THE PHYSICAL CONTEXT OF SOCIAL ORDER

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ABSTRACT

The present ethnographic study of work settings in an established survey research center (Midwest Survey) is unique in that it combines both social organizational specifics and interior physical context in contrast to previous studies that have focused either on physical aspects or on the social dimensions of work settings. For more than four years the author observed the spatial adaptation by personnel of Midwest Survey. The dates under consideration roughly coincide with a move of Midwest Survey from an original facility to a new (and larger) set of offices. Anchored by seventy three open-ended interviews (constituting roughly 30% of the staff) the observations were carried on during and after the interviews. The synthesis of the ethnographic material revealed that physical settings act not only as a background for facilities, but they become a salient aspect of work life as indicators of status role congruency and incongruency. Physical settings, therefore, are proposed as "extension" attributes of role structure. In doing so, Nadel's conceptualization of role structure as comprising pivotal and peripheral attributes (1957) is amplified to include the physical setting as an "extension" attribute. Theoretical and practical implications of the study are suggested.

1. INTRODUCTION

It is 9:10 A.M. on a weekday morning, time for the bi-weekly organizational meeting on space allocation at Midwest Survey to start. The setting is a tastefully decorated and comfortably furnished section of an executive office. The Space Decision committee members, representing different departments, have begun to filter in and seat themselves on sofa chairs arranged in an informal grouping around a coffee table. After some cordial exchanges, the committee gradually settles down to more substantive matters. One Survey Operations representative brings to the attention of the group, the start up of a new project that would initially need around 10-12 workspaces to accommodate staff personnel. Someone else makes a proposal that the space could be eeked out if Accounting could temporarily squeeze and abdicate one space that could accommodate at least five staff. The proposal seems a feasible one, but is met with resistance, because this would mean the displacement of the accounting leader.

The above scenario could be from any organization. Most organizations go about working on one matter to the next, most often in the interest of solving the most crucial problems of the day (March & Olsen, 1976). In doing so, they may not always be aware of how the social organizational attributes and physical attributes of workspaces come together (White, 1992). In the above example, for instance, even a temporary abdication of space resources, and a displacement of the accounting leader, besides entailing consequences for
the status and role of their department in the organizational structure, would jeopardize claims to space resources in the future. Many organizations are not aware--till brought to the foreground through either some conflict or a change in their physical setting—that aspects of organizational structure are mirrored in, and with time become part of, the physical settings they unfold in.

The design of workplaces has traditionally been investigated from two diverse perspectives. First, architecture concentrates on the physical aspects of work settings, but ignores the psychological and sociological factors (Norberg-Schulz, 1965). For example, the dynamic elements of architectural analysis have been, overtly or otherwise, conceived of as arising from relationships between form, substance and symbol (Venturi, 1977). In the second—the social sciences—the spatial aspect of work settings is examined to the extent that it elucidates organizational elements such as worker productivity, (Roethlisberger & Dickson, 1939), efficiency (Homans, 1950) and satisfaction (von Bertalanffy, 1950). Because of these differential scopes of the two perspectives, research efforts often have tended to keep separate the social from the physical dimensions of the work environment. In contrast, in the present ethnographic study of an established survey research center, the author has examined both the social organizational and interior physical context from the workers' perspective (Gorawara-Bhat, 1993). The ways in which these two foci become intertwined, each with the other through time, are the focus of this paper. More specifically, two aspects of the organizational structure salient to workers, role and status, and the dynamic processes through which these unfold and come to be validated through the physical setting are detailed in this paper.

2. MIDWEST SURVEY

The work setting chosen for the present study is a non-profit, established, survey research organization (hereafter referred to as Midwest Survey) affiliated with, and located on the fringes of a large private university (hereafter called Midwest University). Midwest Survey is an internationally known social science research center, involved primarily in gauging the national opinion on major issues of the day like, education, health care, AIDS, mental illness and homelessness. Since its inception and affiliation with Midwest University in 1947, and subsequent growth in both grants and contracts, the staff of Midwest Survey has increased from 30 to approximately 300, with its annual volume of business conducted spiraling from less than 1/2 a million to about 26 million dollars in 1988. This unprecedented growth necessitated Midwest Survey to reconsider its organizational and space needs, resulting in several moves to different locations on campus; its move in 1986 to a larger space on campus was the focus of this study. It is known that when organizations are under stress--social or
physical--their linkages (internal and external) become accentuated, making these the most conducive circumstances for studying organizational life (Coleman, 1982). Therefore, in the summer of 1985, when it became known that Midwest Survey was in the process of planning a physical transition, the present author made the first inroads into Midwest Survey and the field study including observations and interviews were carried out over the next four and a half years.

2.1 Description of Setting

In its new location on the south fringes of the university campus, Midwest Survey is a sprawling, and ostentatious looking four story building clad in a buff-colored limestone. When a prior tenant vacated the building, the first, second and fourth floor of the building were renovated for the use of Midwest Survey; and the third and basement floors were earmarked for use by a Midwest University computing organization. The schematic layout of the first floor (Figure 1) shows a central circulation spine running north-south along the entire width of the building, flanked on either side by a west and an east wing. Each of these wings is arranged around an outdoor garden court or open-to-the-sky atrium. On the first floor, the west wing--in the shape of a square doughnut with a landscaped atrium in the center--has a double loaded corridor supporting research spaces on the north and west facades, survey operations on the south, and a conference center on the east. The east wing, laid out more or less in an upside down L shape, surrounds a garden court on the east and south; the west of the court is flanked by the central spine and a conference center. The functions housed here include a research center along the east and, survey operations and loading dock facilities on the south.

The upside down L shaped east wing on the second floor is the home of the Survey Operations management and their support staff; kitchen and conference facilities occupy the south arm of the wing. On this floor, the west wing is (as is the first floor) organized around the central atrium space. The Administrative arm on the north facade faces a green place and the south end of Midwest University. The west arm of this wing is home to a research center, the south accommodates the library and part of the computing center, which then extends into the east arm of this wing. The fourth floor constituting only part of the east wing directly above the survey operations management (on the second floor) is a relatively small area occupied by the phone shops.

3. METHODOLOGY

This study is about workers' perceptions of their work life; more specifically, their work, the
spaces allocated for its execution, the way the space is managed, and the ways in which it comes to be used by the workers. To understand these perceptions, the most appropriate method seemed to be right in the field at the workspaces. Another reason for choosing this method was that hypotheses and explanations would emerge from the data and develop out of the field work. Therefore, the ethnographic method was chosen for this study. (Fine, 1987; Gold, 1958; Van Maanen, 1988; Weick, 1985; Gorawara-Bhat, 1993). The data collection method included:

1. In-depth individual interviews and observations at the two locations, and over time.
2. Participant observations at some official and social events.
3. Attending and observing meetings involving space allocation, field co-ordination, middle management training workshops and lunch lecture series; and
4. The use of unobtrusive measures such as sketches and drawings of pertinent spaces.

Seventy three open-ended interviews were conducted with staff at all levels of Midwest Survey to elicit data of three sorts: 1) demographic composition; 2) respondent attitudes and perceptions towards their workspace, and work in general; and 3) physical attributes of the workspace occupied (e.g. a plan sketch of the workspace was noted before, after, or during interruptions of the interview), location within the organization, and proximity
to other departments. Unless otherwise stated, the descriptions of the spaces in the text refer to the new building in which Midwest Survey is housed.

The demographic variables noted during the interview and subsequently coded included age, race, sex, rank, and years of service put in. In addition, type of workspace occupied, and organizational affiliation of respondents were also included as demographic data because they help describe the population of Midwest Survey. Broadly categorized, an individual could occupy one of four types of workspaces: private, shared, partitioned, or open-plan; and be part of one of four organizational units: 1) the academic centers; 2) the survey operations; 3) the administration; and 4) the field staff.

In the first stage of work, these open-ended interviews were transcribed and supplemented with related notes from field observations. In the second stage, the interviews were deconstructed and coded according to environmental attributes that surfaced most often (they encompassed four dimensions: aesthetic appeal, perceived privacy, centrality of the workspace from the core, and perceived control over workspace); and the social dimensions that were most commonly mentioned. Role and Status emerged as the primary dimensions emanating from the social organization. An ordinal scale was used to categorize and rate status (high/low) and role (salient/non-salient). (Details of the classification and the coding of the physical and social dimensions of work life may be found in Gorawara-Bhat, 1993).

4. MAJOR FINDINGS: STATUS, ROLE AND PHYSICAL SETTING

A synthesis of the ethnographic material revealed that workspace issues and their intertwining with role and status were of persistent and ongoing salience to the workers at Midwest Survey.

Status in a work setting can be viewed as that important element which the organization confers on the individual or the group in return for rendering mutually agreed upon services. The differential position or rank of the individual or group, in a hierarchical structure is indicative of status. A particular position in an organization entails certain rights and obligations dependent on the designated responsibilities involved. While the knowledge aspect of these rights and obligations is conceptualized as status, the performance aspect is referred to as role (Nadel, 1957). Thus by inference, status and role are not only complementary in nature, they are two aspects of a single concept: role represent the dynamic aspect of a status (Linton, 1936), and status translated into action is role (Parsons, 1951; 1965).

An understanding of the total entity of role behavior involves practical problems of perception and recognition which are facilitated by the mutual entailment of the role attributes, in which one attribute functions as a cue for the others. In as much as roles are
based in status, there tends to be a congruency between the two (cf. Nadel, 1957). However, the processes through which this congruency unfolds itself, and becomes manifest in a physical work setting have not so far been systematically discussed in the literature, either from the social science or the architectural perspectives, and will be highlighted in the following sections.

Role behavior (inclusive of both knowledge and its performance) is enacted phase by phase, occasion by occasion, in a 'process' extending over time, and in physical space. The physical setting of work implicates and facilitates the perception of both the status and role in behavior. For example, on the one hand, workspace is the most patent symbol of status bestowed by the organization upon the worker; and on the other hand, for the worker, the workspace, in the course of work, becomes a salient means to, and support in the performance of one's required tasks and responsibilities. Only when a workspace, physical location, and/or relevant physical setting is able to confirm, nurture, and sustain fitting perceptions of both—the knowledge and its performance—over time, that a particular role and status come to be validated in a work setting. For example, when an executive has a corner office affording a wider view and twice the amount of natural light as other offices, the workspace is a symbol of the executive's status, and when personalized it comes to be an extension of role attributes, and backdrop to the interactive role of the executive. In other words, workspace is more than simply the physical setting wherein role behavior materializes, rather it is an integral part of the conferred status and worked out role.

An analysis of the interviews and observations of Midwest Survey demonstrates at least two distinct ways in which the physical setting is seen as interrelated to status and role:
1. Most often in a work setting, workspace and/or physical location is congruent with status and role, and acts as an indicator of such a congruency.
2. When the physical setting is not in consonance with status and role, it acts as a deterrent to status/role congruency. In such cases, the physical setting impels its own congruence with either status or role, and consequently alters the prevailing perceptions of status or role in the direction of the newly established congruence with itself.

Several examples to illustrate these two cases are delineated below.

4.1 Physical Setting as an indicator of Status/Role Congruency

We often expect a confirming consistency between status and role attributes; for example, we expect that in a work setting, the differences in social status of the workers will be expressed first through the role 'name', and then through other role attributes such as clothing, posture, speech patterns, etc. These attributes condition the expectations of the worker and subsequently come to be linked to status. However, it is only when workspace and its attributes also come to be congruent with the status and role that workspace confirms and
facilitates the course of social behavior. Therefore, the most patent indicator of the consistency between status and role in a work setting is the workspace and/or its physical attributes as highlighted in the examples below.

4.1.1 The Demilitarized Zone (DMZ) of Survey Operations
Adjacent to the main entrance and exit of Survey Operations is an elongated space, bounded on one side by a section of Survey Operations and on the other by the Editorial department. As projects wax and wane in the Operations department, workspaces in this area are regularly regrouped and otherwise rearranged. When several workers who had been moved to this area for a relatively short period of time were subsequently laid off work, this space came to be ritually established as the "DMZ Area" (Interview # 1).

The organization confers a relatively low status on these workers who have not been assigned a particular project for any number of different reasons. And with time, workers occupying the above work area are perceived as having marginal roles because of the decrease in the number of responsibilities assigned to them. Thus, although the organization initiated this ritual of space allocation as a sequence of practical acts, the DMZ has become a good indicator of the marginal status conferred on, and the marginal role behavior expected of these workers.

4.1.2 Offices of the Director and Operations Management
In contrast to the DMZ, but illustrative of an alignment of status, role and physical setting, in fact, one that reflects and enhances incumbents' rank are the offices of the Survey Operations management and the Director. We turn first to the Offices of the Director.

At the head of the administrative corridor running east-west, on the second floor of Midwest Survey, are located the Director's offices, comprising a suite of three separate offices. The director occupies a spacious corner office looking north and east, with the south wall opening into a comfortable conference/library area, and the west wall opening into a large office of an Administrative Assistant.

The Director's office itself is very distinguished, with wood paneling, an ornate ceiling, and a north and east corner view looking into Midwest University campus. Modern furnishings cater to the needs of a top executive, as evident in the comfortable grouping of sofa chairs, and those of an intellectual, reflective in the floor to ceiling book cases shelved with a wide range of books, reports and documents. The Office of the Director is responsible for executing a varied number of functions because of the many hats worn by the Director e.g., faculty in the University, Head of Survey Operations, Head of Administration, Head of the Research Centers, member of the Board of Trustees, and Research Scholar. Directly adjacent, the Administrative Assistant's office—a large and always busy office—is separated.
from the administrative corridor by a glass partition wall. Opening directly from the south wall of the Director's office is a wood panelled library and conference room used both for in-house and client related meetings and discussions. The general impression one is left with is that of coming into the most important set of offices at Midwest Survey. The location serves somewhat as a nucleus, easily accessible to other departments on the same floor, such as the survey operations, editorial department, and computing facilities on the east, and three academic research centers and the central administration core on the west.

It is a widely perceived notion that departments in proximity to this nucleus of power and prestige (the Offices of the Director) are themselves important actors in the organizational arena and have a distinctive place in the functioning of the organization. In other words, they have a relatively high status and salient role. Workers perceive themselves as being deprived of symbolic status and an active role as the physical distance between themselves and the source of power on the second floor increases.

Besides the Directors' Offices, a large part of the management of the Survey Operations is also housed on the second floor. Located in a distinguished part of the building, they occupy private workspaces laid out along the perimeter of the east wing, with a pool of support staff in partitioned workspaces in their center. These prestige offices, overlooking the campus in the near distance, and an outdoor landscaped court of the building closer up, enhance and reflect their occupants' high status and salient role. Their internal arrangement and amenities speak to their position in the hierarchy. Through a selection and placement of furniture equipment, artifacts, and symbols such as closed or open doors, the incumbents are endowed with means to send signals directed either to the organization or colleagues/staff confirming differential status and roles. In fact, many of the management staff felt embarrassed about the exclusive space allocations made for them, confirming their high status and salient role in the organization. From the perspective of the organization, the physical setting is a latent, yet persistent aspect of work that needs to be allocated and/or restructured on an ad hoc basis. For the workers, it becomes and comes to be used as a signal of the congruence between the differential status and role of individuals, and of the various departments vis-a-vis each other; and more so as a vehicle for an ongoing non-verbal dialogue over issues of mutual concern between the organization and themselves.

4.1.3 The Phone Shop
In contrast to the above described spaces on the second floor where the decision making work takes place, the "real" work of surveys is carried out at the shop level, mostly on the fourth floor of the building. One such example is the phone shop on the fourth floor, remote in both physical and social distance from the second floor. Approximately fifty phone interviewers were working on the National Longitudinal Study (NLS) Questionnaire.

A typical Phone Shop consisted of a large space divided by 6 feet high movable fabric
covered partitions to accommodate several interviewers and a supervisor. Each interviewer
cubicle comprised an average space of 5 feet by 6 feet, to be taken or exchanged at any time
depending on the needs of the several ongoing projects. The work of interviewing has several
responsibilities involved therein. The primary task of phoning potential respondents is usually
assigned to a "temp"—temporary worker, and consists of asking questions (from a list
supplied by a supervisor), in a given order, from a pre-coded questionnaire. A typical
interview using The NLS Questionnaire lasted an average of an hour. Temps are also asked
to set up appointments with potential respondents to interview them at a future time and date.
And further, after all the interviews are completed, they validate a small percentage of them
(a sort of rechecking of the work already done) for quality control. The average number of
interviews completed in a day varied anywhere from four to eight. Phone shop supervisors
have a two pronged responsibility: the first calls for managing all respondent paper work, and
the other entails supervisory tasks. Their frustrations were manifold: besides the problems
with interviewer space arrangement and layout, the more nagging problem was their own
workspace. They felt there had been no space provided to have any meetings with all the
interviewers simultaneously, nor any space to work on interviewer evaluations, for which it
is desirable to have some privacy. While the role of phone interviewers is an important and
indispensable one in the process of collecting data for the organization, it has been
downgraded to the lowest rung of the organizational hierarchy. Firstly, the role has been
narrowly limited because in its' present form it is restricted to the administering of a
standardized questionnaire. Secondly, because of the standardization of the questionnaire, the
organization can justify the use of temps, for such work. The use of temps in turn
downgrades the role of phone interviewers, who are crucial to the organization because, they
tread that narrow bridge between potential information retrievable from respondents and the
raw data made available to the organization.

Further, the lowly status of the occupants of the phone shops is emphasized by its
physical distance from the core of decision making on the second floor. For example, a senior
management executive is known to have referred to the phone shop staff, on more than one
occasion, as "the bodies up on the fourth floor" (Interview # 44). A marginal and remote
physical location from the prime center of activity is connotative of the plebian role of these
workers, their low status is implicated in their less than adequate workspaces, which in some
instances are so inundated with papers/files etc. that they simply spill over into the corridors.
In referring to their physical location on the fourth floor, the executive invokes both, their role
and status. Thus it is clear that the status conferred by the organization and the role played
by the phone shop personnel are in consonance. Further, the workspaces in the phone shops,
and their location, seem to be in alignment with, and symbol of, the consonance between the
incumbents' status and role.
4.1.4 Offices of the Senior Survey Management

The workspaces of the Senior Survey management are in stark contrast to the workspace areas in the Phone Shop delineated above. The diversity of furniture, style, and physical layouts of the workspaces of the management attest to the latitude for diverse management styles afforded at this hierarchical level. Interviews and observations of workspaces of two Senior Survey Directors indicate that the physical environment of the upper management of Midwest Survey is functional, aesthetic and flexible enough to accommodate the informal exchanges of the elite group of the survey operations. The contrast between the two workspaces is noteworthy: one, adequately furnished and tastefully arranged, and the other functional but almost spartan in character, on the one hand foretell their personal style of management as well as their use of physical space in expressing to the organization their unique perspectives on employee management. On the other hand, this latitude for the expression of different philosophies for enhancing group morale through the differential use of physical space layout/setup eloquently tells the gist of the social structure of the operations department: one group may be managed in a conventional manner—the regular authoritarian posture—the manager and the worker, the other portrays a more egalitarian attitude—"we make decisions around this table" (Interview # 38). These two stand almost on opposite ends of a continuum, and make yet another statement, perhaps one directed towards the organization. If the first instance is interpreted as an affirmation of one's rank, and aspiration to a rung up the pyramidal structure, the latter can be viewed as an affirmation of status tinged with a rebellion towards line management structure. It is worth noting that in both cases, physical layout and other attributes of the workspace have been used to express individual perspectives on work, and to enhance the congruency between these incumbents' role and status.

4.2 Physical Setting as an Indicator of Status and Role Incongruency

Although organizations tend to have workspaces to be indicative of, and congruent with status and role, often, as in the case of Midwest Survey, the constraints of the physical layout make it difficult to fit the social organizational aspects with the physical location and/or workspaces. Consequently workspace (and/or physical location) is allocated such that it is incongruent with either the status or the role of the incumbents. Depending on the location of these workspaces, one of the constructs—status or role—comes to be perceived as congruent with the workspace, and in turn adjusts prevailing perceptions to reflect and reinforce the incongruency between the status and role. Workspace thus becomes an indicator of the status/role incongruencies in the social organizational scheme in a work setting. Four examples, delineated below, illustrate the ways in which workspaces at Midwest Survey show the incongruity between the status and role in work settings.
4.2.1 The Case Of Accounting

The primary function of Accounting is the fiscal management of Midwest Survey. However, the general perception of the status of this service department has been augmented through the deft manipulation of workspaces and other physical attributes to that of having greater significance than other service departments, as described below.

Eleven clerical staff, two chief accountants and the controller keep track of the overall financial health of Midwest Survey. They are housed in two chief accountant's offices—medium sized, approximately 150 square feet in size, functionally, and aesthetically laid out, and the large, private office of the Comptroller. Two other offices are divided amongst open plan and partitioned workspaces housing several clerical staff. From the daily routine tasks of keeping the field and in-house staff payroll up to date, to keeping accounts of the dollar volume of business being conducted, and furnishing projections for the volume of business in relation to incoming projects in the future, Accounting "never stops" (Interview #11). The staff almost have to be working around the clock, and often act as a back up for each other, to keep the organization running smoothly. Accounting is akin to one of the "shops"—like the coding or Phone Shops in Survey Operations—where working late hours is the norm rather than the exception. And while any service department has such responsibilities, it has been kept "respectable" by the efforts of the Controller who wanted it to be at a level higher than the other service departments. The means used to accomplish such a task should be noted:

"some kind of dress code has been instituted in the department; at least we (the Controller and the Chief accountants) have private offices; some of the people in (Survey) Operations who were given cubicles instead of private offices were very upset about their space . . . She (the Controller) likes to keep her (private) office looking nice, it's her home away from home. I'm glad she didn't lose her office. If she gets upset, accounting is upset . . . We're sensitive to her needs as she is to ours . . ." (Interview #11).

The controller echoes some of these same ideas: such as the need to maintain "respectability", lest they (Accounting) be discerned as being at the same level as other service departments. And hence the informally instituted rules about dress, about work hours, and most notably about workspace. The leader "keeps her office looking nice". Her private workspace—a large office, partitioned from the corridor with a glass wall—was enhanced with beautiful reprints and other artifacts from her European and other travels. In fact, what hangs in her office is seen to be fit to be hung in the Director's office. Such subtle manipulation of the physical attributes of workspace have led to the elevation of the status of Accounting to a level somewhat higher than that of other service departments. The Accounting department, under her leadership, had managed to secure resources otherwise unavailable to service departments, such as three private office spaces in a preferred space zone of the building.

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Thus, even though the status of Accounting is not high in the organizational hierarchy, and its role remains that of providing a service, its physical location has raised its structural functional position with respect to the larger organization.

Further, we are made to understand that it was the astute management of the presentation of the department (through physical space) as having a salient role, that provided the latitude for the leader in retaining her private space at a time when there was a dearth of workspace in Survey Operations, because, "if the leader is not happy then Accounting is not satisfied either" (Interview # 11). This sentiment induces us to believe that the source of this cohesiveness in Accounting could more than likely be spawned from some collective pursuit of the group. For example, the definition and enhancement of the status of the group through the astute manipulation and management of attributes of the collective workspace could more than likely be a goal that brings the group together on an ongoing basis. In stark contrast to the accounting department, cohesiveness within other departments, was a much desired but non-existent aspect of social life, especially since the move to the new building.

We conclude that collectively contemplated and planned acts (in Accounting) like the degree of privacy as differentially allocated to workers, the privatization of work space, the aesthetic layout, arrangement of work areas to augment work interactions, and be on display, (as in the Controller's office with a glass wall facing the corridor) and the prized location of the group space have facilitated the perception of an enhanced status and made it consonant with its physical location. These perceptions have come about through the subtle engineering of the workspace areas by the incumbents of the accounting department, and have been effective in altering the group's subjective orientation about its structural functional position at Midwest Survey. In other words, the "nicer" the workspace is arranged, the better the location of the workspace, the greater the degree of synonymy with "respectability" or status. In this case, workspace has come to be congruent with status, with consequences for a rift and incongruity between the status and role of the department.

4.2.2. The Computing Services Department
The Computer department's main function is to provide computing services to the survey operations, the academic centers, and the administration department. At the previous location of Midwest Survey, its location in the basement level reflected their service function. Its present location in the building baffles all other departments: "What is a service department doing at a location next to the Director's offices?" (Interview # 30). When asked, the workers of the Computer department justify their location: they are an integral part of the five year planning and policy making committee working on funding avenues to be diverted into making Midwest Survey more technology intensive.

The Computer Department is not at the same status as a core department that brings in monies for the organization; it essentially services the other core departments. However,
it has been allocated a covetous physical location, and attractive workspaces therein. Its role has been simultaneously enhanced by securing for it the responsibility of making the organization more technology intensive, and itself as the target for future funding. The coveted location has added to the credibility of this enhanced role. In other words, the workspaces of the Computer department and its enhanced role are now congruent with each other, even though its status remains the same as before and thereby incongruent with its elevated role.

4.2.3 The Library

In its previous setting in another building, the library was at the hub of work life, it had a location that facilitated the inadvertent confluence of people from different areas of Midwest Survey. The present location is quite a contrast. While it is dignified, spacious, comfortable and could be a fertile ground for camaraderie across the levels, its spatial location in a remote corner of the building acts as a deterrent to the frequency of usage, as well as to the facilitation of interaction across and within the levels of the organization.

At the time (September '86) the library moved to the present location, its role and status were unchanged (i.e. high status and significant role); however, this new physical location and design (remote location, and the placement of the entrance doorway as isolated from any other entrance) were not congruent with either its status or role at Midwest Survey. Over time, a year later in August '87, it was found that its role in sustaining the informal networks had diminished, but it continued to fulfill its formal role, as and when needed. Thus, physical location and role, have become congruent over time, resulting in the library's status and role to disengage and be incongruent (high status and diminished role) with each other. The spatial location and physical design of the library have facilitated the perception of its incongruence with its diminished role, and simultaneously highlighted the ensuing incongruence between its status and role.

4.2.4 Open Space vs Private Workspace

A group of administrative offices, in accord with their significant role within the organization and located in the main administrative wing on the second floor is the focus of this section. To be allocated a space next to these prestigious offices is perceived as having a salient role. Our interest in them lies in the way in which their spatial setting comes to be perceived as being consonant with either their status or role, thereby altering prevailing perceptions of status/role congruence to one of tension between status and role.

Susan, a secretary, has an office in the corridor. In addition to being a secretary for three people in the Contracts/Grants Administration, Susan also provides secretarial services to the Treasurer and Associate Director for Administration. While her office is surrounded by a set of prestigious offices, her assigned workspace makes her role an ambiguous one.
Susan's "office" is a desk facing the corridor, which not only provides the usual distractions of circulating traffic, but additional annoyances like that of people congregating in the hall while they are waiting to see someone, of inadequate florescent lighting, and of stagnant air. Susan confided that the workspace was giving her facial muscle cramps, but her pleas for relief in the form of some privacy went unheeded (Interview # 21). Susan felt intimidated by this posture of interaction with her superiors, and felt that this would not have occurred had she been in a "regular office". Even the interaction with her colleagues had been jeopardized.

The whole identity of her role as a valued employee with a salient role is being perceived in a changed light, by both her superiors and her peers. From Susan's perspective, the workspace in the corridor has led her role to be perceived as non-significant, further heightening the incongruency between her actual role (secretary to three important positions—thus a valued employee) and the status conferred on her (office space in a corridor). As such, her workspace becomes an indicator of this incongruence.

Along this prestigious Administrative wing, almost next door is Michelle, an administrative assistant. Her job description was that of secretary to the Associate Director, but some time ago, her title was changed to Administrative Assistant. While Michelle has some additional responsibilities, there are great similarities between her role and that of Susan. The greatest difference between the two is in the conferred status symbolized through the physical workspace; Michelle enjoys a private office.

Michelle is proud of her private office: she has personalized it with plants and has brought in other conveniences like an electric heater. She sees herself as an important team member as when she expresses acts of management in the plural form, e.g., "... we've done a lot of hiring" (Interview # 17). It is as if, the workspace (private office) allocated by the organization to Michelle has elevated her perceived status. In her response to Susan's workspace she is very matter of fact: "no doubt it is an unpleasant situation, but that was a decision taken by the Space Committee after a holistic analysis of the space available and the people needing space." Susan's concerns with workspace are very basic: she would be more than happy with a minimum level of privacy, the latitude to arrange and personalize her space, and a location that would permit the two. Michelle's concerns on the other hand, are more global—they center around the physical layout of the building. Michelle already has a private office, but there are a great deal of inconveniences to put up with in this new building:

"... The building is so fragmented ... environmental problems are many, it is hot and cold erratically, and then the windows don't open, you need an Allen wrench; elevators don't work. There are other issues as well to which there is a lot of resentment, for example the casual atmosphere—coming to work in shorts, breast feeding babies at work, coming in anytime you please. ... Yes, people talk about the stratification, some constructively and others not so constructively, but recently there have been attempts to rectify it ..." (Interview # 17).
The juxtaposition of the above two examples clearly demonstrates that the employee with a private office sees herself as a team member of the organization, in contrast to the employee with a desk in an open space (with no privacy and/or latitude to personalize) who is disillusioned about the organization. The workspaces have become a lucid reason for, and indicator of, the incongruency between the status and the role in a work setting: the general perception is that Susan's role is diminished with the allocation of an open desk, and Michelle's status is elevated with a private workspace.

5. DISCUSSION: THE PHYSICAL CONTEXT OF SOCIAL ORDER - THE CASE OF MIDWEST SURVEY

Physical settings in organizations not only render the background for facilities, and a stage for the incumbents to enact their roles, they also themselves become visual symbols of the

FIGURE 2: Four-Cell Representation of Status/Role Construct

<table>
<thead>
<tr>
<th>Low Status</th>
<th>High Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cell B</strong></td>
<td><strong>Cell A</strong></td>
</tr>
<tr>
<td>Significant Role</td>
<td></td>
</tr>
<tr>
<td>Low Status</td>
<td></td>
</tr>
<tr>
<td><strong>Cell C</strong></td>
<td><strong>Cell D</strong></td>
</tr>
<tr>
<td>Non-Significant Role</td>
<td></td>
</tr>
<tr>
<td>Low Status</td>
<td></td>
</tr>
<tr>
<td>Ex: DMZ Phone Shop</td>
<td></td>
</tr>
<tr>
<td>Ex: Director's Office Sr. Survey Mgmt. Offices</td>
<td></td>
</tr>
<tr>
<td>Non-Significant Role</td>
<td></td>
</tr>
<tr>
<td>High Status</td>
<td></td>
</tr>
</tbody>
</table>
status of the occupants, and, over time come to be part of the overall culture of the organization. Two aspects of the organizational structure of Midwest Survey—status and role of incumbents—will be analyzed in the present section to show the ways in which they are intermeshed with the physical settings at Midwest Survey. This is best achieved through the delineation of two diagrams: first, a four cell representation of the status/role construct at Midwest Survey (Figure 2); and second, a status-role typology that explicates the relative positions of resources such as physical location and workspaces, as allocated by the organization, and as they come to be modified by workers' perceptions over time (Figure 3).

In Figure 2, the X-axis represents status on a continuum ranging from Low to High; and the Y-axis represents role on a continuum ranging from Low (non-salient) to High (salient). The specific locations of the departments or incumbents on this figure, depict their relative status and role in the social organizational structure. The diagonally opposite cells A (high status/salient role) and C (low status/non-salient role) are shown as having those individuals or departments that manifest congruence between their status and role. Several such examples are indicated in the figure. The high status/salient role of the executive management is positioned in cell A. In these cases, workspaces and their respective physical locations have come to be indicators of, and in congruence with the social structural positions of the incumbents. Thus these workspaces are perceived to be more or less in equilibrium, and in congruence with the social structure. On the other hand, as in the case of the DMZ and the Phone Shop, the marginal physical locations of the workspaces act as extensions of their non-salient role, i.e. they are indicative of the nature and type of work the individual is expected to do. Beyond this, they are an indicator of the impoverished status conferred on the incumbents by the organization. Such a low status and inconsequential role, as indicated by the undesirable physical space, warrant the placement of the DMZ and the phone Shop in cell C (low status and non-salient role).

Physical locations and/or workspaces of departments that are perceived as being in a state of incongruence with their status and role fall in cells B and D. They come to be perceived in these schematic locations (as indicated by boxes enclosing the name of the department in Figure 3) through some aspect of the physical setting that is not in congruence with either their status or role.

For example, in the case of Accounting, its status and role warrant its positioning in cell C (Figure 3) however its present preferred physical location has subtly altered perceptions to one of high status in the organizational structure, and hence we see it schematically in cell D. This process has had some latent repercussions: the perceived high status—emanating from the sought after physical location—now is incongruent with its low role in the organizational hierarchy. The physical location, in this case, while it propagates
an elevation in status, simultaneously generates, and makes explicit a rift between the knowledge aspect (high status reflected in the preferred physical location) and the performance aspect of Accounting's service-oriented role. It is this dissonance between the perceived high status, on the one hand, and the non-salient role on the other hand (when in cell D), that creates tensions between Accounting and other department staff. Figure 3 illustrates the suggested ways of alleviating these tensions:

1. Allocation of additional tasks and responsibilities to augment the present role of Accounting, and facilitate its' congruence with the perceived status and assigned workspace (would locate in cell A).
2. Allocation of a more modest physical location for Accounting—one in keeping with its service role and relative status in the overall hierarchy (would locate in cell C).

Our second example illustrates the way in which the physical location of the Computing Department facilitates the recognition of its changing role from one of non-
salience to that of salience. The department originally supported other arms of Midwest Survey (operations, research, and administration) by providing them with data processing and programming services. Consequently, its social organizational position (non-salient role and low status) at that time warranted its placement in cell C (dotted box, Figure 3). In fact, prior to the move in 1986, their assigned physical location (the basement level in the previous location) was in keeping with their service role and status. However in the new location, the Computing department was able to secure a physical location in a prestigious area of the building. Along with this came an explicit acknowledgement of the elevation in its role: it was assigned the task of making Midwest Survey more technology intensive, and was simultaneously made an integral component for its long range planning strategies. Consequently, we place the Computing department in cell B. It should be noted that while the physical location and workspaces presently accorded the Computing department are congruent with its new role, its role and status have drifted to become incongruent as shown from its positioning in cell B. This incongruency may lead to tensions between Computing and other departments. Inter-departmental tensions could be alleviated by boosting the status of this department, whereby the status, role and physical location of the Computing department would be in consonance (as indicated by the schematic move from cell B to cell A, shown in Figure 3). Given the trend of the Computing department's increasing role in Midwest Survey, such a situation may not be too far into the future when the Computer department may be an independent center, bringing in its own monies.

Let's consider yet another example—the library. The spatial location of the library has devalued its role from one of significance to that of being non-significant; subsequently it has come to be perceived as being located in cell B, as shown in Figure 3. A more central and salient location for the library would augment the salience of its role and its high status, and have it schematically locate in cell A.

The example of the secretary with the open workspace is interesting because it shows clearly how perceptions of status and role come to be reassessed, and redefined with configurations, and reconstructions of physical space. With the title of Secretary to the Associate Director and two other Grants and Contracts Managers, it is understood that Susan is a “valued employee” of the organization. Encompassed within this role are tasks and responsibilities that, in general, require confidentiality of documents and verbal interaction. Such a title and role invoke visions of a workspace that would provide the needed privacy, and appropriately symbolize Susans' status level.

But Susan is allocated an open workspace comprising a desk in a corridor—a heavily trafficked circulation route—devoid of any degree of privacy, with inadequate fluorescent lighting, and giving the general impression of a marginal make-do workspace for a transient worker, rather than that of a permanent and valued employee of the organization. Clearly the workspace is not in congruence with the status or role of the occupant. Allocation of a
marginal workspace implies that Susan's role in the department may not be that important. In addition, the open workspace also fails to support the notion of a secretary dealing with confidential materials, and therefore the concept of confidentiality in the role itself appears as illegitimate. Thus, with the open workspace, Susan is perceived as having a diminishing role and locates schematically in cell C.

It is interesting to note that during my field work, another worker with the title of Secretary to the Administrative Assistant of the Director was assigned an open workspace—a desk in the same corridor as Susan. This occurrence softened the tensions for Susan by mitigating the marginality of her role. It also clearly showed the way in which role, status and workspace can be brought into congruence and thereby lessen the tensions. In this case, when two workers, instead of a single worker, get assigned open workspaces some degree of salience of the given role is recaptured. If the particular work assigned could not be executed in open workspaces, there would not be an additional such workspace added; but the fact that such had been added could connote that the performance of assigned tasks and responsibilities are feasible via such a workspace. Consequently, Susan's schematic position on Figure 3 moves from the previous position in cell C to a new position within the same cell C in which, the role is presently perceived as having greater salience. The present position brings Susan's status, role, and workspace as being conceptually closer to, and augments in reducing the tension.

5.1 Role Attributes and Constructed Meaning of the Physical Setting: Theoretical Amplifications

Several examples cited in the previous sections provide ethnographic evidence for conceptualizing the close inter-relationship between status and role on the one hand, and physical setting on the other, and the way in which they come to implicate social organizational behavior. The theoretical perspective that best lends itself for a vigorous analysis of the concept of role (and status) is that of Nadel (1957).

In elucidating the internal structure of roles, Nadel emphasizes that it is the summation of all the inter-connected series of attributes that make up the character of any given role. However, not all attributes have the same relevance for a particular role. Nadel proposes a hierarchy. A role is comprised of "pivotal" and "peripheral" attributes, both of which are internal to the role, and become visible only with the unfolding of role behavior. The "pivotal" attributes are those whose "absence or variation changes the whole identity of the role." On the other hand, "variation or absence of peripheral attributes does not affect perception of effectiveness of the role" (Nadel, 1957). We now propose that there is, in addition to the pivotal and peripheral attributes, an attribute of role that is external to the role itself, but which facilitates its unfolding. This will be termed an "extension" attribute, of which
a relevant example is the physical setting of behavior. In a work setting, for congruence to occur between the status, role and workspace, the pivotal, peripheral and extension attributes would need to be entailed, each taking its cues and following from the one before it. For example, when an executive has a corner office affording views and light from two sides, his/her status and role are entailed with the workspace, which is indicative of, and congruent with them. On the other hand, when the workspace—the extension attribute—of a valued employee is not entirely supportive of, or in consonance with the performance of the specific role, it fails to legitimize and/or be an extension of the aforesaid role and status.

Beyond their characteristic attributes, status and role, as delineated in examples such as the DMZ and the Phone Shop, come to be perceived by the workers as reflected through the physical setting that mirrors their congruence. In other examples, such as Accounting and the Computer Department, only one of these social structural constructs—status or role—is reflected in, and comes to be congruent with the physical setting. The perceived disengaging of the status and role causes a tension amongst staff in the organization, and subsequently, a latent tendency is set up in the direction of mobilizing the social and physical factors to a state of congruence, and change.

Several examples above have illustrated how the physical location and/or the workspaces become a crucial "extension" of the role attributes and serve to enhance (or diminish) role behavior. When entailed with the internal pivotal and peripheral attributes of role (and status), this "extension" affords a means to understand the processes and explanations of how physical locations can be bleak and yet, because they are in congruence with the respective status and role, are perceived as being equitable. While the internal attributes are part and parcel of role and status, the extension attribute is salient in that it supports, entails and sustains the role and status attributes. Status and role then, can best explain behavior in work settings only when they are inclusive of the important "extension" attribute viz. the physical location, surround, and/or workspace.

The ways in which the physical setting becomes an extension attribute is based in our assumptions about human behavior that, the meaning that people assign to things ultimately organizes their behavior.

"If men define situations as real, they are real in their consequences" (Thomas and Thomas, 1928).

For personnel in organizations things become objects once they are defined as relevant for the completion of work. These so called "objects" acquire meaning for the staff in the process of negotiation and construction of activity, in and with the organization. For example, as described above, a fairly centrally located set of offices came to be known as the DMZ among the staff, after a number of personnel occupying them were laid off, i.e. the physical set up of these spaces came to acquire a meaning and be constructed and connotated as such, after which they were given the name of the DMZ. In another example "the bodies up on the
fourth floor*, connotes the shop areas where routine sorts of tasks are handled in bulk fashion by easily replaceable staff. Social life in the organization is thus continually created (by the organization) and recreated (by the participants), with tasks to be completed and goals to be achieved within certain time frames. Through these mutual processes entailed between the worker and the organization, the environment of action and interaction, inclusive of the physical surround, becomes a symbolically defined environment. And often, as the evidence points out, the physical surround becomes a means used to alter the very social structure it is part of. In the course of persistent incongruencies between the symbolically defined environment and the social structure that it is part of, organizations might conceivably alter their course of action to adapt to their workers; and/or the workers may alter their ways of comprehending the policies of the organization.

6. SUMMARY AND CONCLUSIONS

In the phenomenological sense, the incumbent worker perceives the organizational and the physical setting as one and not two separate entities. Therefore, the present ethnographic study of Midwest Survey (a non-profit survey research center) explored both, the social organizational facets and the physical setting of the work environment conjointly. This paper focused on issues of status and role (ethnographic synthesis revealed these being salient to workers) as addressed by the organization, and negotiated by the workers within the context of the physical setting at Midwest Survey. Two distinct ways in which the physical setting was interrelated to status and role at Midwest Survey were identified:

1) Most often, workspace and/or physical location is congruent with both status and role, and acts as an indicator of this congruency.

2) However, when the physical setting fails to simultaneously enhance both status and role, it acts as a deterrent to status/role congruency. Over time, the physical setting impels its own congruence with either status or role, alters the prevailing perception of the other in the direction of the newly established congruence with itself, and becomes an indicator of status and role incongruence.

The ethnographic findings suggested the need for conceptualizing the physical setting as a closely intertwined entity of status and role in the work setting. According to Nadel (1957), all the interconnected series of pivotal and peripheral attributes of the role structure are internal to the role itself. The present author proposed that the physical setting (inclusive of location, surround and/or work setting) be considered as an "extension" attribute of role structure in the work environment. This extension attribute is external to the role and is thus visible independently, but nevertheless facilitates the unfolding of role behavior.

When role and status unfold within an external physical setting that supports their
internal structure and attributes, then the physical setting becomes an extension in the
facilitation and execution of the instrumental and expressive functions of work. However, a
situation of incongruence between the physical and the social constructs, gives rise to tensions
between departments and, could set into motion forces that might alter and change
organizational allocations and policies to adapt to workers demands and needs. Therefore,
an awareness of the interdependence of the social and physical factors relevant in work
settings, and the processes by which they coalesce or disengage, would best serve the interest
of organizations in alleviating tensions between departments and their staff.

NOTES

1. White (1992) asserts that "Ecological siting in physical space is always present for social
action, which continues to come into existence, and fade, in part as irritation from the spin
off into the erratic in biophysical space-time. Biophysical ecology shapes empire and tribe
alike. (p.20).
2. While the behavior or conduct of individuals exhibit these aspects (roles), they are also
independent of them in that they function with a constantly reconstituted personnel. The
concept of roles therefore, refers not to specific individuals but to roles of individuals seen
as clusters of qualities, those invariant qualities as are required in the implementation of tasks
and goals in the larger social structure.
3. Other possible ways of reducing tension in this case would include the following: 1.
Enclosure for the open workspace (design feature affording privacy); 2. Being physically
located within a group's boundaries, even if it were a group other than the one to which one
has prime affiliation (security from location), and 3. The latitude to personalize the
workspace, even to a small degree (imparting a sense of control).
4. We draw from the Symbolic Interactionist perspective (cf. Mead, 1934; Stryker and
Stryker, 1985) which emphasizes self processes and role taking in the analysis of interaction
in the creating and recreating of society and person.
5. For example, Caikszentmihalyi & Rochberg-Halton (1981) have studied the ways in which
objects come to have meaning and implications for definitions of the self. Other research (cf.
Holahan, 1978) has shown the differences in the range of meanings that men and women
derived from objects.
REFERENCES


