I did not ask them whether they see themselves as ahead of, on, or behind schedule. It seems improbable that managers' felt experience of their career progress is a linear function of such differences.

Managers who see themselves as one year older or younger than typical for their level are unlikely to interpret this deviation as ahead of or behind schedule. In order to increase my confidence in their interpretations, I selected three subsets. Subjects who saw themselves as within two years of the typical age for their level were defined as on schedule, those who saw themselves as seven or more years younger than typical were defined as ahead, and those who saw themselves as ten or more years older than typical were defined as behind schedule.³ The remaining subjects were dropped (see Lawrence, 1984 for more detail).

I then identified each subject's actual position on the career timetable. Actually on schedule subjects were defined as those within one standard deviation of the actual average age for their level, with younger subjects defined as ahead of schedule and older subjects as behind. Finally, I divided the sample by age because research shows that many work-related attitudes and behaviors are age-related (see Lawrence, 1996a for a review). I included only 35 to 50 year old subjects because it was the only age group with sufficient numbers for comparison in the three perceived timetable categories. This is not surprising since it is difficult for older individuals to see themselves as fast track and younger individuals to see themselves as too slow. The final sample consisted of 78 subjects. Despite their similar age and actual on schedule careers, 16 of these informants saw themselves as ahead, 37 as on schedule and 25 as behind.

The results compare subjects' work satisfaction and orientation across these three groups. When subjects inaccurately perceive themselves as behind schedule, they tend to have lower work satisfaction and orientation than those who see themselves as ahead or on schedule. There is no difference between the work satisfaction and orientation of subjects who see themselves as ahead and those who see themselves as on schedule. This suggests that the relationship between subjects' self-perception and work-related experiences is somewhat independent of their

accuracy.

I conducted similar analyses in two other organizations: a relatively small medium-tech company in which I studied the dual-track engineering-management career, and a second large utility (Lawrence, 1996b). The distributions of how managers saw their career timetables differ across organizations. In the original utility, the average manager sees him or herself as 1.1 years behind schedule, ranging from 20 years ahead to 24 years behind. In the medium-tech firm, the average manager sees him or herself as 4.2 years behind schedule, ranging from 16 years ahead to 35 years behind. In the second utility, the average manager sees him or herself as 4.9 years behind, ranging from 14 years ahead to 30 years behind. Interestingly, despite such distributional differences, the correlations between age and career timetable self-perception are almost identical: $r = 0.72$ in the first utility, $r = 0.72$ in the medium-tech firm, and $r = 0.73$ in the second utility. Thus, while perceptions appear anchored at different ages across the three companies, the relationship between managers' self-perceived timetables and their ages is the same.

Shared perceptions of the career timetable

Given these differences in how managers view their own position on the career timetable, I wondered both how they perceived others and whether these views were widely shared. Are perceptions relatively concentrated around specific ages or relatively spread out? I defined shared perceptions using subjects' typical age perceptions. For each managerial career level, shared perceptions were defined as the range of ages for which subjects' showed the greatest agreement. People all over the world appear to over-report ages ending in zero and five (Shyrock et al., 1980: 204) and these organizations were no exception. Since this reporting pattern represents how people think about age, I defined the range of greatest perceptual agreement

using ages ending in zero or five rather than use standard deviations or quartiles (see Lawrence, 1988 for more detail).

Figure 4 shows for the two utilities subjects' shared age perceptions of each career level and the actual ages one standard deviation around the actual average age. In the first, shared age perceptions tend to constrain for each level the range of typical ages. For instance, the actual ages of Level 2 managers exhibit a range of about 16 years from 40 to 56, whereas the typical age perceptions of Level 2 exhibit a range of 10 years from 40-50. This occurs for seven of the eight career levels. The range of age perceptions for the highest career level is greater than the actual typical age. This is not surprising given that there are only two individuals at that level and both are close in age. Inaccuracy shows up in a larger than actual age range. The other interesting observation is that the age range for each level is relatively concentrated and shows fairly high agreement. None of the shared perception ranges include more than ten years and they show an average of 73% agreement, with a range of 66% to 81%.

INSERT FIGURE 4 ABOUT HERE

At the second utility (Lawrence, 1996b), also shown in Figure 4, the spread of managers' shared perceptions was greater although agreement is still high. In this organization the shared perception ranges include four that reach 15 years. On average they exhibit 81% agreement with a range of 46% to 91%. Unlike the pattern of perceptions at the first utility, the regression effect is minimal here and perceptual accuracy is worse at lower than higher levels. Managers' age underestimation at lower levels is greater, particularly for levels eight through 11. This may have resulted because the company was downsizing and hiring younger managers from outside. Their relative youth, unexpectedly high career levels and external hiring violated long-held

beliefs about the internal labor market, which made these new employees especially salient and visible to other managers (Taylor, 1982). Thus, it seems possible that these deviant managers stretched the boundaries of shared perceptions.

So what? Deviating from shared perceptions. The next question was whether these shared age perceptions were related to managers' career outcomes. Did being seen by others as ahead of, on, or behind schedule affect managers' performance ratings? And was this difference more or less pronounced than deviations from actual ages? Using managers' shared perceptions, I divided subjects into three categories: those seen by others as ahead of schedule, those seen by others as on time and those seen by others as behind (Lawrence, 1988). The results in the first utility show that a manager's category is related to his or her performance rating. Managers seen by others as fast track are more likely to receive high performance evaluations than would be expected by chance, and managers seen by others as behind schedule are less likely. The performance ratings of managers seen by others as on schedule do not differ from expectation. In contrast, managers' deviations from actual timetable categories show no significant effects. These effects are not large, but they suggest that something about shared perceptions does index a manager's value as seen by others (see Lawrence, 1996b for additional performance-related results).

Conclusions about career timetables

Key to what I learned from these studies is that the relevant *they* for managerial career timetables is complex. It is easy to identify who holds what jobs from company records, but it is less easy to understand how people make sense of that information. As shown in Table 1, their conclusions involve three dimensions: the individual's own perceptions, shared perceptions among individuals, and the organization's actual distributions.

INSERT TABLE 1 ABOUT HERE

These dimensions are not new, but careers scholars tend to examine them independently, studying either an individual's perceptions or shared perceptions or actual distributions. However, it seems likely that such versions of *they* are linked. They connect in some intricate social space where individuals observe actual distributions, their observations then produce perceptions that may or may not be accurate and may or may not be shared by others. But these perceptions and the norms they engender influence individuals' attitudes and behaviors and, in the long run, may alter the hiring and promotion decisions individuals make. Such alterations will change actual distributions (see Lawrence and Tolbert, 2007, for a more detailed discussion of these proposed relationships).

I also learned there is great variation in individuals' observations of others, even when viewing a population with known attributes. This variation provides room for distinct individual and shared interpretations of an organization's career timetable. In addition, it seems related to differences in how individuals experience work and how they are valued by others. Managers who were ahead of schedule, either because of self- or shared perceptions, appeared better off than those who were behind.

As mentioned earlier, these conclusions assume that individuals extract their distinctive information from the same population of others. But what happens if they extract it from different groups? In a small organization every individual can be aware of everyone else. In a large organization no one individual knows everyone. Each person sees a different population: a group of others determined perhaps by geography, building design, the type of work in which he or she is engaged, the organization's formal structure, reporting relationships, or a wide variety

of other possibilities. This diversity makes it much more difficult to identify from whom individuals get their social information. If individuals in large organizations observe random slices of the population, we can predict the attributes of these others. But if these slices are not random, the attributes of these non-random others may explain some of the observed variations in individual and shared perceptions.

Organizational reference groups and neighborhoods

Here I return to my original question. How can I identify the people from whom individuals receive the social information they use to create meaning? While searching for the answer, I serendipitously uncovered two informal social structures that appear to emerge from individuals' perceptions: organizational reference groups and neighborhoods. The former represents an individual's broad awareness of social context. The latter identifies clusters of individuals whose awareness of social context is similar.

Following my first studies, I started to ask interviewees how they knew they were ahead of, on or behind schedule. They typically told me stories about other managers they perceived as valued. Being valued involved promotions, but it also involved going to lunch with high status others, being hired from outside for a high level job, inclusion or exclusion on the cc: of an email, mentions in a company newsletter or appointment to an important task force. Individuals could name these visible, salient managers, but the broader population of others from whom they selected these managers was still unidentified.

One of the difficulties in answering my question in a large organization was methodological. I could interview managers and generate long lists of everyone they knew. Or I could use a survey and ask them to write their own lists. The problem with the former was I couldn't interview enough managers to produce generalizable results in an organization with

over 2 500 managers. The problem with the latter was that the existing method for eliciting such lists, an ego network survey, produced an average of eight names (Lawrence, 2006: 84). This was inadequate for capturing my phenomenon. However, the problem seemed to result primarily because such surveys typically require subjects to write a new list of names in response to each question. Unsurprisingly, subjects quickly get impatient, irritated and fatigued, which requires researchers to focus on salient questions and short lists.

I redesigned the survey format. The new format resembled the old-time spiral notebook teachers used for tracking grades. Students' names went in rows on the left edge of the first page. The remaining pages were half pages, with lines corresponding to each student's name and columns for recording each assignment. When teachers finished one half page of columns, they could flip the page and a clean set of columns appeared. This left the original list of names on the left, obviating the need to rewrite them each time more columns were needed. My survey booklet provided 26 lines for names on the left side of the inside cover and 26 lines on the right side of the end cover, limited by the available space. The questions were printed on half pages in the middle whose rows lined up with each name.

This redesign offered several advantages over the typical ego network survey. First, subjects only needed to write the names once. Possibly as a result, I received an average of 50 names per subject instead of eight. Second, subjects were asked to create a list of the 'people they know' rather than to provide names in response to direct questions about salient relationships. This produced lists that did not result primarily from question relevance.⁴ Third, subjects provided no demographic information about the people listed. All identifying information was obtained from company records. This increased the accuracy of attributes and eliminated selection bias connected with perceived social desirability. Most importantly, these

lists included others with whom the subject did and did not communicate about work. This allowed me to explore large groups of perceived others with whom subjects held a variety of close and distant associations.

Organizational reference groups

After receiving the surveys, I examined the attributes of subjects' listed, known others. I expected to see systematic patterns. For example, the names would almost certainly be influenced by homophily, individuals' propensity to be attracted to similar others (Lazarsfeld and Merton, 1954; McPherson et al., 2001). I picked six standard demographic attributes—gender, ethnicity (Caucasian, African-American, Hispanic and Asian), age, organizational tenure, education and career level—and examined the extent to which subjects' own demographic attributes predicted those of their known others. As expected, subjects were most likely to list demographically similar others. Table 2 shows four examples. The dependent variables are attributes of subjects' known others: average age, average education, proportion women and proportion African-American. The independent variables are subjects' own attributes.

 INSERT TABLE 2 ABOUT HERE

There were two surprising results. First, the amount of variation explained in the composition of subjects' lists was much higher than expected. I could explain on average 56% of the variation (range of 34% to 70%) in the attributes of subjects' listed known others. Second, although predictable in retrospect, adding a subject's other attributes significantly increased this explained variation. For example, knowing a subject's age accounts for 47% of the variation in the average age of his or her known others. Knowing the subject's gender, ethnicity, organizational tenure, education and career level in addition increased the explained variation in

average age by 20% ($p < 0.001$). Such multiple attribute patterns were observed for all six compositional attributes.

Compared with much social science research, these levels of explained variation seemed high. I became intrigued by the strong systematic patterns with which subjects selected or became aware of the people they listed. The magnitude of these patterns suggested that subjects' lists were not random slices. I then learned that the composition of these groups was associated with subjects' career-related experiences (to be discussed in the next section). Subjects seemed to be using their lists of known others as reference groups, in that their own behavior was oriented toward membership *and* non-membership groups (cf. Merton and Kitt, 1950 [1974]).

Thus, an important answer to the question 'Who is *they*?' in a large organization is the people an individual knows, where 'knows' includes a broad range of close and distant associations that extend beyond strong and weak ties.⁵ Each individual's known others represents an *organizational reference group*: 'the set of people an individual perceives as belonging to his or her work environment that defines the social world of work in which he or she engages, including people with whom the individual does and does not communicate and those with whom awareness is the only connection' (Lawrence, 2006: 80). More simply described: when there are too many people, you acquire your own perceived social context.

 INSERT FIGURE 5 ABOUT HERE

So what? The effects of organizational reference groups. While the data showed that subjects exhibited strong systematic patterns in composing organizational reference groups, the next question was whether this composition was associated with subjects' work-related attitudes and behaviors. The literature suggests that individuals' strong and weak ties affect their

promotability (Burt, 1992) and performance (Cross and Cummings, 2004). However, the concept of ‘organizational reference group’ extends these ties to others with whom individuals have neither strong nor weak relationships. Rather, these others include weak associations frequently defined by awareness, not interaction (See Lawrence, 2006: 82-83).

It seemed reasonable to expect that the composition of an individual’s organizational reference group might bracket his or her career comparisons, where known others’ career levels define his or her self-perceived career possibilities. For instance, an individual whose organizational reference group members are, on average, in Level 7, may expect to achieve somewhat less than an individual whose organizational reference group members average Level 9. While these individuals may use the same social comparison processes, they end up with different expectations because the results depend on different comparison groups.

Table 3 shows the relationships between the average career level of subjects’ organizational reference groups and their expected achievement, average level of career referents and performance.⁶ The results show that, independent of subjects’ individual attributes, the average career level of their organizational reference group adds explained variation to each outcome: 7% to expected achievement, 22% to level of career referents and 6% to performance. This suggests that the average career level of individuals’ organizational reference groups extends our understanding of how they experience their careers beyond what would have been observed using only their own attributes.

 INSERT TABLE 3 ABOUT HERE

What this does not show is whether organizational reference groups add information beyond what would be expected from an ego network survey including eight people. If the attributes of an individual’s distant associations explain no more than his or her close

associations, then obtaining the broader social base of an organizational reference group is unnecessary. Merton and Kitt (1950 [1974]: 50) note that distant associations represent the key test of reference groups. If such groups include only those of which individuals are members, they represent an unnecessary concept because sociologists have long studied how group membership affects behavior. However, individuals ‘frequently orient themselves to groups other than their own in shaping their behavior and evaluations, and it is the problems centered about this fact of orientation to non-membership groups that constitute the distinctive concern of reference group theory’ (p. 50).⁷

This concept is relevant for organizational reference groups. Given that we know a good bit about close associations, do distant associations matter? To assess this, I divided subjects’ organizational reference groups into two subgroups based on their responses to a question about work-related communication, a name generation question frequently used in ego network studies. One subgroup contains close associations: all the people with whom a subject works every day or week. This subgroup is similar in size to that of ego networks in previous studies of strong and weak ties in large social systems ($\bar{X} = 7.13$). The second subgroup contains distant associations: the known others with whom an individual speaks infrequently or not at all. Subjects’ distant associations are what differentiate their organizational reference groups from their strong and weak ties.

I examined the relationship between the average career level of subjects’ close and distant associations and the career outcomes above: expected achievement, level of career referents and performance. For all three the average career level of subjects’ distant associations added significant variation beyond that explained by their close associations: 3% ($p < 0.001$) to the explained variation in expected achievement, 11% ($p < 0.001$) to the average level of career

referents and 2% ($p < 0.05$) to performance. This indicates that distant associations do matter. Thus, at least for this dimension in this company, an individual's organizational reference group plays a role in his or her work-related experiences.

There are many potential difficulties one could raise about this study. Certainly, the data come from one organization and I do not believe subjects' lists of known others included everyone of whom each is aware. However, the lists of others I did obtain seem to constitute a significant source of social information that includes but lies beyond more familiar levels of analysis. These lists map an expanded version of an individual's social context somewhere between the organization overall and its' dyads, groups and small social networks.

Neighborhoods

If we expect organizational reference groups to shape individuals' work-related attitudes and behavior, it seems likely that individuals whose organizational reference groups share similar attributes will experience similar shaping. I am defining these groups of individuals as a neighborhood: a cluster of individuals whose organizational reference groups share common attributes (Lawrence and Zyphur, 2009). If the social information individuals acquire about an organization is related to attributes of the individuals from whom they acquire it, residents in different neighborhoods likely experience different versions of the organization. These different versions represent interdependent attribute separations. The composition of an individual's organizational reference group and his or her neighborhood differs.

At an early stage of the organizational reference group work, I had the opportunity to share a few results with a colleague. There were six individual attributes and eight multiple-attribute regressions describing subjects' organizational reference groups, one for each compositional variable: proportion women, proportion African-American, proportion Hispanic,

proportion Asian, average age, average organizational tenure, average education and average career level. As previously noted, Table 2 shows the results for four of these (see Lawrence, 2006 for additional results).

He posed a great question. Was there any way of capturing the multiple attribute patterns that appeared to underlie the regressions? It seemed as if some kind of clustering was going on. For instance, subjects seemed to be combining attributes: a subject with a high proportion of women in his or her organizational reference group was also likely to have a highly educated group. The literature proposes individual, social and structural mechanisms that produce such interdependencies (see Lawrence and Zyphur, 2011 for a discussion). Examples include distinctiveness (McGuire et al., 1979), crossed-attribute categorization (Urada et al., 2007), intersectionality (Browne and Misra, 2003) and consolidation (Blau, 1977). Each of these mechanisms suggests that people in social systems of any size divide into subgroups based on their common and interdependent demographic attributes.

Lau and Murnighan (1998) proposed the concept of faultlines to describe the boundaries between such subgroups. For instance, a work group of five women who are Causasian and five men who are Hispanic has two subgroups defined by a gender-ethnicity faultline. Faultlines have usually been studied in formally-defined work groups (e.g., Bezrukova et al., 2009) by using observed data, i.e., the actual distribution of attributes. However, the concept seemed relevant to organizational reference groups. If subjects' lists of known others cluster into similar-attribute organizational reference groups, what attributes constitute the faultlines, what do the subgroups look like, and more importantly, what do they mean?

This question was not easily studied with existing methods at the time because it involved clusters of similar organizational reference groups rather than clusters of similar individuals.

Latent class cluster analysis (LCCA), a relatively new model-based procedure, was the best fit. LCCA can be used to identify clusters of clusters by maximizing differences between subgroups and minimizing differences within subgroups. No individual falls in more than one. Moreover, various statistics are available to assess model fit (Lawrence and Zyphur, 2011). At the time, personal computers had neither the speed nor memory to handle this data set. It involved 411 subjects, each with an average of 50 people in their organizational reference groups and each identified by six individual attributes. So the analysis waited. Eventually, my co-author built a cooled, multi-processor computer, which allowed us to begin. Fortunately, building a computer is no longer necessary.

We identified five neighborhoods (Lawrence and Zyphur, 2009, 2011) in which subjects are clustered together because their organizational reference groups share similar attributes that differ from those in other neighborhoods. Importantly, it is not the subjects' attributes that are similar, but the attributes of their organizational reference groups. Table 4 shows the five neighborhoods: attributes of the individuals within each and attributes of the defining organizational reference groups.² Each neighborhood was named subjectively using the organizational reference group attributes that best distinguished it from others. Names were also informed by interviews with managers conducted before the survey.

INSERT TABLE 4 ABOUT HERE

There are two patterns to note in these results. The first is that organizational reference group attributes differ across neighborhoods. For instance, the average proportion of women in the organizational reference groups that define Asian Women Newcomers is 0.48. In the Old-Timers' neighborhood, the average proportion is only 0.21. In another example, the average

organizational tenure in the organizational reference groups that constitute High Level Old-Timers is 21.54. In the Fast-Track Men's neighborhood, the average is only 11.40. The second pattern is that the attributes of the individuals whose organizational reference groups define each neighborhood differ from the attributes of the reference groups themselves. For instance, the average age of the individuals whose organizational reference groups define Middle-Timers is 38.75. In contrast, the average age in their reference groups is 42.49. In another example, the average career level of the individuals whose organizational reference groups constitute Fast Track Men is 9.53. The average career level in their reference groups is 8.94.

To assess the criterion-related validity of these neighborhoods, we examined the distribution of subjects' work-related contacts within and across them. The results in Table 5 show significantly higher within neighborhood contacts than across. This suggests that neighborhoods are related to the behavior of their residents. We thought these results might be explained by subjects' actual work groups because individuals who work together are more likely to communicate with one another than those who don't. Using same-supervisor to identify work groups, we found only two neighborhoods whose residents share more than two supervisors: six of the 31 residents of the Asian Women Newcomers' neighborhood work for the same supervisor, and five of the 34 residents of the Fast Track Men's neighborhood work for the same supervisor. Other than these, the largest number of same-supervisor residents in any one neighborhood was two. On average, 71% share no supervisors with anyone in their neighborhood. Thus, common work groups do not explain the results.

 INSERT TABLE 5 ABOUT HERE

Several findings from this analysis interest me. First and unexpectedly, gender and

ethnicity (Caucasian, African-American, Hispanic and Asian) do not dominate the definition of neighborhoods. Rather, faultlines appear more strongly connected to time and status-oriented variables, including age, tenure and career level. Second, a look at the numbers of contacts between neighborhoods suggests that some are more isolated than others (Lawrence and Zyphur, 2011). For instance, residents of the Asian Women Newcomers neighborhood report little contact with other neighborhoods except for those in the Middle-Timers neighborhood. In contrast, Middle-Timers residents report work-related contacts in all others. These patterns of isolation and inclusion suggest that neighborhoods identify a social structure with consequences for residents.

Third, individuals' attributes are not dependent on those of their neighborhood. For instance, although the average age of the organizational reference groups that define Middle-Timers is 42.5, the average age of Middle-Timer residents is 38.8 and the average age of company managers is 43.6. In almost all cases, the attributes of neighborhoods are more similar to the population mean than those of their residents. Given that neighborhoods are defined by individuals' perceptions of others, this result seems similar to the regression phenomenon at the individual level-of-analysis noted earlier.

So conceptually, what is a neighborhood? Although these inferences are speculative, my guess is that neighborhoods act as petri dishes for social norms. They are communities defined by people with access to similar social information—similar because their organizational reference groups, their individual versions of *they*, are similar. Residents may not know they fall within a neighborhood, as neighborhoods are not defined by geography or social identity, but it seems likely they acquire similar understandings of the organization. Repetition becomes reality (Weaver et al., 2007).

Neighborhoods may represent invisible blinders on individuals' perceptions. For instance, managers may make inequitable decisions about promotions simply because they are unaware of employees in other neighborhoods. If they are scanning candidates for a valued job, they are least likely to see the kind of people who reside in other neighborhoods. Moreover, their understanding of how the organization values its employees emerges from their own neighborhood. Managerial career levels have formally-defined status, but distinctive meanings ascribed to each level are likely to emerge and be reinforced within an individual's neighborhood (Faunce, 1989).

I don't know to what extent these results generalize to other large organizations. But they do suggest that something meaningful occurs in the social context that lies between an individual's strong and weak ties and the organization.

Who is *they* and why it matters

My original question was 'Who is *they*?' I learned that for any one individual, *they* encompasses a more expansive social territory than typically studied. Initially, I assumed that everyone in an organization perceives the same population of others and thus the same careers. Thus, any differences in perceptions would reflect real inaccuracies in individuals' estimates of timing norms. However, I learned that individuals in large organizations do not perceive the same populations and the populations they do perceive are systematically non-random. This suggests that distinctive, individual-level versions of social context represent a second component of perceptual differences.

This perspective uncovered two informal social structures that to the best of my knowledge have not been studied. The first is an individual's organizational reference group: the members of an individual's social context as he or she perceives it (Lawrence, 2006). This

group incorporates each person with whom he or she works or of whom he or she is aware. In small organizations, everyone has the same organizational reference group because they either work with or know everyone else. Thus, the concept does not become interesting until an organization is too large for one person to know everyone. The second is an individual's neighborhood, which clusters him or her together with others whose organizational reference groups have similar composition (Lawrence and Zyphur, 2009, 2011).

The main difference between these two informal social structures and more standard levels of relational analysis is their boundaries. Studies of dyads, groups and social networks typically involve strong ties and sometimes weak ones (cf. Granovetter, 1973). Organizational reference groups and neighborhoods include such ties, but they also encompass an individual's distant associations, incorporating connections defined by awareness rather than contact or acquaintance. The data suggest that in large organizations these broader definitions describe distinctive sets of others from whom individuals obtain disparate interpretations of their organizational experiences. These differences appear related to how individuals value themselves, as well as how they value and feel valued by others. As a result, the significance of both social structures extends beyond career-related outcomes.

Thus, the most important contribution of organizational reference groups and neighborhoods is that they identify a new informal social territory with apparently significant boundaries. This territory may help connect the behaviors observed in small social contexts with those observed in large ones. I cannot do justice in this paper to the theoretical possibilities suggested by these ideas, but I will mention a few general directions. First, this territory is likely to influence attitudes and behaviors in situations where individuals rely on the range of information they receive, such as those that depend on social comparisons (Gibson and

Lawrence, 2010; Novicevic et al., 2008). The data presented here, for instance, suggest that career expectations depend on the average career level in individual's organizational reference group. The higher the average, the higher his or her expectations. This relationship holds for close associations, but gets stronger when distant associations are included. Individuals seem to use the larger range of information provided by organizational reference groups for social comparisons.

The logical extension of this idea, and one that has not been discussed here, is that an individual's relevant work reference group reaches beyond his or her organization. For instance, a professor's most relevant organizational reference group is his or her college or university. However, the group he or she uses for work-related social comparisons includes a wide variety of others gleaned from disparate sources, such as other academic institutions, family, communities, newspapers and digital media. Certainly, individuals can only process the social information they receive (Salancik and Pfeffer, 1978).

A second possibility is that this informal social territory may shape or be shaped by individuals' social identity (see, for instance Ashforth and Johnson, 2001 on cross-cutting identities). To the extent that social identity emerges within social contexts, an individual's social identity will be related to the distribution of attributes in his or her organizational reference group. Individuals promoted from non-exempt to exempt jobs, for instance, are likely to maintain their social identity as non-exempt employees until their organizational reference group expands to include more exempt employees. Distinctiveness theory suggests that when an individual belongs to two minority groups, he or she will identify with the smaller of the two (McGuire et al., 1979). However, in large organizations, the size of minority groups depends on an individual's organizational reference group. An African-American woman whose

organizational reference group includes more women than African-Americans is likely to identify with African-American. If it includes more African-Americans than women, the opposite may occur. Importantly, these contrasting effects should result independent of the organization's actual gender and ethnic distributions.

Third, this social territory seems important for any research involving social norms or culture. Despite their appeal, such concepts have been elusive in the organizational literature. One problem is that we know little about scaling-up to larger social contexts the norms observed in small ones. We don't know if the norms observed in dyads and groups are the same as those observed in organizations. We don't know whether the mechanisms that govern their emergence and drift in small social contexts resemble or differ from those observed in larger ones. One reason for this deficiency may be that we haven't had a level of analysis—a social territory—in which to study where it occurs. Organizational reference groups and neighborhoods may provide one.

Cialdini and his colleagues (2007; 1991) define two kinds of norms: descriptive norms, which are individuals' perceptions of what is typical or normal, and injunctive norms, which are individuals' perceptions of what others think ought to be done. By definition, organizational reference groups provide the social information individuals use to define descriptive norms. For instance, individuals' observations of typical ages for various jobs or a typical career timetable denote descriptive norms (Lawrence, 1988). If similar social information comes from similar others, then neighborhoods are communities in which individuals are exposed to social information that is chronically accessible and reinforced. For instance, in the data presented here neighborhoods evidence distinctive patterns of communication-based contacts. There is more contact within than across neighborhoods. Moreover, some neighborhoods are more isolated

than others. These attributes of integration and separation suggest that organizational reference groups and neighborhoods represent empirically-observable and fertile ground for studying how individuals' observations become shared (Trice and Morand, 1991: 71).

I started this work with what seemed a simple question: Who is *they*? From whom do individuals get the social information they use to interpret their own work experiences? The fact that people receive and are influenced by social information is widely recognized across social science. However, each discipline maps the social landscape into blocks of different sizes. And these differences have defined our understanding of social context. As a result, the informal social structures that emerge between individuals' social networks and a large organization remain unmapped. My research suggests that this territory acquires psychological salience for individuals and shapes their work attitudes and behavior. Thus, to understand people's work experiences and why they appear different, we need to think more expansively about the ways individuals perceive and make sense of social context.

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- ¹ This is unfortunate as many early, classic studies combine induction and numbers, for instance, Durkheim's *Suicide* (1897/1951) and Stouffer et al.'s *The American Soldier* (1949).
- ² There are, of course, many social contexts outside of organizations that influence what happens to those within. Examples include family, volunteer organizations and community.
- ³ I used the longer time period for defining behind schedule because research suggests that people are overly optimistic even when their perceptions are accurate. For instance, Rosenbaum (1989) found that people remain optimistic about promotion chances long after job statistics say they should give up. This is consistent with the notion of positive illusion (Taylor and Brown, 1988).
- ⁴ Because typical ego network surveys rely on names generated by questions about meaningful relationships, it seems likely that these studies include few truly distant associations. Rather, weak ties are plausibly the weakest of a set of strong ties.
- ⁵ I do not know how subjects interpreted the word 'know' or how this influenced the composition of their lists.
- ⁶ Expected achievement was measured using the average response to two questions: 1) What career level do you hope to achieve before leaving the company and 2) What career level do you expect to achieve before leaving the company? Level of career referents was measured using three questions. For each individual in subjects' organizational reference groups, subjects were asked to indicate how similar they were to this individual in terms of 1) types of work, 2) pace of advancement and 3) future career opportunities. Performance data came from company personnel records.
- ⁷ Although the logic and mechanisms underlying an organizational reference group are consistent with Merton and Kitt's (1950 [1974]: 50) formulation, there is one difference. An organizational reference group is not a group in the sense that everyone recognizes members as members and nonmembers as nonmembers.
- ² The original analysis includes six attributes in nine categories: gender, ethnicity (Caucasian, African-American, Hispanic and Asian), age, organizational tenure, education and career level. Table 4 shows four of the nine. See Lawrence and Zyphur (2009, 2011) for more detail.

Table 1

Three definitions of the career timetable: Individual perceptions, shared perceptions & actual distributions

Individual perceptions of the career timetable:	Actual distributions of the career timetable:		
	Ahead of schedule	On schedule	Behind schedule
Ahead of schedule	Equivalent*		
On schedule		Equivalent	
Behind schedule			Equivalent

Individual perceptions of the career timetable:	Shared perceptions of the career timetable:		
	Ahead of schedule	On schedule	Behind schedule
Ahead of schedule	Equivalent		
On schedule		Equivalent	
Behind schedule			Equivalent

* Equivalent means the individual's perceptions match the actual distributions or shared perceptions of the career timetable.

Table 2

The relationship between an individual's demographic attributes and those of his or her organizational reference group (Utility B)

Individual attributes ^a	Average age		Average education		Proportion women		Proportion African-American	
	Attribute	Multiple attributes	Attribute	Multiple attributes	Attribute	Multiple attributes	Attribute	Multiple attributes
(1) Women		0.27 <i>0.22</i>		0.14 *** <i>0.03</i>	0.26 ***	0.24 *** <i>0.02</i>		0.02 ** <i>0.01</i>
(2) African-American		-0.17 <i>0.26</i>		0.06 <i>0.05</i>		0.06 ** <i>0.02</i>	0.19 *** <i>0.02</i>	0.19 *** <i>0.02</i>
(3) Hispanic		-0.24 <i>0.30</i>		0.09 * <i>0.05</i>		0.02 <i>0.02</i>		0.03 ** <i>0.01</i>
(4) Asian		-1.85 *** <i>0.38</i>		0.21 *** <i>0.05</i>		0.02 <i>0.02</i>		0.00 <i>0.01</i>
(5) Age	0.27 *** <i>0.02</i>	0.10 *** <i>0.02</i>		0.01 * <i>0.00</i>		0.00 * <i>0.00</i>		0.00 <i>0.00</i>
(6) Organizational tenure		0.14 *** <i>0.02</i>		-0.01 *** <i>0.00</i>		-0.00 * <i>0.00</i>		0.00 <i>0.00</i>
(7) Education		-0.60 *** <i>0.14</i>	0.24 *** <i>0.01</i>	0.13 *** <i>0.02</i>		0.03 *** <i>0.01</i>		-0.00 <i>0.00</i>
(8) Career level		0.00 <i>0.04</i>		0.05 *** <i>0.01</i>		-0.00 <i>0.00</i>		-0.00 * <i>0.00</i>
<i>F</i>	317.48 ***	98.80 ***	258.44 ***	53.51 ***	325.16 ***	51.47 ***	106.05 ***	22.38 ***
<i>R</i> ²	0.45	0.65	0.35	0.51	0.45	0.50	0.43	0.49
ΔR^2		0.20 ***		0.16 ***		0.05 ***		0.06 ***
N	401	401	401	401	401	401	401	401

^a Variables 1-4 are dummy coded with minority category = 1.

Unstandardized estimates. Robust standard errors in italics.

† $p < 0.10$, * $p < 0.05$, $p < 0.01$, *** $p < 0.001$.

Table 3
Regression of average career level of an individual's organizational reference group
on his or her career outcomes (Utility B)

Individual attributes ^a	Expected achievement		Average level of career referents		Performance ^b	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
(1) Women	-0.43 * <i>-1.96</i>	-0.53 ** <i>0.21</i>	-0.23 † <i>0.13</i>	-0.35 *** <i>0.08</i>	-0.00 <i>0.03</i>	-0.01 <i>0.03</i>
(2) African-American	0.07 <i>0.28</i>	0.43 † <i>0.26</i>	-0.44 ** <i>0.14</i>	-0.05 <i>0.10</i>	-0.05 <i>0.04</i>	-0.02 <i>0.03</i>
(3) Hispanic	0.50 † <i>0.30</i>	0.46 † <i>0.27</i>	-0.10 <i>0.16</i>	-0.09 <i>0.10</i>	0.01 <i>0.03</i>	0.01 <i>0.03</i>
(4) Asian	-0.39 <i>0.32</i>	-0.24 <i>0.30</i>	-0.11 <i>0.19</i>	-0.07 <i>0.11</i>	-0.04 <i>0.03</i>	-0.03 <i>0.03</i>
(5) Age	-0.02 <i>0.02</i>	-0.04 * <i>0.02</i>	0.01 <i>0.01</i>	-0.01 <i>0.01</i>	0.00 <i>0.00</i>	0.00 <i>0.00</i>
(6) Org. tenure	-0.06 ** <i>0.02</i>	-0.06 *** <i>0.02</i>	-0.00 <i>0.01</i>	0.00 <i>0.01</i>	0.00 <i>0.00</i>	0.00 <i>0.00</i>
(7) Education	0.36 ** <i>0.12</i>	0.17 <i>0.12</i>	0.25 *** <i>0.07</i>	0.05 <i>0.04</i>	-0.01 <i>0.01</i>	-0.03 † <i>0.01</i>
(8) Career level	0.46 *** <i>0.05</i>	0.26 *** <i>0.06</i>	0.39 *** <i>0.03</i>	0.15 *** <i>0.03</i>	0.00 <i>0.01</i>	-0.01 * <i>0.00</i>
(9) Avg career level of individual's organizational reference group		0.90 *** <i>0.14</i>		0.97 *** <i>0.06</i>		0.08 *** <i>0.02</i>
<i>F</i>	28.08 ***	41.51 ***	47.42 ***	222.05 ***	0.79 ^{ns}	3.38 ***
<i>R</i> ²	0.45	0.52	0.63	0.85	0.01	0.07
ΔR^2		0.07 ***		0.22 ***		0.06 ***
N	377	377	343	343	396	396

^a Variables 1-4 are dummy coded with minority category = 1.

^b Square root of performance used to increase normality of regression residuals.

Unstandardized estimates. Robust standard errors in italics.

† p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001.

TABLE 4
 Attributes of individuals and their organizational reference groups by neighborhood:
 Neighborhoods defined by LCCA faultlines (Utility B)^a

Neighborhoods	N	Gender		Age		Org tenure		Career level	
		Individ- uals	Org ref groups	Individ- uals	Org ref groups	Individ- uals	Org ref groups	Individ- uals	Org ref groups
(1) Middle-Timers	73	0.45	0.39	38.75	42.49	11.95	15.61	7.69	7.83
(2) Old-Timers	136	0.16	0.21	45.19	46.20	21.50	22.16	6.33	7.06
(3) Fast Track Men	34	0.15	0.28	35.12	38.97	6.24	11.40	9.53	8.94
(4) High Level Old-Timers	84	0.38	0.35	49.07	46.53	23.71	21.54	8.95	8.56
(5) Asian Women Newcomers	31	0.55	0.48	35.45	38.33	5.10	10.44	6.61	7.11
<i>F</i>		9.74***		50.00***		86.94***		19.54***	
Subgroup comparisons ^b		12, 13, 24, 25, 34, 35		23, 24, 25, 34, 45		23, 24, 25, 34, 45		23, 24, 25, 34, 35, 45	
Population means	2685	0.32		43.59		17.05		7.55	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

^a Includes some results from Table 2 in Lawrence and Zyphur, 2011: 47. LCCA = latent class cluster analysis.

^b Subgroup comparisons: xy = Mean of Subgroup x differs from that of Subgroup y , $p < 0.05$.

Table 5
Regression of number of others with whom individual communicates about work on his or her attributes and neighborhood (Utility B)^a

	Number of work-related contacts who are:				
	Middle-Timers	Old-Timers	Fast Track Men	High Level Old-Timers	Asian Women Newcomers
Step 1: Individual's attributes					
F	6.76 ***	21.72 ***	6.96 ***	10.16 ***	20.56 ***
R ²	0.13	0.33	0.14	0.19	0.32
Step 2: Neighborhood					
(1) Middle-Timers	<i>b</i>	-3.41 *** <i>0.34</i>	-1.08 *** <i>0.18</i>	-1.06 *** <i>0.31</i>	-2.65 *** <i>0.24</i>
(2) Old-Timers	-1.98 *** <i>0.17</i>	<i>b</i>	-1.88 *** <i>0.20</i>	-1.13 *** <i>0.26</i>	-3.05 *** <i>0.27</i>
(3) Fast Track Men	-1.16 *** <i>0.29</i>	-3.85 *** <i>0.49</i>	<i>b</i>	-2.07 *** <i>0.44</i>	-3.24 *** <i>0.26</i>
(4) High Level Old-Timers	-0.99 *** <i>0.24</i>	-2.14 *** <i>0.30</i>	-1.45 *** <i>0.21</i>	<i>b</i>	-2.94 *** <i>0.28</i>
(5) Asian Women Newcomers	-0.43 <i>0.33</i>	-3.97 *** <i>0.55</i>	-1.66 *** <i>0.22</i>	-2.41 *** <i>0.49</i>	<i>b</i>
F	12.65 ***	29.93 ***	15.01 ***	11.06 ***	36.00 ***
R ²	0.30	0.50	0.34	0.28	0.56
Δ R ²	0.17 ***	0.18 ***	0.20 ***	0.09 ***	0.24 ***
N	358	358	358	358	358

^a Summary of Table 3 from Lawrence and Zyphur, 2011: 49.

^b Comparison category.

Unstandardized estimates. Standard errors in italics.

† p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001.

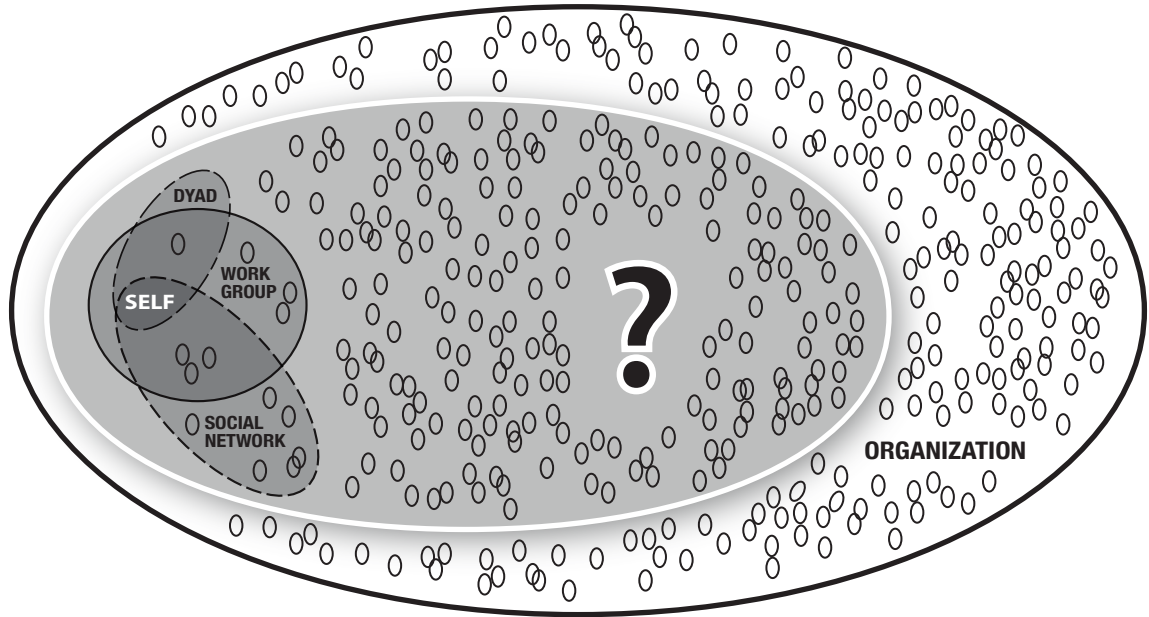


Figure 1. Who is they? Scholars routinely study the informal social contexts defined by dyads, work groups and social networks. However, in large organizations, no level of analysis exists for studying the informal social territory between these and the organization.

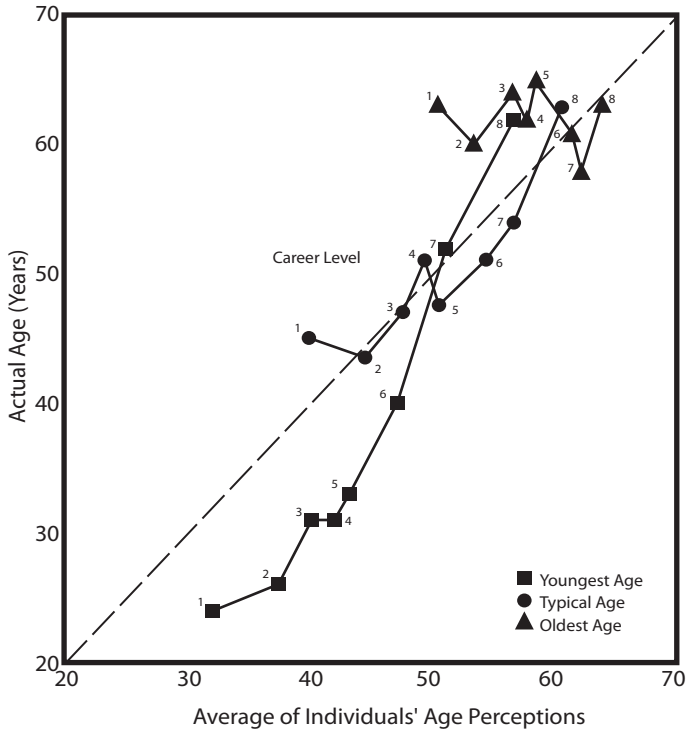


Figure 2. A comparison of subjects' perceptions of the youngest, typical and oldest ages of managers in each career level with the actual youngest, average and oldest ages in Utility A (Lawrence, 1988: 326). When the actual age falls within one standard deviation of subjects' age perceptions, the career level is marked by an asterisk.

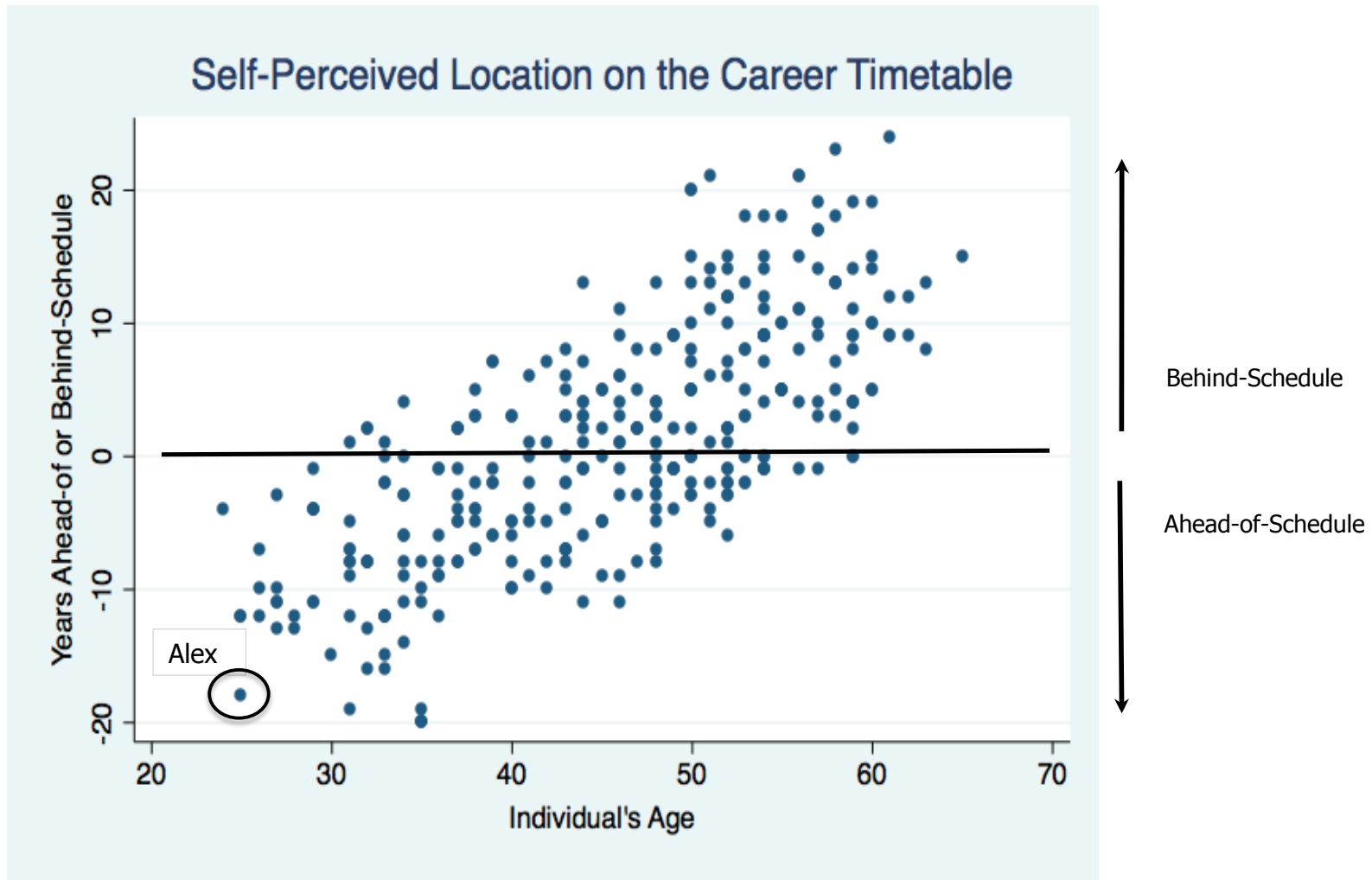


Figure 3. An individual's self-perceived location on the career timetable is his or her age minus his or her perception of the typical age for his or her career level (Utility A). For example, Alex, a real but fictitiously-named subject located on the lower left of the graph, is about 25 and sees herself as around 18 years younger than what she perceives as the typical age for her career level.

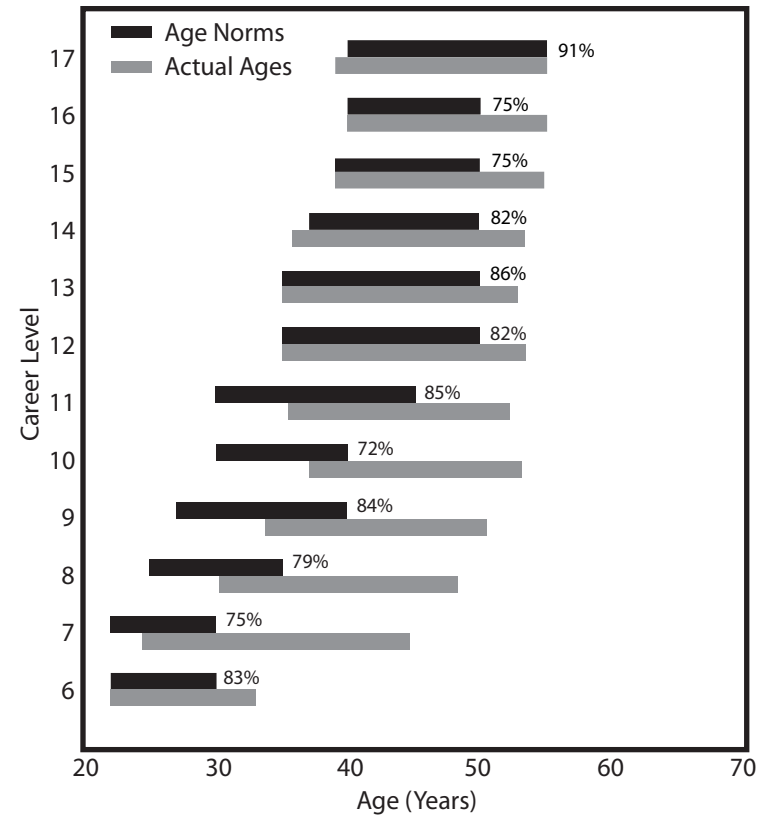
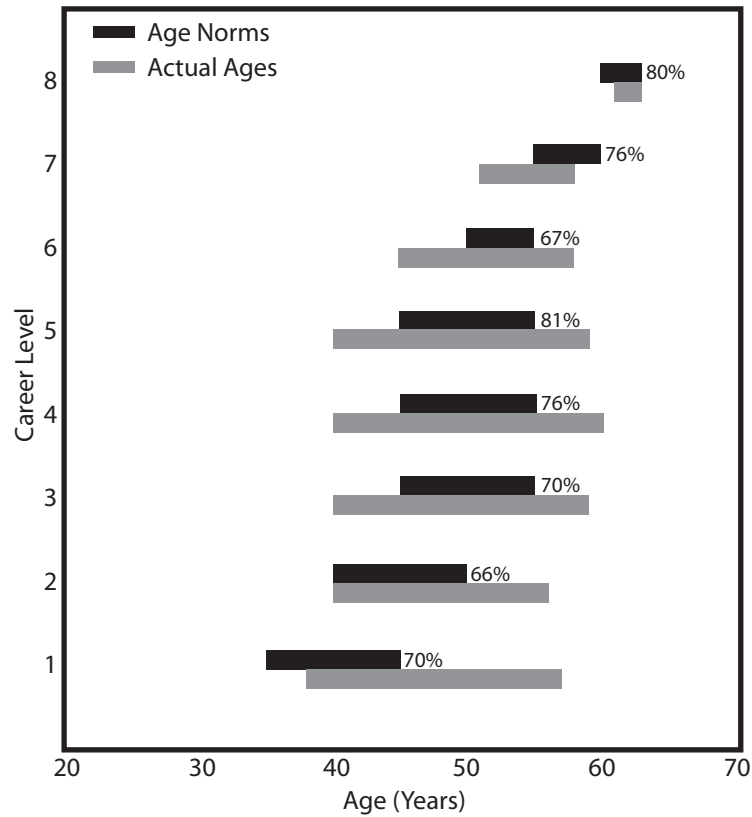


Figure 4. The extent to which individuals' perceptions agree differs across organizations. In Utility A on the left (N = 390), perceptions are relatively concentrated (Lawrence 1988: 324). In Utility B on the right (N = 411), they are more widely spread (Lawrence 1996: 216).

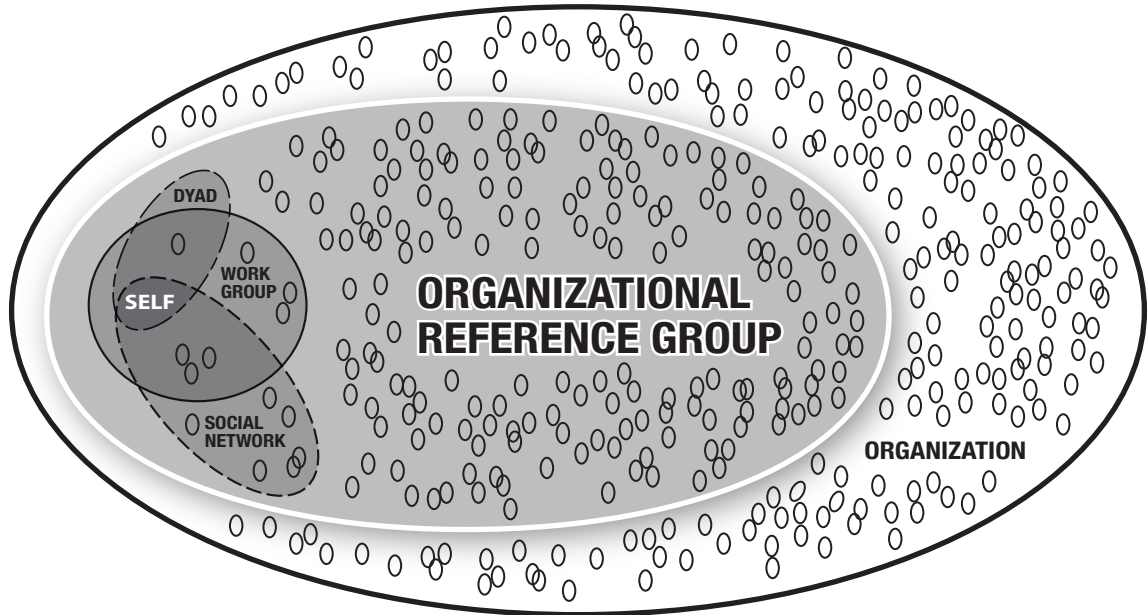


Figure 5. An organizational reference group is "the set of people an individual perceives as belonging to his or her work environment that defines the social world of work in which he or she engages, including people with whom the individual does and does not communicate and those with whom awareness is the only connection" (Lawrence, 2006: 80).