

DOCUMENT RESUME

ED 099 524

CE 002 605

AUTHOR Klausner, Samuel Z.; And Others
TITLE The Workplace Reaches Out: A Study of Organizational Impropriation. Volumes 1 and 2. Final Report.
INSTITUTION Center for Research on the Acts of Man, Philadelphia, Pa.
SPONS AGENCY Manpower Administration (DOL), Washington, D.C. Office of Research and Development.
REPORT NO DLMA-21-42-73-07-01
PUB DATE Jan 74
NOTE 554p.
AVAILABLE FROM National Technical Information Service, Springfield, Virginia 22151

EDRS PRICE MF-\$0.90 HC-\$27.00 PLUS POSTAGE
DESCRIPTORS *Bibliographies; Case Studies; Community Services; Economic Research; *Employer Employee Relationship; Fringe Benefits; Human Services; Job Satisfaction; *Operations Research; *Services; *Socioeconomic Influences; Special Services; Work Attitudes

ABSTRACT

Volume 1 of the report opens with a series of case studies of services at the workplace. These qualitative surveys formed the basis for a more systematic analysis of the array of services to employees and to the community. The case studies examine two occupations (seafaring and the military), two countries (Japan and Israel), a special worker population (female labor force), and services in the context of five industries (a world trade corporation, hospital, bank, industrial site, and an international conglomerate). On the basis of the case studies, a method was devised for analyzing services in a more quantitative manner. The data were gathered and interpreted to reveal the social and economic conditions under which services emerge. Volume 2 offers a 63-page bibliography and five appendixes. The first (11 pages) describes the Delaware Valley setting of the study and how the sample was drawn. The second (5 pages) discusses securing industrial cooperation. The third (13 pages) describes development of the research instrument. An evaluation of field techniques for research on complex formal organizations (13 pages) forms the fourth appendix. The fifth (125 pages) presents frequency distributions of responses to all items for which data were gathered. (NH)



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THE WORKPLACE REACHES OUT: A STUDY OF ORGANIZATIONAL IMPROPRIATION

Volume I

Samuel Z. Klausner
Robert H. Edelman
William Gomberg

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ED 099524

THE WORKPLACE REACHES OUT:
A STUDY OF ORGANIZATIONAL IMPROPRIATION

Samuel Z. Klausner
Robert H. Edelstein
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FINAL REPORT

January 1974

Submitted to

Manpower Administration
U.S. Department of Labor
Grant No. 21-42-73-07

by

CENTER FOR RESEARCH ON THE ACTS OF MAN
4025 Chestnut Street
Philadelphia, Pennsylvania 19104

21-42-73-07-01	3. Recipient's Catalog No.	
THE WORKPLACE REACHES OUT: A STUDY OF ORGANIZATIONAL IMPROPRIATION	5. Report Date January 1974	
7. Author Samuel Z. Klausner, Robert H. Edelstein, William Gomberg	6. Performing Organization Code	
9. Address Center for Research on the Acts of Man 4025 Chestnut Street Philadelphia, Pennsylvania 19104	8. Performing Organization Report No.	10. Project/Task Work Unit No.
12. Address U.S. Dept. of Labor Bureau of Labor Statistics Office of Research and Development 1111 20th St. N.W. Washington, D.C. 20210	11. Contract Grant No. 21-42-73-07	
13. Type of Report & Period Covered FINAL REPORT	14. Sponsoring Agency Code	
16. Abstracts Certain workplace activities are drawn in from other social institutions, a process here termed "impropriation". Some of these are services to employees (e.g., retail shops, sports activities and medical care). Others are services to the community (e.g., aid in housing, community health care, aiding the social mobility of youth and "minorities"). Such services were examined in a sample of 106 Delaware Valley industries by means of informant interviews and the data treated by multi-variate analysis. Employee services tend to be found in firms in which employees and managers are in a relatively personal-type community relation, in which benevolent paternalism is a managerial attitude, and are less likely to be found where a conflict of interest perspective governs the relations of employees and management and where mutual obligations are narrowly specified by work contract. Recommendations are for mounting projects in child care and health care services and for the establishment of regular systems of data collection regarding services as a basis for future policy formation.		
17. Key Words and Document Analysis. 17a. Descriptors for future policy formation. Economic analysis, employment, fringe benefits, government policies, industrial management, job satisfaction, work attitudes, child day care, health, mental health, supportive services, quality of employment		
17b. Identifiers. Open-Ended Terms		
17c. COSATI Field/Group 5a Administration and Management; 5k Sociology		
18. Distribution is unlimited. Available from National Technical Information Service, Springfield, Va., 22161.	19. Security Classification UNCLASSIFIED	21. Number of Pages 575



EXECUTIVE PRECIS

THE WORKPLACE REACHES OUT: A STUDY OF ORGANIZATIONAL IMPROPRIATION

Samuel Z. Klausner
Robert H. Edelstein
William Gomberg

Certain workplace activities are drawn in from other social institutions, a process here termed "impropriation". Some of these are services to employees (e.g., retail shops, sports activities and medical care). Others are services to the community (e.g., aid in housing, community health care, aiding the social mobility of youth and "minorities"). This is a précis of a report about such activities in a sample of Delaware Valley industries. Following are recommendations emerging from the study, a brief statement of findings and a word about the conceptualizations and research method on which these findings rest. A better appreciation of these recommendations and findings may be obtained from the Executive Summary to the report. No policy should be designed on the basis of these recommendations, however, without evaluating them in the context of the complete two volume report.

Recommendations

Demonstration Projects

Establish an industry related child care center. An industry related child care center is currently an infrequent service. The demand for workday child care will rise with the proportion of mothers in the labor force.

Extend physical health care services. Physical health services are nascent in nearly all workplaces and might be developed as part of programs for general medical care of the population. The workplace, like the school, offers access to populations in need of preventive medical services as part of a community health program.

Both of these programs might examine the best forms of control of these services--whether corporate, worker, union or outside agency. The best location, whether literally at the worksite or as a joint venture serving several worksites at a location optimal for all, should be examined. This would be an opportunity to test the extent to which services are bound to the conditions under which they have arisen in the past. Adjustments in the rules governing services might make them viable under other conditions. Both of these demonstrations should involve a cooperative effort between the Department of Health, Education and Welfare and the Department of Labor.

Establishing Policies for Services

Employee service characteristics should be negotiated with the workers' association and, where unions exist, be part of collective bargaining. The success of services, their efficient use by employees, would be enhanced were they established and governed in consultation with workers. Not only the economics of services but the rules governing them should be negotiated. This includes policy regarding control, fiscal management, types of services and their manner of operation. Norms established in union negotiations would probably extend, by example, to non-union shops such as those in which employees' associations arrange services.

Collect national data on employee and community services. Data similar to that collected in this study for a sample of industries should be collected on a national basis to aid the policy maker in deciding which services to encourage. This data collection could be incorporated in the Census of Business of the Department of Commerce and/or the regular surveys of the Bureau of Labor Statistics of the Department of Labor.

Develop managerial and social accounting schemes to assess the costs and performance of services within firms. Appropriate managerial and social accounting schemes to assess the costs of services to the firms, to the employees, to outside offerers of services and to the community as well as to assess the quality of performance of each service within the firm are a prerequisite for policy formation. A central agency should monitor this effort to assure a uniform system generating comparable data.

Economic incentives should be offered for employee and community services with positive social externalities. Services, almost definitionally, involve externalities as they affect a worker's non-work life, provide competition for a service in its usual setting, or benefit a "minority" community. They, thus, merit a selective incentive program. Incentives may take the form of direct and indirect subsidies or of tax relief. To approve tax deductibility, it will be necessary to set and monitor quality standards for services.

Further Research

Continue to exploit the current data set. The first successor research project should further exploit the current "data set". Only a few of the employee and community services on which data are available have been analyzed. Analyses similar to those in this report should be pursued for the other services.

Conduct research on the impact of and management of services. Research should be undertaken into questions which have barely been opened in this project. How do services relate to corporate profits and other aspects of fiscal structure, to worker productivity and to the culture

and personnel of the workplace? How does the issue of control of services affect identification of workers with the company and its workers relative to their identification with the larger community of workers? What is the impact of these services on the culture of the workplace? What is the impact of the workplace's impropriation of the services on the social organizations ordinarily sponsoring them? How does the character of services offered within an industrial organization differ from the character of these services outside? What is the impact on services of the different rules which may govern them? Which services have economies of scale? What parts of the employee community are served by services? Do national regional differences in services influence labor mobility? What is the optimum ecological distribution of services in a local area?

Publish Booklets on Services

A series of informative booklets should be prepared--each one dealing with a specific service at the workplace or community service. They should be directed to providers of the services, workers' organizations and corporations and should describe the experience of others with the service and some recommended ways of organizing each service.

Findings

The Array of Services

Employee Services. Employee services which impropriate activities of the retail market are, in one form or another, found in nearly every worksite. Retail market services include consumer goods (e.g., a drug store) services, cafeteria and mechanical food services, use of equipment and services of clerical personnel, as well as personal craft (e.g., barber) and technical craft services (e.g., appliance repair). Also

available are two types of commercial service, one monetary (e.g., credit unions) and the other a bookkeeping (e.g., payroll deductions) service and services in which the firm acts as an agent (e.g., obtaining travel tickets).

Services are impropriated from the primary group such as family services (e.g., child care) and services which assist the employee in meeting community obligations (e.g., charity collections). A notable number of firms offer education and information services (e.g., school), leisure and recreation services (e.g., sports and parties) and health services, both physical (e.g., first aid) and psychological (e.g., drug counseling). Work arrangements, which adjust working conditions to special worker needs, include transportation services, flexible working hours and arrangements for the handicapped. Security services (e.g., chaperones) contribute to willingness to work in a particular locale. These last two categories deal, as do all services, with non-work conditions, but, in these cases, the immediate aim is to facilitate working.

Community Services. Community services, an exercise of corporate responsibility, engage corporate officials as representatives to community activities. These include participation on general community affairs committees, services supportive of the household economy (e.g., consumer education) and services oriented to the natural environment (e.g., pollution control) and the built environment (e.g., urban renewal programs). Other community services are designed to catalyze the social mobility of particular populations by skill training (e.g., tutorial programs for school drop-outs), business counseling services (e.g., advisory services to minority enterprise) and services for youth (e.g., Junior Achievement programs). Health services, both physical (e.g., community health care) and mental (e.g., drug education programs), are a bit less common. Some

corporations support sports and the arts in the community (e.g., Little League baseball and theater groups).

The Conditions for Services

The sociological and economic analyses identified several conditions supportive of services in general.

(a) Services are associated with the less formal and less bureaucratic settings. They are less likely to be found where a conflict of interest perspective governs the relations of employees and management and where their mutual obligations are narrowly specified as by a union contract. It is not likely that a specific and distinctive managerial decision is taken on the issue of money wages versus services but that as an industry is less rationalized and more personalized services emerge as an expression of this condition. Typically, management has but a cloudy image of some of the services they offer. Their commitment to the ideology of the rational profit-making firm may sometimes blind them to these technically non-profit oriented activities in their midst.

(b) They are associated with firms in which employees and managers are in a relatively personal-type community relation, in which benevolent paternalism is a managerial attitude and in which members of the firm relate to a local clientele of individual households, rather than to industrial clients in distant places.

(c) They emerge in firms in which, almost regardless of the size of the organization, specialized departments (say, for personnel, production, maintenance of facilities) proliferate.

(d) Employee services are alternative to a portion of the wages and cash benefits.

(e) Services are associated with a low male quit rate but not as often associated with the stability of female labor force suggesting that the male and female labor markets bargain over different conditions.

(f) Service industries are more conducive to the development of employee services than are manufacturing firms. Because of the structural differences between these two types of industry, services may even have a different meaning and function in each context.

Specific service categories are associated with additional specific conditions.

(a) Retail consumer goods services in manufacturing industry, consistent with the above comments, are prompted by concern for the integrity of a community of workers and management. They are established, as if competitively, in locales where alternatives are available. Retail goods services, in manufacturing industries, control the boundary between the industrial community and outside institutions.

In service industries, retail consumer goods services are associated with a high turnover in the labor force, particularly in the female labor force. The boundary they protect is not threatened by other purchasing opportunities but by the demands of non-work related roles.

(b) Agent services, facilitating employee liaison with services in their "natural" setting, arise in manufacturing industries along with services which impropriate activities from the family and leisure and recreation institutions. That is, they are associated with the non-work personal-social ties of the employee.

In service industries, agent services emerge where a highly developed managerial structure and an essentially local employee community,

not under a formal work contract, are conjoined. That is, they are associated with conditions internal to the employee community.

(c) Education and information services in manufacturing firms occur along with agent and leisure and recreation services--all facilitating social life ordinarily pursued outside the plant. In complex organizations, such as multi-national firms, education and information activities contribute to the cultural development of personnel to be the company's ambassadors. They function at the boundary between work and non-work life.

In service industries, education and information services are associated with an institutionalized caring and paternalistic orientation. They are a response to internal conditions at the workplace. In both cases, solidarity of workers and management, expressed sometimes through an employee association, is a basis for a service which transmits culture.

(d) Leisure and recreation services in manufacturing organizations are associated with organizational complexity and a stable labor force in which males predominate. These males, identifying with the workplace, express play-group loyalties (usually associated with family and neighborhood) through the worker community.

In service industries, leisure and recreation services proliferate where there are many low ranking female employees and a high quit rate among male executives.

(e) Physical health services occur in manufacturing firms having relatively self-contained worksites (where few workers leave during the work day) and where the labor force is unstable. They express organizational caring for the employee through formal mechanisms. In holding together the organizational pieces in a rapidly changing milieu, they have a social "healing" function.

In service industries, health services are associated with temporary female help bound to the site of a complex organization. Again, they have not only an individual but an organizational "healing" role.

(f) Among community services, consumer education is more likely to be found in manufacturing than in service firms, reflecting their concern with a product market. Service organizations are more likely to provide family and health services to the community--an extension of their client services. Those with a relatively young labor force offer community services in support of minority groups--reflecting a sensitivity to their labor market and to the ideology of their young recruits.

Theory and Method

Initiating Conception

These findings grow out of a particular conceptualization of services at the workplace which, in turn, guided data gathering and analysis. Organizational specialization is a hallmark of the contemporary Western industrial system. Social and physical separation of work from other social activities is rationalized as increasing the efficiency of production and freeing the personal life of the worker from occupational domination. At the same time, the worker must curtail his responsibilities to his non-working life while at work. Yet, a social undergirding is needed to support work commitment. A separation of these two aspects of life may detract from ability to perform in the job.

Employee services at the workplace permit the worker to perform other roles while at work. The industry assumes the expense of the service, partly in the hope of increasing worker commitment. These other activities are, at the same time, drawn into the orbit of the company.

In this sense, services are regressive, for better or for worse, with respect to the progressive specialization of industry in production. Incorporation into an industrial milieu reshapes the service from what it would be in its "natural" setting. Employee services at the workplace may compete with services in the community. Community services are "corporate responsibility" as they bind the firm to its social milieu beyond that of the employees.

This study is designed (1) to document the extent of employee and community services and (2) to account for their emergence and suggest their function in the industrial system.

Definition

Services at the workplace are regularly offered non-work related activities incorporated into the workplace from other social institutions. These services substantively and palpably engage industry in activities of another social institution. The term "impropriation" describes the process of incorporating activities, ordinarily part of another social institution, into the workplace. Monetary benefits, as cash supplements to salary, in contrast, permit purchase of the services elsewhere.

Method

The social organization at a single worksite is the primary unit of analysis. Employee and community services, subsystems within the workplace, are secondary units of analysis. Several case studies were carried out to explore conditions influencing services. The dependence of services on characteristics of the occupations and the technology was explored through case studies of isolated occupations (seafaring and the military), which have the widest array of services. The effects of

national cultural ideology and of the differentiation of work from other social roles in society were explored through an examination of the influence of collectivism and of a large labor federation (Israel) and the influence of a traditional of industrial paternalism (Japan). Suppositions about the influence of the structure and policies of specific organizations were the basis for case studies of international manufacturing, high technology and financial corporations as well as of an urban hospital complex.

The results of these case studies guided the construction of an instrument to gather data appropriate for multivariate analysis. The instrument was designed to elicit information on the environmental setting of each worksite, its organizational structure, labor force, technology and market relations as well as about the characteristics of employee and community services. Observations were made on a sample of 106 worksites in the Delaware Valley stratified by location, type of industrial activity and size. Data were gathered through informant interviews, usually of personnel directors, among others, and participant observation.

The services are categorized according to the institutional sphere from which they are impropriated. The report offers descriptive material on all nineteen categories of employee services and thirteen categories of community services. For purposes of analysis, the degree of involvement of a firm in services is measured by a diversity index which reflected the number of different specific services in a category (e.g., a firm with a drug store and a food shop is scored higher than one having a food shop alone with greater volume of business). The variability of this diversity index was analyzed, for purposes of the report, as a function of attributes of the worksite for five of the categories of

employee services: retail consumer goods market services, agent services, information and education services, leisure and recreation services and physical health services. The report concludes with a discussion of the practical implications of services for workers and industrial managers.

EXECUTIVE SUMMARY

THE WORKPLACE REACHES OUT: A STUDY OF ORGANIZATIONAL IMPROPRIATION

The Division of Labor and Services at the Workplace

Work is accomplished in a social relationship among fellow workers, managers, suppliers and customers, among others. The narrowing of these relations of work to task performance alone could seriously prejudice productivity. The institutional separation of work from family, religion, health and leisure has, over the past few centuries, proceeded slowly and incrementally and cannot become absolute. Further, a purely interest-determined work situation, dependent always on the bargains of the moment, could hardly be stable. Co-workers must trust one another and trust is rooted in their traditional social bonds. The workplace has made its adaptation to the narrowing of relations. Aside from being a place of work, the workplace has become a locus of "underground" social relations. These "underground" relations mirror, within the workplace, the non-work roles of the workers. In some respects, they interplay with the informal organization of workers sequestered within the formal bureaucracy. They do not, however, manifestly pretend to be work relations.

The "underground" relations are organized around "services at the workplace"--activities appropriate to other social institutions which are introduced into the workplace. The process of drawing such activities into the workplace may be termed organizational "impropriation". Through organizational impropriation, the specialized workplace maintains bonds with non-work institutions, its workers extend their associations with one another and are enabled to live part of their non-work lives through the place of work. The impropriated services compete with services offered in their "natural" loci and are reshaped under the influence of their industrial context.

This report describes services at the workplace found in a sample of Delaware Valley firms and examines some conditions leading these firms to impropriate activities from the retail market, family, religion, health and leisure among other institutions, in the form of services to employees and to the community. The primary unit of analysis is social group working in physical contiguity at a single site. Employee and community services, the secondary units of analysis, are organized social activities at a worksite not directly work-related and offered regularly and intentionally. As distinguished from monetary

benefits, salary supplements permitting purchase of services outside, impropriated services draw the industry substantively and palpably into the activities of another social institution.

Services are classified according to the social location in which they would ordinarily be found. Employee services at the workplace are impropriated from the retail market (including consumer goods, agents, craft and personal service and monetary and bookkeeping commercial service), familial-communal, informational-cultural, work arrangements, leisure-recreational and physical and psychological health services. Community services, sometimes referred to as corporate responsibility, are addressed to employees as members of a community as well as to others. They are classified in terms of the institution affected or to which that service ordinarily belongs, to wit; the community, polity, economy, physical environment, stratification system and system of health and recreation.

Case Studies

Models of Services

Historically, services recall the nineteenth century company store. A post-World War I philosophy of welfare capitalism, following a paternalistic corporate enterprise model, promoted the introduction of services, as well as benefits, to develop worker loyalty and avoid unionization. An alternative model is that of the craft guild in which labor unions promote political organizations, worker funded schools and savings societies. Services enlarge the area of collective bargaining beyond the immediate wage and hour nexus.

Types of services offered depend on characteristics of the occupation, the technology, the work force, the national cultural ideology of work and the differentiation of work from other social roles in a society. Services also depend on the structure and policies of specific organizations. This study focuses on the influence of industrial organizational factors and on the nature of the workforce--but, before entering upon the principal analysis, a word on the other factors will help set the stage.

The peak development of services is in isolated work groups such as crews manning offshore oil rigs, seafarers and the military. Shipping companies link the seafarer and his social ties at home. They facilitate recreation, cultural and educational programs for seafarers' families. The military, by tradition and often by necessity, often provide the only services available for soldiers and their dependents. Facilities are given for the birth of a soldier's child and for his funeral and in between, an Army provides commissaries, medical aid, food, recreation, counseling, social service agencies, country clubs, work clothes and travel.

The influence of national cultures may be exemplified by services in Japan and Israel. The integration of the workplace with the core of

the employee's life is a hallmark of Japanese industry. Once embraced by a large industrial firm, the worker can look forward to lifetime job security, medical and dental care, subsidized transportation to work, lunch at a fraction of actual cost, company vacations with fellow workers at company resorts by the sea or in the mountains, company libraries, parks, clubs, baths, discount stores and company related social welfare agencies. The new employee, perhaps a recent high school or college graduate, may live in the company dormitory, eat company subsidized meals, play in the company game room, on the company sports facilities, attend company paid for entertainment and host a visit from his parents at company expense in company accommodations. To some extent, these services substitute for the wage system.

Workplace services in Israel are modelled on life in collective settlements. The General Federation of Labor in Israel, acting as a trade union, through workers' committees at the plant level, has organized credit unions, cultural and educational programs, short range financial aid, recreational activities and a national medical care system. Acting as an employer, the Federation has organized lending facilities and provides personnel for community activities, youth movements, and political associations, and has given assistance to border settlements, a paramilitary service to the community. A national monetary policy which taxes wages but not services encourages employers to subsidize meals, telephones, apartments, child care and vacations. Services contribute to the maintenance of a differentiated status system, being more frequent on levels at which power becomes increasingly significant relative to economic gain.

Special populations of workers invoke particular services. Blue-collar males promote a sports program and married women in the labor force are a condition for child care services. Eastern European countries have made day care available as a matter of policy. American industry has begun to establish day care centers. One American firm is operating day care centers as a profit making service to other firms. The sponsoring corporation restricts the "interference" of parents in the administration of the day care centers, in fixing criteria for acceptance or rejection of children and in matters of discipline. Its seven suburban centers may induce mothers to enter the labor force.

Corporate Examples

Several specific corporate experiences will illustrate how productive technology, organizational structure and philosophy and the demands of labor shape the pattern of services. The American Manufacturing Corporation (a fictitious name), a high technology industry, employs over 100,000 people in 100 countries. Its worldwide benefit and service concept is tailored to be competitive in the local market and to meet national legal requirements. Germany and Mexico, for instance, stipulate that employers offer a housing allowance. Cafeterias and noon-time meal subsidization are of more importance to foreign than to American laborers. Where road networks are insufficient, the company

provides transportation, most commonly a bus. One isolated plant provides dental care.

A large urban medical center, functioning twenty-four hours a day, extends counseling, medical care, security and food services, established for patients, to employees. Some of the employees perceive services as management's attempt to prevent unionization. Employees also receive tuition reimbursement, gymnasium privileges, help in preparing references, help in attempts to secure mortgages, credit accounts and loans, discounting on prescription drugs, automatic payroll savings, help in locating apartments and moving, Christmas parties for "teens", free tickets to plays and concerts, and use of auditorium and meeting room, library privileges, educational leave, uniforms and access to gift and coffee shops.

A corporate headquarters of an international manufacturing firm, located opposite a shopping center, offers beauty and barbershop services, tax and legal assistance. White collar employees at headquarters follow regular office hours, leaving the worksite for lunch or patronizing a workplace cafeteria and snack bar. Employees have no union for collective bargaining but have social clubs that provide entertainment, arrange picnics, dances and bowling, golf, bridge tournaments, photography, hobby shows and a Christmas party and acquire tickets for spectator recreation. The company offers commercial services including check cashing, extension of loans, a credit union and payroll deductions. Aid in finding residences is given to arriving employees and those being transferred are assisted in moving. Free parking is available at the worksite. A yearly medical examination, dispensary services, counseling for drug abuse and alcohol problems make up a health program. Management justifies spending some \$50,000 per year on these services by claiming they help attract a desirable labor force and encourage identification with the company.

The headquarters of a major petroleum corporation, controlling operations, planning, forecasting and policy formation and evaluation, located in an urban center, supports a medical facility with a women's ward, X-ray room and doctors' offices, medical laboratories, examination room, nurses' station, dispensaries and a reception area. These facilities cost about \$100,000 a year, or about \$67 for each of 1500 on-site employees. A collective bargaining agency represents regular office workers at the site and an employees' credit union and social club reflect a community of common employment. Corporate public service efforts are aimed at "minority" groups, especially blacks. Following their own "Community Relations Guidelines" the firm offers a tutorial program for high school students and a "minority" vendor purchasing program. A formal statement on campaigning for public office defines permissible political activities. Specialists and professionals are provided with library resources and support for participation in professional societies.

A large city bank believes its services at the workplace fuse corporate responsibility, a social ethic and good business. The bank defends spending half a million dollars a year for services to employees and to the community as an investment. Employees have no collective bargaining arrangement, the climate being traditional or even paternalistic.

Located in the business district, workers may leave for lunch or shopping or choose the workplace cafeteria, a major service. The bank's customer services are modified for employees as reduced rate loans, free safe deposit boxes, travellers' checks and checking accounts. Employees, many of whom did not study beyond high school, learn to think of their lives in terms of credit, checking accounts, payroll deductions, savings, taxes and investments. A medical care unit, costing the bank some \$15,000 per year, encourages the worker to rely on the company for health service. The bank facilitates philanthropic contributions to general community causes, allocating three or four employees to the campaign. Adding the time of 250 solicitors, this service costs the bank about \$14,000. Membership in the company club encompasses 80 percent of the employees. Bank personnel serve on community relations committees, advisory boards on community development, give talks about consumer problems and manage a summer work program for high school students and an athletic program for youth. Environmental improvement is encouraged through the sale of "earth bonds", reduced rate loans are given for urban renewal and low income developments. Art exhibits and theater groups in the community received contributions from the bank.

The Sociological Analysis

The case studies show an affinity between the impropriated services and the type of production in which the firm is engaged, some workforce and organizational characteristics and national culture. To study, more systematically, organizational conditions under which services emerge, information was collected from a sample of 106 work sites in the Delaware Valley. An instrument guided informant interviewing about the environmental setting of each work site, its organizational structure, labor force, technology and market relations as well as about the characteristics of employee and community services.

The Array of Employee Services

The number of different individual services discovered may be multiplied by the observer's penchant for specificity. The following outline clusters them for presentation according to the institutional sphere from which they are impropriated. Several examples are given in each category.

Outline of Employee Services

Retail Market Services

Consumer Goods

(discounting on company products, company store, drug store)

Mechanical and Manual Food

Equipment and Clerical

(use of company equipment, copyist, typist)

Craft

Personal

(shoe repair, beauty shop)

Technical

(appliance repair, printing, plumbing, laundry)

Commercial

Monetary

(advances on pay, savings and loans, credit unions)

Bookkeeping

(payroll deductions, charity deductions, check cashing, tax aid)

Agency

(finding and moving, placement, tickets, travel)

Primary Group Services

Family

(retirees, child care)

Community

(charity collection, funerals, religious observances)

Education-Information Services

(library, school, publishing professional material in company journal)

Work Arrangements

Transportation

(parking, company vehicles)

Flexible work hours

Arrangements for handicapped

Leisure and Recreation Activities

(sports, parties, movies, relaxation rooms, employees association, music)

Health Services

Physical Health

(first aid, blood bank, yearly medical examination, prescriptions)

Psychological Health

(counseling, drug and alcohol treatment)

Security

Following are brief descriptions of the employee services along with conjectures about their significance for employees, their effect on industry, the reshaping of the service when it is impropriated by industry and the effect of the industrial impropriation on the usual offeror

of services in the outside institution.

Retail consumer goods services are available in three out of four firms (discounting on company products, retail concessions, general store, drugstore, foodshop). The workplace market deals in small large volume items. Shops at the plant simplify the employee's marketing while involving him as a consumer in the workplace. The employing industry, by relating to its employees as seller to buyer, engages a larger part of their lives. Managing a retail consumer goods market becomes an additional task of the purchasing, sales and personnel departments. Retail stores in the community would suffer were a significant population served at the workplace.

Mechanical food dispensing, an aspect of consumer market, is almost universal in the sampled workplaces. Continuously available food may serve as much to relieve strain as to provide nourishment. Cafeteria eating is a setting for informal social relations cutting across formal bureaucratic lines. Industry, engaging in food service, unless it is a restaurant, must especially establish facilities for food preparation and hire cafeteria personnel. The industry is changed by these facilities and special personnel. Making expenditure decisions with reference to employee needs, a household economy consideration, contrasts with the usual decisions with reference to profits. Income may decline in the external retail restaurant trade while institutional food service positions become available at the plant.

Equipment use, typist, copyist or other clerical service employee may be "rented" in the retail consumer market. Personal use of equipment at the worksite may add to attractiveness of the job and may involve only negligible cost to the firm. The impact on the community rental market is marginal since, without the access at work, the activity often would not take place. Access to equipment depends on skill but access to a typist, for other than work-related typing, depends on rank and placement in the organization. The additional work for clerical employees is absorbed in regular budgets as a trade-off for executive commitment.

Personal craft services (shoe repair, beauty shop, barber) serving the person of the employee, and technical craft services (appliance repair, plumbing, printing) performed on material possessions of the employee, are available in manufacturing firms. Sometimes they are offered against a charge to the employee. Relationships of gift exchange between the craftsman and executive are not unusual.

Payroll and accounting departments are microcosms of the retail commercial services of banks and accounting firms. Cash flow or monetary services (advances on pay, loans, credit card privileges, credit union) advance credit and so facilitate the employee's activity in a wider market. Banking services contribute to growth of finance departments and, consequently, increase their influence in company policy. As a depository for employee funds, the corporation may have access to additional investment capital. The credit union, particularly when employee operated, may foster a community of employees. Bookkeeping (payroll and charity

deductions, check cashing, tax and investment planning) services place no more or less money at the disposal of the employee but involve instructions regarding the allocation of income and expenditures. Tax and investment planning advice may increase rationality in financial management. Through such advice, the corporation mediates between employees and other commercially-oriented institutions possibly influencing investments. Commercial services, either monetary or book-keeping, are little affected by an industrial rather than a banking context. Industrial impropriation of bookkeeping, tax advising and accounting probably has but marginal influence on these services in the community.

The company acts as an agent in non-financial areas (finding homes, arranging for moving, purchasing theater and travel tickets and arranging purchase of non-company products) facilitating the employee's access to the market. Assistance in housing and moving are part of taking the nation and beyond as a labor market and of transferring executives. The firm may, with this service, deal more rationally with its labor market and its executive assignments. The employee, for his part, may consider a wider employment market when these aids are proffered. Involvement of wives in moves brings a second member of the family into contact with the firm. Corporate agent services are not competitive with moving and real estate companies but may reallocate the demand for the substantive service among selected offerors in the community. Acquiring tickets and making travel arrangements, conveniences for employees, contribute to the sophistication of the labor force as communication widens between industry and the institutions of culture. The audience for theatre and concerts is expanded, raising the cultural level of the community.

Retail market services in industry are drawn from the sphere of business and commerce, activities in which industry already has competence and which do not contrast culturally with industrial ways of life. Industry already has clerical services, marketing, payroll and financial departments, the skills needed for personal and technical craft services and the administrative apparatus for establishing agent services for employees. Primary group services, impropriated by industry from family, household, or community, on the other hand, contrast culturally with any activities ordinarily existing in a business firm. These include extending privileges, mainly recreational, of corporate life to retirees, establishing child care facilities and aiding the worker in meeting his community philanthropic obligations through fundraising at the workplace. Corporate cooperation in fundraising is a catalyst to the development of voluntary agencies in the community and retards the dependence of these agencies on government. Industrial participation in funerals of employees, or of their families, is less frequent. Death is cacophonous with the creative motif of work. Religious observances occur where employees are, more or less, religiously homogeneous. Observances typically are sacrilizations of civic occasions.

Information and education services extend the vocational library and school. A wide literary and curricular choice enhance the intellectual and recreational life of employees.

The non-vocational curricula deals with financial management and crafts among other things. Curricula, like libraries, under company auspices are influenced by company philosophy, if not by company policy. Education at the workplace may, in the short run, substitute for evening education programs sponsored by religious and fraternal orders and, in the long run, whet the appetite for education. The impropriation of education draws the employee's cultural interests into the company orbit. Publishing employees' writings in a company journal or sponsoring membership in professional organizations demonstrates corporate interest in professional activity.

Work arrangement services assist the worker in his non-productive roles in order to facilitate his productive performance. A company cafeteria functions in this way. Assistance in the journey to work, adjusting work hours with respect to the demands of other roles, and providing for handicapped workers all facilitate job performance. Transportation permits sequential performance of several roles separated by distance. The worker's social activity and, in consequence, the level of community activity are increased thereby. Industry obtains a vehicle-dependent labor force but extends the radius of its labor pool. A shuttle bus service transports urban workers to suburban industrial parks. An employee's need of a car for work rationalizes the expenditure and, as a consequence, increases the probability of his having a car available for family and recreational trips. Company vehicles for personal use or, in rare cases, a company airplane are ordinarily executive prerogatives. Flexibility in working hours does not replace a work schedule but allows a regular schedule of part time or off-hours work or an adjustment of the work day to avoid traffic hours. The handicapped are aided in their work by appropriate tables, seats, instruments or adjustments in work pace. Improprated here is an order or set of rules which originate in non-work situations but which constrain work.

The community of workers may become a recreational community engaging in sports or some form of organized congeniality. Sports, generally organized among workers of relatively equal status, are viewed by management as supporting worker morale. They are informal dramas about relations of superordination-subordination. Parties are informal dramas about pleasure oriented friendship relations. Through them employees glimpse the wider social personality of their fellows and supervisors. Sports and parties impropriate from neighborhood and family the net of social relations of leisure and recreational groups. Relaxation rooms allow the worker to "leave work" while remaining at work. Employees' associations, more like community voluntary groups than unions, are a common mechanism for organizing leisure and recreation activities as well as for sponsoring retail market and other services. Music simplifies the emotional environment at work--setting a harmonious background for tense and boring activities. Country clubs, usually reserved for executives, are a recreational canopy for the conduct of business as well as occasions for managerial socializing. Leisure-recreational services do not compete with, but supplement, a play-life in the community.

Almost every industry in the sample protects the physical health of the worker at the worksite through services impropriated from medical

organizations. More than half offer psychological health services. Dependence on the medical profession for personnel and for certification limits the completeness of the impropriation of health services. The extent to which workplace medical diagnosis is influenced by the examiner's association with management, in the light of workmen's compensation legislation, is often debated. A blood bank is a form of in-kind medical insurance. Membership in a blood bank through work may replace the worker's contribution through another association.

A security service may protect an employee's automobile in the parking lot, or chaperone women from the plant to a public transportation departure station. Security, a service relatively expensive for the firm, is not one the worker might seek elsewhere, but he might choose not to work in a dangerous place.

The Array of Community Services

Services to the community are organized according to the community institutions most directly involved. The following outline presents the categories of community services discovered in our sample along with several examples.

Outline of Community Services

General Community Affairs Services

(community relations committee, social service agency, community development committee)

Economically Supportive Services

(community service projects, consumer education, product safety education, driver education, credit information)

Services Oriented to the Environment

Natural Environment

(pollution control, environmental improvement program, recycling)

Built Environment

(low income housing, urban renewal programs)

Services Affecting Social Mobility

Skill Training

(tutorial programs, programs for drop-outs and ghetto children, leadership training, adult education, reading laboratories)

Aid to Minority Group Members

(minority employment opportunities, minority enterprise, advisory committees and counseling)

Aid to Youth

(summer employment, junior achievement programs, counseling and guidance)

Health Services

Physical Health

(community health facilities, mobile dental and health units)

Mental Health Services

(drug education, counseling)

Sports and Arts

Sports Activities

(little leagues, local team support)

Art

(exhibits, theater groups, cultural awareness programs, music appreciation programs)

Community services ordinarily entail executives participating in community agencies as representatives of their firms. The social relations of the worksite are less directly influenced than they are by employee services. Community services, impropriated at the behest of outside agencies, give industry some influence over agency policy. While the personnel department is, ordinarily, responsible for employee services, the public relations staff takes prime responsibility for community services since the latter are thought of in terms of image projection. Nearly half the firms in the sample participate in community relations and maintain a presence on committees of voluntary agencies.

Economic and cultural development of the community and an improvement in housing help attract a labor force. Companies attempt, more directly, to improve the economic behavior of members of the community by sponsoring consumer education. Beyond adjusting their own externalities, some firms work with citizen groups for pollution control, recycling materials and for general environmental improvements. Tutorial and adult education programs may affect community stratification by accelerating the upward mobility of specified populations. Minority employment opportunities and advisory counseling to minority enterprise reflect commitment to the betterment of minority groups and a response to community pressure. These services generate a climate sympathetic to business and contribute to future industrial manpower.

Physical health services for the community are an area of corporate responsibility for companies not directly involved in health. Drug education, a mental health service, emerges from the realization by corporations that the problem of drugs at the worksite must be dealt with in the wider community. Organizations support sports and athletics in the community as well as cultural activities, music theater and art and so create a cultural climate which may attract employees to the area. A few industries support political education programs as a community

service and a few engage in direct provision of social agency services.

The brevity of our treatment of community services is not commensurate with their growing significance. Constraints of time prevent a more detailed analysis here of their implications for the industry and for the community and of the conditions under which they emerge.

Retail Consumer Goods Market Services

The array of employee and community services at the workplace has been described on the previous pages. An analysis of some conditions leading industries to inappropriate five employee services, a retail consumer goods market, agent services, education-information, leisure and recreation and physical health services, in that order, follows. In each case, the degree of industrial involvement in each category of service is measured by the number of different specific services available at a workplace. This is a diversity index revealing the level of structural differentiation in that area of services. For instance, five specific retail consumer goods market services were recorded. A given firm could have none, one or up to five of them and be scored accordingly.

A market for consumer goods at the workplace is a traditional impropriation. It would be too facile to explain impropriation as industrial imperialism, as a device of extending control over more of the worker's life, though increased worker-management inter-dependence is certainly an outcome. The industry itself changes as a consequence of impropriation in ways not entirely explicit in the decision to impropriate.

Retail consumer goods services are more likely to be found in service than in manufacturing industries. Service firms are, in their productive activities, more attuned to the roles and rules of the retail market. In service industries male executives of relatively higher education monitor large numbers of female employees, face a local market consisting of individuals and have local management--all of which tend to promote services at the workplace. Manufacturing industries are more likely to be controlled from another site, workers are male operatives of modest education belonging to a union transcending the local plant. The clients of manufacturing industries tend to be other industries rather than individuals and households. This cluster of characteristics tends to militate against services at the workplace.

Seemingly paradoxically, firms located near stores offer more not fewer retail consumer goods services than those in isolated places. Some threshold number of employees is needed for a retail service to become viable. In part, this reflects the role of level of demand but, more importantly, larger sites are more structurally differentiated, more likely to have departments of production, personnel, administration and sales. The diversity, or structural differentiation, of retail consumer goods services parallels the structural differentiation of the industrial organization in general. Impropriation is regressive with respect to the process of institutional specialization. Industry, by engaging its workers in more than their work roles, extends the relation beyond the

specialized area. A retail consumer goods market in industry is a departure from the rational profit orientation of the firm (though it ultimately may increase profits) in the direction of the more need-based household economy.

A workplace organized around a community of workers is more likely to harbor a retail outlet than one in which bureaucratization and rationalization of contractual relations are in the ascendancy. Unionization, which presumes a conflict of interest and rationalization of contract, reduces the likelihood of this service. The rationalizing tendency converts services to benefits, to cash payments. Unions are also not supportive of this particular service because of its potential for becoming a "company store", a device which increases control over workers.

Publically owned manufacturing corporations have more retail goods services than do the privately owned. The public corporation tends to be larger and more structurally differentiated. Its personnel policy may call for impropriation of retail market services, a measure which is regressive with respect to specialization but recommended as a progressive step in support of personnel relations. Stability of the female labor force, as measured by a low quit rate, is associated with a diversity of retail market services. Male separation rate is unrelated to this service, perhaps because the consumer role is less salient for men.

Retail opportunities outside the plant, as in an urban setting, generate them inside the workplace. It is as if workplace services were developed competitively with those outside--an attempt to keep workers at the worksite or to affirm the community of employment. The urban setting, despite current contentions about urbanism and anonymity, supports, according to the findings of this study, greater personal interaction among workers and between members of a firm and their clientele. If retail consumer goods services reflect this more intense community of workers, the paradox that services are found at the workplace just where they are most accessible in the vicinity of the workplace dissolves.

In manufacturing industry, retail consumer goods services emerge where employees have a relatively fluid and direct relation to customers. Dealing with individual consumers puts a premium on relationships and personal needs. Putting this together with the above point about urbanism suggests that retail services in manufacturing industry respond to conditions at the boundary between the industrial community and outside institutions.

In service industries, competition for worker commitment with other community institutions is a less significant factor in predicting retail services than holding down the rate of labor turnover against pressures of non-work personal roles. A service industry is culturally disposed to impropriate a retail consumer goods market. Unlike manufacturing, privately owned service firms are more likely than publically owned to have retail market services. Privately owned firms are the more likely to be involved with clientele in the Delaware Valley. Impropriation in service industry seems more related to a welfare philosophy in which the

industry facilitates the workers' other roles, permitting them to work, rather than to a question of worker commitment. In service industries, again unlike manufacturing, suburban or rural firms, those distant from outside services are more likely to offer retail services, perhaps responding to the needs of employees by offering services where they are objectively needed.

Agent Services

An agent service is a retail market service, but rather than engaging in buying and selling, the service facilitates employee liaison with the market in its "natural" setting. The typical firm in the sample offers between two and three agent services, manufacturing and service firms differing little in this respect.

Agent services, in manufacturing industries, are associated with organizational complexity, lack of unionization and a plant location distant from retail market services. Agent services do not occur together with retail consumer goods market services but rather with those related to the world of expressive activity, to family, leisure, recreation, and physical and mental care. They develop a reservoir of supportive and expressive relations among employees.

Agent services are often arranged through employee associations and often promoted by personnel and sales departments. A sales department's telephones and arrangements image is the stuff of which agent services are made. The hierarchical complexity of the firm does not act directly in proliferating agent services but acts through horizontal complexity, the diversification of departments.

In service industries, isolation is also a factor in promoting agent services. Multinational corporations, those governed from another site and those having widely dispersed clientele, all aspects of distance, have more agent services. Employee contact with the public means fewer agent services. Again, hierarchical development of the organization without horizontal departmental structuring has little impact on the diversity of these services. A managerially oriented service industry inappropriates management as its service to employees. Agent services in service firms emerge where the managerial community is highly differentiated and rationalized but the employee community is essentially local and non-rationalized in its orientation. The image is that of an isolated body of workers in an organizationally complex setting.

Education and Information Services

All but twenty-one firms have some education-information service, the typical firm having one or two. Within manufacturing organizations, education-information services occur together with agent and leisure and recreation services--all of which facilitate access to social, especially a vocational, life outside the plant. These services are

are impropriated by large and complex organizations having a relatively stable labor force. The theme is social and cultural development of personnel, who advance through social as well as market relations.

Among service firms education-information services occur together with physical and psychological health services, a cluster reflecting help for and care of the employee. Non-profit organizations, having an institutionalized caring orientation, are most likely to impropriate education-information services, especially when they also have a stable labor force. In both types of industry, open rather than union shops and a developed employee association seem to encourage this service. Solidarity within the community of workers and between workers and managers in the firm seem to be a basis for these services involving the exchange and transmission of culture. Education-information services represent company bids for the continued loyalty of employees.

Leisure and Recreation Services

All but nine of the firms offer leisure and recreation activities. Almost half have four or more such activities. These services impropriate a network of social relations from neighborhood and friendship groups. Manufacturing industries develop these services when they are large, multinational, hierarchically and horizontally complex and when they include more diverse types of employees, a stable labor force and an employees association. They increase with the proportion of male employees. Firms with many female workers have less diverse leisure and recreational programs because females socialize with friends and neighbors in preference to workmates. The isolated work community, in forcing the acceptance of workmates as playmates, has a more diverse leisure-recreation program.

The diversity of services in service industries rests on a stable internal worker community of non-salaried females of lower education. An employees' association abets the development as does a high male quit rate. These services maintain social congeniality, as in office receptions, in the face of high male executive turnover--perhaps asserting through sociability a stability of relations transcending the workplace.

Physical Health Services

All but two firms have some physical health services, with the typical one having three or four. A higher diversity of health services in manufacturing than in service industries is a response to the problem of employee safety. Larger concentrations of employees enjoy more complex health services in both types of industry. In relatively socially self contained worksites, as indicated by workers lunching at the site, medical services are more frequent. Physical health services express caring in a formal, well bounded way, a personal expression through impersonal rules. Health services are also used for personnel selection. They increase where the labor force is unstable suggesting that they may have a "healing" function.

In service industries, where worker safety is not an issue, the character of physical health services is set by the character of a site-bound female labor force. Service industries with large numbers of temporary female help diversify health care. These are likely to be insurance companies, banks, hospitals or social agencies, some of which merely extend their client services. In general service companies increase their health facilities in response to complexity of organizational structure more than to sheer numbers. Organizational structure and labor force characteristics, both factors internal to the firms, seem to be determinants of physical health services.

The Economic Analysis

Economic Models for the Analysis of Services

To this point, services have been treated as social relational systems embedded in the larger industrial social system. Labor and management more often approach services from an economic perspective. A modified theory of labor supply and demand is needed to explicitly incorporate the decision variables of employees, such as quit rate and wages, and employers, such as level and type of services. Services at the workplace affect efficiency in time allocation. Alternating sequences of business and pleasure may spoil both. The value of leisure to the individual may differ according to where it is consumed, at home or at work, and when it is consumed, the time of day. Orthodox theory holds that work reduces utility, and leisure increases utility. In fact, for some people, work may augment utility. Leisure at different times of day or at different locations has a different combination of characteristics and therefore different utilities. The profit maximizing firm aims to balance the advantages of a low turnover rate against the cost of higher real wages that maintain labor force stability. The research objective is, in part, to measure the worker response to "various packages" of real wage bundles, consisting of services, other non-pecuniary benefits, and direct pecuniary benefits. The economic characteristics of firms likely to provide services at the workplace may be analyzed (a predictive non-structural model). The profit-maximization of the firm and utility-maximization for the employee will determine the diversity of services (in an economic structural model).

Empirical Results

Seven employee services, treated as dependent variables, included retail services, clerical, medical, craft, education-information, transportation and security. (Slightly differing specific services were clustered in these categories than were clustered in the sociological analysis.) Urbanized work settings are more likely to provide these employee services. Wages are a significant explanatory variable for medical, craft and transportation services. In non-manufacturing firms, age composition of the labor force is an explanatory variable, but location of the work site is not. Variables that explain the behavior of non-manufacturing firms do not correlate well with those explaining the

behavior of manufacturing firms.

Manufacturing are less likely than service firms to have their officers participate in community affairs groups and to provide family and health services on the community level. Manufacturing firms are more likely to provide consumer services such as credit information and consumer education. This suggests that manufacturing firms are relatively aggressive in developing their own product market. Work sites having a relatively young labor force are more likely to offer community services in support of minority groups.

The economic variables in this study predict employee services better than they do community services because employee services are more directly linked economically to labor market behavior. Wage rates are negatively associated with four of the five service categories. At the same time, levels of expenditure for employee oriented services are negatively related to the money wage rate. These findings suggest that services are alternatives to cash benefits. This is a potent result, given that the wage data for the worksites are, to some extent, a measure of workplace skill mixes and wage scales as well as of the relative attractiveness of the worksite. The relationships between quit rate and employee oriented services are less certain. Male employee quit rates are frequently negatively related to expenditures for employee services. Female quit rates typically do not follow the theoretical expectations. Male and female sub-markets for employment differ.

In sum, the economic analysis shows that

- (1) Urbanized work settings are more likely to provide employee services.
- (2) Wage variables explain some but not other classes of services.
- (3) The behavior of manufacturing and non-manufacturing firms in terms of providing services is different.
- (4) A strong negative relationship exists between the level of expenditures for employee services and the money wage rate.

A Practical View of the Needs of the Manager and the Workforce

Some services are indigenous to the operation of a plant. A plant in a rural area expects workers to furnish themselves with an automobile and the plant to provide parking space. Eventually, as property values around the plant increase, the management will encroach more and more on the parking area to command rental revenue. Other services are auxiliary, independent of the work and designed to increase the living effectiveness of the workforce. /

The American worker has, by and large, preferred to take his earnings in cash and purchase services in the open market. The economic package developed through collective bargaining is generally divided

between cash wage and fringe benefit increments. Together they are calculated as the cost of the bargain. The worker's union in partnership with the firm may organize and administer group purchase of travel and health insurance.

The company store and company homes of isolated communities were first initiated by management to provide services in these isolated areas. They were rapidly converted into managerial instruments of control and power over the workforce. The private automobile, along with unionization, has, by and large, liquidated this practice. The cooperative grocery store begins with unpaid volunteers who are replaced by paid employees in the course of institutionalization. The service has seldom survived the initial enthusiasm. Union financed cooperative housing has been a success though housing cooperatives of the unions seldom offer a greater location advantage over privately financed housing. The personnel director of the non-union enterprise will, at times, anticipate union demands and make these services available to his employees sooner than they are to the union company. Thus, the union attitude influences both the union and non-union employment site. Given the growing numbers of young mothers entering the labor force, the greatest future push in services at the workplace will be in child care. Company day care centers will not, however, tend to be company owned. As more women enter labor unions, demands for child care facilities will emerge as a more and more insistent collective bargaining demand. A model experiment in the child care area is needed. It will have economic payoff for employers in a society committed to "full employment" by giving the employer access to a hitherto unavailable stable labor force and a payoff to the community in improved care for its youngest citizens.

THE WORKPLACE REACHES OUT:
A STUDY OF ORGANIZATIONAL IMPROPRIATION

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Within a social group the ways in which labour or other work may be carried on typically may be classified in the following way: (1) technically, according to the way in which the services of a plurality of cooperating individuals are divided up and combined, with each other and with the non-human means of production, to carry out the technical procedures of production; (2) socially. In the first place, forms of labour may vary according to whether particular services do or do not fall within the jurisdiction of autocephalous and autonomous economic units, and according to the economic character of these units. Closely connected with this is variation according to the modes and extent to which the various services, the non-human means of production, and opportunities for economic profit, used as sources of profit or as means of acquisition, are or are not appropriated. These factors determine the mode of occupational differentiation, a social phenomenon, and the organization of the market, an economic phenomenon.

Max Weber, 1913

The millions of people who clock in each day at thousands of workplaces are entering what some have called the postindustrial era. They face new types of technology that force new definitions of work and affect the very shape of the organization as formerly useful skills become irrelevant and new ways have to be found to make the cost/benefit ratios come out favorably...Workers caught in this crunch are reacting in various ways which point to worklife as a rapidly emerging social problem, and which indicate that problems at work have effects far beyond the workplace itself. We can no longer console ourselves with the old bromide that "leisure" activities can serve as antidotes to the negative components of work roles.

Upjohn Institute for
Employment Research,
1972

STAFF

Samuel Z. Klausner, Ed.D., Ph.D., Principal Investigator
Robert H. Edelstein, Ph.D., Co-Principal Investigator
William Gomberg, Ph.D., Co-Principal Investigator

Joel E. Gerstl, Ph.D., Project Director (September 1972-February 1973)
Yoav Santo, M.A., Project Coordinator (May 1973-January 1974)

Research

Albert G. Crawford, M.A.
John Dyble, M.A.
Rela G. Monson, Ph.D.
Ross J. Koppel, M.A.
Walter G. Pascal, M.A.
Joseph R. Piasecki, B.A.

Gail Bassok
Carol Graeber, B.A.
Shirley B. Pascal, B.A.

Administration

Madeleine S. Klausner
Gail W. Donner
Andrea Megela

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PREFACE

This is a study of an "underground" within industry. Conventional wisdom believes a factory and an office are places for work. Yet, we have found services at the workplace which mirror outside commercial, familial, recreational and medical life under the nose of and abetted by management. This movement is so contrary to our industrial ideology that management almost denies seeing it. Analysis suggests, though, that specialized efficient production grows from this "underground" and will do so as long as men are the producers.

The names of the authors following each section or chapter show this report to be a social product. The productivity of the authors also rests on an "underground". All of the authors interviewed informants at the workplaces but Yoav Santo and Joseph Piasecki carried the heaviest responsibility. They were supported in interviewing by Albert G. Crawford, Carol Graeber, Rela G. Monson, Shirley B. Pascal and Walter G. Pascal. Shirley B. Pascal developed the bibliography bound in Volume II. Yoav Santo served as project coordinator for most of the time. Gail W. Donner administered the field while Madeleine S. Klausner provided fiscal and contractual management for the project. John Dyble did much of the data processing and Gail Bassok and Andrea Megela assumed clerical responsibilities. It is gratifying to acknowledge support of this "underground".

The study was conducted under a grant from the Office of Manpower Research and Evaluation of the Department of Labor. Credit for the original conception of this study goes to the monitors of the study, Robert Greene and Linda Kontnier. We appreciate their faith in entrusting us to nurture their idea. A running dialogue with them and with Hans Spiegel, a fellow researcher of these events, shaped the project intellectually.

Philadelphia
January, 1974

Samuel Z. Klausner

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THE DIVISION OF LABOR AND SERVICES
AT THE WORKPLACE: INTRODUCTION

Samuel Z. Klausner

Labor policy uses the term "worker alienation" to refer to lack of labor commitment. The concept is invoked to account for disrupted production schedules, a competitive disadvantage of American industry in world markets and blue collar political protests. Authorities respond with plans for "job enrichment", a change at the bench, and "worker participation", a change in plant governance. Assumedly, these amendments to practice will increase worker satisfaction and, in consequence, labor commitment.

The observations are firm. Strikes occur. Production schedules are disrupted and the international balance of payments has not been consistently favorable to the United States. Yet, alienation, in this psychological sense, has not been established as their root cause. Nevertheless, the policy analyst, convinced otherwise, seeks to account for alienation as part of the diagnosis.

One commonly cited source of alienation is the segregation of occupational from other life activities of the worker, an hypothesis connecting alienation and role segregation. With this hypothesis in mind the policy makers observe the introduction of "services at the workplace". Firms have, in the past, provided retail stores for employee shopping, non-vocational educational programs and child care among other "services". Presumably, by thus "desegregating" their role and permitting workers to meet some obligations of their non-occupational roles while at work, alienation will decrease and strikes, disrupted production schedules and the balance of payments will become less problematic.

It is tempting to view the emergence of services at the workplace from the perspective of individual workers and management planning. This could lead us, however, into a psychologistic fallacy. Alienation, lack of commitment to the work role, does have psychological components. The propensity to strike does have roots in individual motivation. Yet, an explanation for widespread social and economic phenomena might better be sought in widespread social and economic conditions. Indeed, the response of industry in establishing "services" is not an individual but an organizational act.

It is also tempting to isolate the "causes" of industrial disturbances within this industrial system. An implied remedy would then be an adjustment in industrial relations. However, disturbances within the factory may reveal, from its perspective, the social malaise which is also revealed in family problems, campus protests, underground paramilitary activities, political corruption, economic dislocations and inter-racial strife. This does not gainsay that the root causes of

industrial tensions are in relations of production, as suggested by Marx, and that the other social difficulties result from an "alienation" (now in an objective sense) of the worker from the products of his labor and the conversion of his labor to a "commodity". Whatever the ultimate cause, problems do occur at the workplace. At least, some proximate cause must be found there.

Aside from any commitment to the validity of the above line of argument, technical and social-institutional division of labor has generated a cleavage among the workers' roles. Prior to the emergence of the modern factory system, family, work, community, commercial, religious and healing activities commingled. In much of Europe, the family was the significant productive unit along with its communal extension in the craftsmen's guilds. The factory system emerged as one, among many, institutional specializations. Religion and state, economy and family, among others, were evolving their own normative orders and organizational loci at the same time. The factory, as a specialized production unit, was socially and spatially separated from the home. Members of a number of families met there to work with equipment and materials owned by another person or group, such as a joint stock company, that specialized in managerial functions. The firm developed a "being" of its own--symbolized in its corporate charter and in its internal accounting books.

The modern corporation descends from this simple entrepreneurial firm. To this situation, the worker brings his labor and from it he takes monetary compensation. These wages betoken his rights in the world's resources of goods and services which he distributes to his family and to others whom he is committed to sustain. As the principal source of rights in resources, this occupational relationship becomes strategic in shaping the life of the worker--the nature of the other relationships in which he engages and, as a consequence, even the nature of the thoughts and feelings he develops to understand these relationships.

The situation of work does not, however, gain imperial control of the whole life of the worker--as some distant, isolated master. The rationalization of productive technology and the bureaucratization of management, on the one hand, and "formally free" labor guaranteed by citizen rights, on the other, limit the domination of the worker's life by the situation of work.

The extent to which work dominates other roles or obstructs the enactment of other roles varies with the nature of the occupation. A worksite socially or geographically distant from the home, such as in the maritime and mining industries and in the military, has an overriding influence in the worker's life. The professions may leave the worker at the hearth but require so heavy a socio-cultural commitment that he has little time to meet the demands of other roles. In the typical manufacturing situation, the worker tends to be nearly out of contact with his family, religious community, as well as with his role as a consumer, during working hours.

The institutional separation of work from other roles has proceeded slowly and incrementally. A complete empirical separation seems rare. Indeed, the completely rationalized, segregated work situation could not function. Co-workers must trust one another and so maintain some traditional bonds. Managerial theory allows that some personal interest in workers characterizes the good executive and is necessary for morale. A purely interest determined work situation--always exposed to competing bargains--could hardly be a stable one. In Durkheim's language, the bonds of organic solidarity, of the division of labor, are set against an undercurrent of mechanical solidarity. However, at advanced stages of the division of labor, that undercurrent becomes a transcending tie. Divided labor is bound together in a functioning society through such transcending ties. One type of integrative tie is that established under the aegis of the workplace--here called "services at the workplace".

The first part of this report is a series of case studies of services at the workplace, qualitative surveys which formed the basis for a more systematic analysis of the array of services to employees and to the community. The case studies examine two professions, two countries and a special worker population and then observe services in the context of five industries. On the basis of these case studies, a method was devised for analyzing services in a more quantitative manner. The data were gathered and interpreted to reveal the social and economic conditions under which services emerge. The report concludes with a statement on the future of services in the light of current political and economic considerations governing labor and management relations in American industry.

The second part of this report, bound as Volume II, offers a bibliography of general studies on the sociology of work and more specific items on the several services at the workplace. This is followed by four appendices on method, the first describing the setting in the Delaware Valley in which the study was accomplished and the manner in which the sample was drawn; the second noting the method by which we secured cooperation of the sampled firms; the third, developing the logic of the research concepts and the indicators selected for them and, finally, a critique of informant interviewing as a data gathering method. This second volume concludes with a frequency distribution, the "marginals", for each of the items in the research instrument which, in a sense, is a descriptive research report all by itself.

CASE STUDIES

CHAPTER I

MODELS OF SERVICES

Paternalistic and Fraternalistic Models

Joel E. Gerstl

Occupational sociologists have offered rich descriptions of work-life behavior. They have been less likely than industrial sociologists to stop at the factory gate. (See, for example, Berger, 1960; Hughes, 1971; Krause, 1971; Whyte, 1956). Yet, even with their explicit attention to family life, community and leisure patterns of workers, insufficient attention is given to the links between work and non-work roles. De Grazia (1962) and Wilensky (1960) have attempted to bridge this gap. The occupational literature on situations in which work assumes an extraordinary force in shaping lives offers good material on services at the workplace. Work involving exceptional schedules, isolated locales or carried out within total institutions is associated with an increased number of life-support activities. Seafaring and military life are examples selected for this report in this area. In both cases the occupation facilitates a distinct occupational culture and life style. The wide range of services at these workplaces compensates for separation from the "normal" services elsewhere available. The services also function to support institutionalized patterns of status differentiation and control of the workplace over the lives of the workers.

Services may be offered differentially according to rank and function in the same work setting. Professional work, in most contexts, is seen as so intrinsically rewarding that it does not seem to warrant or require the cushions of service rewards. In contrast, it is striking that executives receive abundant workplace services. Specific services for the executive not offered to lower level employees tend to strengthen hierarchical status differences. With women increasingly participating in the labor force, but with virtually no reallocation of familial responsibilities, problems of role conflict and overload become endemic. These women workers pose distinctive issues with regard to services available. Where industry needs to attract women workers, it must be increasingly concerned with their service requirements, e.g., to retain their nursing staffs hospitals have been instrumental in the development of day care facilities.

Special service requirements of minority groups may also be considered. Usually defined in terms of social responsibilities of business, special programs in this realm tend to emphasize training and education. (See Nowlan and Shayon, 1972.)

Historically, for blue-collar workers, services seem to be rooted in three principal sources. The first is the company store of the nineteenth century, initially aimed at simply providing hard-to-get products

and eventually attaining monopoly positions. The tenets of welfare capitalism that followed in the wake of World War I are a second source. A few pioneer firms introduced services and benefits as mechanisms for developing work loyalty and avoiding unionization. A third source of services is in the enlarging of the area of collective bargaining beyond the immediate wage and hour nexus. The needle trade unions, pioneers in this respect, became almost as "pater familias" to newly arrived immigrants. The ILGWU innovated health services, recreation and vacation facilities and night school classes. Other unions, stimulated by the limitations imposed by the War Labor Board regarding wage increases, built upon the foundation provided by the needle trade union.

A few words about historical antecedents of the modern services will help place them in perspective--particularly since services assume distinctive forms under the industrial system. Services have been part of ancillary activities of corporate organizations since the beginnings of the industrial revolution. These activities were, and are, designed by corporate officers to enhance the corporation's position in the society, to influence the corporate relationship with the workers, the immediate locale and the political system. The major current forms of auxiliary workplace activities were crystallized in the Middle Ages. Two models of work organization with respective modes of non-work programs, the paternalistic and fraternalistic, became the pattern for later industrial development.

Paternalism was exemplified by the lord-serf relationship, a form of association to be reverently cited by captains of industry. The lord, or later the owner, was required to provide many of the necessities for the existence and continued work of the employees. In exchange, he would receive loyalty, a life of hard work and, generally, options on the worker's offspring. This was, of course, modified in subsequent generations, but the philosophy remained intact.

Later advocates of paternalism sometimes turned this philosophy into a basis for exploitation. They found a profit in the non-industrial endeavors. "The school could train manual arts and discipline, the church could preach a love of authority, docility and hard work, while the police could become spies, screening new workers and rooting out malcontents" (Peterson, 1973, p. 31). Corporate enterprise became the major form of work organization in approximately the eighteenth century. Since industrial development was affecting all aspects of life, corporations became increasingly involved with other than work activities. With more people moving to industrial centers and company towns, paternalism helped to transform peasants into an urban working class (Moore, 1951).

Fraternalism characterizes cooperative associations of workers for the pursuit of political, economic or social goals. Originally these took the form of craft guilds. Later counterparts are seen in labor unions, political organizations, worker funded schools and saving societies. While most of these groups were organized around specific requirements of workers, some had broader ideological goals. Fraternalism was both a call for worker organization and an underpinning for larger class activities.

In the paternalistic model, the employer initiated benefits and controlled the services; in the fraternalistic model, these functions were effected by the employees. Peterson suggests that paternalism and fraternalism may be differentially associated with specific forms of technology (1973, p. 31). Accordingly, machine-tending technologies, as in the textile mills, have predominantly paternalistic orientations, whereas the craft industries, where skilled labor is the rule, develop fraternalistic associations.

To return to the present, we find that "strictly work" tasks are accompanied by a rich variety of "other" activities. The morning ritual of getting started, the numerous chats, breaks and early preparation for leaving work are but a few examples. The division of labor on largely rational and technical criteria may impede the worker's activity in non-work roles, a situation which some refer to as alienating and dehumanizing. Auxiliary activity may be perceived as a device to improve morale. Non-work auxiliary activities are considered a way of incorporating additional psychological and social meanings in work. The shift from line to group production, for example, as recently introduced by Volvo, induces the development of auxiliary activities by permitting more informal social interactions at work. This is a nascent form of auxiliary activities which coordinate work with other social roles and assist the employee in his non-work social life.

In addition to employee oriented auxiliary activities, a corporation may support activities in the community. These may be induced by political pressure, normative expectations or economic considerations of labor and consumer markets, or by a sense of responsibility, of noblesse oblige. Minority group training for employment, air pollution control and slum rehabilitation are common examples.

The whole array of auxiliary activities include those oriented toward the work process per se, i.e., those complementary to the performance of the instrumental tasks. Services at the workplace of concern here are identified by their orientation toward the interplay of work with other social roles and institutions, e.g., the relation of a worker to his/her family, as affected by the provision of day care; the position of the individual in the status hierarchy as influenced by educational subsidies. Services may be considered a portion, a sub-stratum, of the non-work activities and must be conceptually isolated from the larger aggregate of activities designed to improve work as an individual role and as an institution.

The disjunction in the life of the worker introduced by the technical division of labor is both the root of services and the key to their wide institutional impact. Occupational participation limits the worker's participation in his family and other institutions. Services as links to these other roles cancel some of the effects of distance and time. More significantly, perhaps, an occupation engages the economic aspect of a person while rejecting concern with his other social relations. The self is evaluated as a source of labor, consisting of skills and time, a commodity to be exchanged for a wage. The skill commodity

market is relatively, though not entirely, indifferent to the participation of the person in other settings. While income compensates laborers for disutilities related to production, services compensate them for deprivations deriving from the isolating character of modern occupations. In so doing, services integrate the activities of otherwise sundered institutions.

Productive effort is rewarded in cash but services, which meet requirements not easily satisfied by income, are payments in kind. Payments in kind may be economically regressive with respect to worker performance. Most importantly, they introduce into the workplace social activities, even a social organization, not designed to affect production, but which may, in reality, help or hinder production. They may become leverage for control of the industrial system.

The decision to admit services, the operation of services and the use of services are all subject to control by management, by workers, through internal shop representatives or through unions, or by outside agencies acting, for instance, as concessionaires. Worker dependence upon services may underlie control of workers. On the other hand, workers may use services to exert a demand upon management by requiring managerial support of services as a provision in their work contracts. The degree of control of workers depends, in part, on whether their participation in services is voluntary or mandatory. Mandatory use may result from the nature of the situation, such as that on shipboard, where workers have no option but to eat in the management-supplied mess. Similarly, companies may require, by rule, that their workers buy products in their facility, an extension of the company store.

The intrinsic accompaniments of services have an almost inescapable impact on management. The demands of running cafeterias, medical services or day care, and the introduction of the necessary new personnel, change the picture of life within the plant by introducing activities not ordinarily associated directly with the production process. These activities draw wider social involvements after them. A day care center may implicate the firm in the hiring of teachers and in government monitoring of the quality of that day care.

The offering of services impacts on the service itself as an activity. In place of many individual purchase decisions, a few firms buy collectively. A reduced number of purchasers in the commodity market may influence prices in that market. Insofar as services become an element in workers' employment decisions, they affect the labor market. Further, the offering of services may expand the labor market. Day care, for instance, enlarges the pool of female workers by releasing them from home duties resulting in a reduction of the bargaining power of workers at that level.

Activities proper to other institutions change in character when offered in the context of the industrial firm. For instance, when cultural and educational services are offered within the industrial situation they tend to be drawn in vocational-technical directions. The

incorporation of vocational education into industry may make for further specialization of vocational education and remove it from the general educational system. When day care services are offered within industry, day care personnel may become more responsive to management than to the parents of their charges. This may promote the bureaucratization and professionalization of day care teachers.

At the same time, the workers' relations to the other institutions, to which services may link them, may be affected. Day care influences the life of the woman in relation to her home and company sponsored vacation resorts affect the social meaning of recreation, the selection of people with whom one vacations.

The discussion has tacitly assumed services offered by a single plant to a single group of workers. A firm exists within a network of firms, and the industrial network, in turn, exists within a wider community. If the need for the services derives from a disutility which workers suffer by their being sundered from other life activities, a lack of services implies that workers are providing a hidden subvention to production. Perhaps, as in the case in which workers suffer physical disabilities, are injured or become ill due to workplace conditions, the cost of services should be internalized as a cost of production.

A network of firms relating to a single labor market might offer some services through a collective of industries, grouped together as in a marketing consortium or a Chamber of Commerce.

Finally, some services which may not be offered conveniently to the individual worker may be offered as a public good. The federal government, for instance, supports schools near Army bases, on the grounds that the additional children of military personnel constitute an imposition on the local taxpayers.

The types of services offered depend upon (1) the special characteristics of the occupation, particularly the exigencies deriving from the form of technology, (2) the national culture, the ideology of work and the extent to which work and other social roles have been differentiated, (3) the character of the work force in that particular ethnic or religious groups or handicapped workers may have special requirements. Women workers are a particular case here. (4) The structure and policies of specific organizations, even within the same country and the same industry, will influence the nature of services at the workplace. This part of the report will offer qualitative discussions of each of these four considerations illustrating with case studies. This in depth look at particular issues will form a basis for the following more systematic, quantitative analyses.

Seafaring and the military will be taken as illustrations of occupations in which the worker is removed from his usual setting and becomes almost entirely dependent on the worksite for auxiliary services. The situation of work in two nations, Japan and Israel, will then be sketched. A note on special problems of the female labor force follows. The

section concludes, in the following chapter, with case studies of five organizational settings, a world trade corporation, a hospital, a bank, an industrial site and the headquarters of an international conglomerate.

Services and the Character of Occupations

Seafaring--Yoav Santo

Groups for work and social activity, which operate for limited time periods in relative isolation, cut off from the remainder of society, have not been made obsolete by modern technology. Examples of such groups to be found today are crews manning off-shore oil rigs, astronauts, research teams investigating the possibilities of living on the sea bed and army units at isolated outposts such as missile bases or early warning stations.

The above units are relatively new. Crews of military or merchant ships and territorial explorers are more established groupings of similar nature. These groups carry their work and social life within a confined boundary isolated from the remainder of society. The unique requirements imposed on the worker in such settings makes for incompatibility between his occupational role and other social capacities and so these may be termed the "incompatible occupations." The captain is boss, policeman and judge embodied in one role. His total control over the lives of his crew makes him responsible also for the form of life they conduct outside working hours (Moreby, 1968). As representative of the shipping company, he is accountable for the standard of living on board and the leisure activity of the crew in ports.

Compensatory mechanisms arise in association with such occupations designed to ease the workers' lives. Services emerge to perform such a function. Seafaring, for instance, manifests such mechanisms. The isolation of the ship at sea from the wider society generates an integration of social and occupational roles (Trist, 1968). The company provides a wide range of services: food, housing, laundry, duty free shops, money exchange systems and recreational facilities such as day rooms, hobby rooms and movies. The acute manpower shortage in recent years in this industry influenced shipping companies to establish seamen's clubs in major ports (Hohman, 1959). These clubs serve as a leisure guide to the seafarer and indirectly promote a feeling of occupational community.

The extent of services actually provided on board varies according to the national culture and company policies. However, there are, in fact, only minor variations (Richardson, 1956). Services on board, in addition to making life easier, contribute to the maintenance of a differentiated status system. Special food, room and laundry services given exclusively to officers reinforce the cleavage between them and the non-commissioned ranks. While ordinarily rank can be expressed both within

and without the workplace, with the non-occupational settings limited on board, the impact of services on status differentiation is more pervasive.

The shipping company, as the main link between the seafarer and his homeport social ties, also acts as a social agency facilitating leisure activities and various cultural and educational programs for the seafarers' families. In some cases, companies offer financial services to families, including loans, allowances and assistance in housing.

In sum, the incompatibility of an occupation with other roles may be associated with services as a compensatory mechanism. Services at the workplace respond to restricted access to outside services and to a limited interaction net. Some of these services are designed to counter the notion of captivity but do, in effect, extend the influence of the occupation into other spheres of the life of the seafarer and his family.

The Military --Ross Koppel

The military, by tradition and often by necessity, has encompassed the totality of its workers' lives. Morris Janowitz (1960, p. 175) writes, "The military profession is more than occupation; it is a complete style of life ... The separation between place of work and place of residence, characteristic of urban occupations, is absent." For much of its history, in America especially, the military has been socially, politically and physically separate from the rest of the population. Cultural expectations of tolerated behavior, of relative independence from the rest of society and of political awareness and action are affected by the contemporary societal and governmental philosophies. Depending, of course, on the type of service and assignment--sea duty, battlefield, foreign country base or home country stable post--the necessities of total involvement vary accordingly. Civilian controlled and volunteer armies, of course, are less radically separated from other social institutions.

Services thus range from facilities for the birth of a member's child to arrangements for a member's burial. In between, the military supplies education for its workers' dependents as well as non-vocational education for enlisted men and flag rank officers. Also provided are commissaries, medical aid, food, recreation, religious counseling, infant nurseries, teenage clubs, social service agencies, country clubs, wardrobes, housing and travel.

Ranking officers move by helicopters, private boats and limousines. They may be housed in mansions, with enlisted men as servants. Although paid little compared to their counterparts in industry or finance, ranking officers command prestige and power few men possess. Further, in contradiction to the military's precepts of meritocracy, officers often pass on career advantages to their sons if they also enter the military. Thus, the military, because it must, and because it is traditional, relies heavily on other than monetary remuneration for its employees.

Moreover, in a strictly hierarchical social organization, where money is not the prime reinforcement, differential access to services is a key in the status and reward system. The availability also aids in recruiting and maintaining personnel. As in any organization, personnel turnover and inept workers are very costly. An all-volunteer army increases the necessity of creating an attractive military life. Services will undoubtedly be one of the attractions.

Further, the exigencies of war, and of martial activity in general, dictate the existence of a group that can operate somewhat independently of the larger society. Thus, if we may consider services as the provision of functional necessities to a "captive" market, then "services" in the military are often the only available life support activity for tens of thousands of men and their dependents.

Policymakers may be motivated to supply services to the armed forces for broad political purposes. After wars and at times of social crisis, the government may find it expedient to increase the ancillary services given to soldiers and veterans to reorient the society and economy to a peacetime basis and, occasionally, to placate a hostile populace.

Services and National Culture

Japan--Ross Koppel

The integration of the workplace with the employee's life and family is a hallmark of Japanese industrial relations. Once embraced by a large industrial firm, the worker can look forward to lifetime job security, medical and dental care, subsidized transportation for his journey to work (if necessary), lunch at one tenth its actual cost, company vacations with fellow workers, company resorts by the sea or in the mountains for personal trips, company libraries, parks, clubs, baths (spas), discount stores offering substantial savings on all but food items and a variety of company-related social welfare agencies. Further, the new employee, usually a recent high school or college graduate, may live in the company dormitory, eat subsidized meals, play in the company game room and on the company sports facilities, attend company-paid-for entertainment and host a visit from his parents at company expense in company accommodations. Upon marrying, the worker customarily receives a gift equal to some one third of his monthly wage, the use of a company owned and rent-subsidized home, financial aid if ill, a further reduction at the company store, 75 percent subsidy of his wife's medical bills and possibly an increase in pay to compensate for the additional costs of a spouse. Children of workers become eligible for additional benefits, including college tuition. The worker also enjoys less tangible amenities from association with a large firm. He expresses his sense of belonging by proudly wearing the company insignia and singing the company anthem at the start of each workday or whenever his spirits may be low (Abegglen, 1958).

The causes of this service orientation are multifaceted. Most writers, however, point to maintenance of a set of historically defined hierarchical relationships and values despite rapid modernization. Sumiya Mikio (1967) suggests that Japanese industrial leaders consciously chose to maintain certain features of their nation's traditional social structure in a belief that this would preserve communal stability. The norms governing reciprocal obligations in Japanese family structure could be generalized through an exchange of services in an industrial system, a situation which would be more difficult in a Western rational-legal compensation system. Further, differential access to services can be used in conjunction with any wage system to reward favored employees without altering the standard remuneration structure.

Karsh and Cole (1968) note that industry-provided services, combined with "lifetime" employment at a single firm, was an adaptation of Japanese industries to a severe labor shortage. This also makes the Japanese factory commitment to retraining and educational institutions quite sensible. An employee is hired, not for one job, but for the many jobs he will be performing throughout his life. In this context, one can better understand the Japanese nenko wage system, in which the employee is paid on the basis of seniority, original educational attainment and family need. The worker is evaluated on his loyalty to the firm and his ability to relate harmoniously with his colleagues. His technical performance is not really the determinant of his wage rate or increases, and competition between firms is mitigated by the relatively universal acceptance of this wage policy.

Tsuchiya Takao (1966a; 1966b) finds a source of Japan's worker-owner relations in an aspect of Confucian ideology. A concern with humanity, justice, harmony, etiquette and faith, he claims, was a prime motivation for the business "ethic" developed by the Zaibatsu (Japan's industrial leaders). Confucianism, according to Takao (1966b), induced such industrial entrepreneurs as Kimpura Meizen and Sakuma Teichi to introduce several labor reforms and benefits for their employees and, later, for the communities in which their plants were located. Sakuma, especially, was instrumental in the passage of important labor laws and in the introduction of services for workers. Tsuchiya, unfortunately, confuses his argument in noting that the Samurai, a group most receptive to Christianity--a religion he considers to be associated with rational, bureaucratic, scientific and technologically advanced thought--provided a disproportionately large number of the country's business leaders.

Takeshi Ishida (1971) claims that the paternalistic business pattern is consciously designed to make the workers feel that the factory is a familial setting. This, he suggests, is the rationale for the intense concern with loyalty and harmony found in the Japanese factory. Abegglen (1958) also reasons that in compensating the workers for their needs rather than capabilities, the factory becomes more like a family and involved with the personal and actual family life of the workers. Japan's very recent industrialization, he writes, did not allow sufficient time to erase the association with feudal rights and obligations which included the provision of services by the feudal chief.

The provision of services for the employees may be utilized as a group activity (e.g., company's division vacations, company sports facilities, etc.). This is but one aspect of the Japanese emphasis on group identification and group life described by a number of students of Japanese culture (e.g., Yoshino, 1968; Bellah, 1957; Plath, 1964; Marsh and Mannari, 1972). The ringi decision system, stressing cooperation, harmony and consensus (Yoshino, 1968), is an example of cohort cooperation and group oriented values illustrating the framework of collective action within which services at the workplace operate. In the ringi system, a petition or memorandum to the executive of the corporation is first circulated among all middle level managers for additional recommendations and suggestions thus spreading decision responsibility among all members of a department.

Services at the workplace are a reflection of the Japanese social system supporting identification of workers with their company. They do maintain a paternalistic involvement of employers with the worker and his family. The offering of services is consistent with the Confucian ideals of harmony, justice, etiquette and ethics, and their provision is conducive to the values of group activity and group identification. Further, in increasing company loyalty and company identification, they reduce personnel turnover.

Japanese businesses have also found manifest utility for their service programs. Employees who appear to management as deserving advancement may receive larger (subsidized) apartments or homes without an increase in rent. Services, thus, may substitute for an elaborate wage system, not changing the salary levels but circumventing the strict seniority-education system. Similarly, the informal services offer another mechanism for control. A manager at a textile mill (Abegglen, 1958) is traditionally obliged to find a groom for a female employee before she becomes thirty. Generally, where this practice is found, a manager will choose someone from the firm, increasing both partners' ties with the plant. Management has found that, in addition to attracting new and better workers, the offering, and use, of services can be an informal indicator of employee commitment. Workers are expected to attend company-provided resorts, parties, etc. Failure to use any company facilities would not be a prudent move. One 1968 study (reported in Ishida, 1971) asked workers what they would do if just before a planned family trip they were informed of a company outing on the same day. The response was almost equally divided between work and family; 45 percent would follow the original plans and go with their families, but 44 percent would cancel the plans and go on the company outing. The size of this latter group is particularly significant if one considers the very strong familial ties of the Japanese (Marsh and Mannari, 1972; Ishida, 1971). Of course, the corporations and the employees do not view such ancillary company functions as coercive. Management and labor sanction these additional activities of the corporation as another area for cooperation and harmony between the two groups. The lack of obvious monetary exchange, combined with an opportunity for face-to-face interaction, is very appealing to the Japanese factory owners and workers.

Workplace services are also affected by the Japanese labor unions' relations with corporate management. The cultural mandate for harmonious relations and the norms of group cooperation in addition to a joint concern for national economic competition has tended to emphasize the role of auxiliary corporate activity and moderate financial remuneration. Almost all Japanese labor unionism is based on the one shop, or enterprise, union. There is very little collective labor association activity among firms. Collective bargaining is almost always on the factory level and federations of unions, when present, are loosely structured (Ishida, 1971; Japanese Institute of Labor, 1972). Further, Japanese unions almost always cut across occupational categories. Both blue and white collar workers belong to the same union and are represented in the same collective bargaining agreements. Most observers claim the cause of this "common" unionization is the general homogeneity of the population and late industrialization.

The unions have traditionally conceived of themselves as an adjunct to the company in its competitive dealings with other companies or, on a broader level, as subjects of the Emperor, furthering nationalistic goals. Strikes are rare, usually lasting only a few hours (Japanese Institute of Labor, 1972). Settlements are often accompanied by the offering and acceptance of "apologies." In fact, "The Public Corporation" or "The National Enterprise Labor Relations Commission" will occasionally order a company to apologize to its union or vice versa.

Managers of industry have tended to favor an elaborate service program and seniority system over a more competitive wage system (Japanese Institute of Labor, 1972). The perceived communality of interests on the part of the unions mitigates the attractiveness of an aggressive collective bargaining posture and is utilized by management in the negotiation of wage rates. The union's identification with the company, while decreasing leverage for wage adjustments, has increased the importance of workplace associated services.

In recent years, some observers (Karsh and Cole, 1968; Yoshino, 1966; Marsh and Mannari, 1972) have noted a small decline in the service orientation of Japanese industries related both to the attitude of workers and to structural changes in the economy. It is less likely that services will be significantly reduced than that the types of services available will be modified.

Business and labor leaders have pointed to a small but growing phenomenon known as kutabare GNP, to hell with the Gross National Product, as a reflection of the decline in the traditional "ethic" of the Japanese worker. New workers are alarming some Japanese business managers by demanding shorter hours, more vacations and by exhibiting a lack of commitment to a single firm. This erosion of "lifetime" commitment may contribute to an attenuation of industry-related services. A management, perceiving an "opportunistic," non-loyal attitude among its work force, will be less willing to provide and maintain the elaborate traditional services. If collective bargaining becomes a "tooth and nail" affair rather than an harmonious meeting of gentlemen, the previous aura of cooperation, so significantly related to services, will quickly dissolve.

The increasing rationalization of industry and the rising cost of labor are forcing management to re-think the values of a lifetime obligation to employees (Marsh and Mannari, 1972). An increase of chuto workers, those who do not come directly from school, but rather have worked previously at another firm, is reflected in the fact that for the first time in Japanese history, newspapers are carrying job application listings. Ironically, one factor motivating workers to leave a smaller firm and become a chuto worker at a larger one is the greater number and better quality of services provided. Previously, chuto workers were socially isolated and had considerably reduced chances for advancement. Such workers now find easier acceptance within the factory.

Some services have become too expensive for corporations to maintain in their present form. The increased cost of urban real estate has led some corporations to shift from company-provided housing to encouraging employee home-ownership (Yoshino, 1968). Yoshino reports that of 225 firms responding to a questionnaire from the Japan Federation of Employers Association, 65 percent said that they had loan programs to promote employee home ownership and that many of those firms had savings programs which pay very high interest rates to workers, also to promote home purchases.

Japan, then, is a country where services provided through and at the workplace have had a history of acceptance. Both traditional patterns and the necessities of a very rapid modernization have made a service orientation attractive to the industrial leaders and to the workers. As management finds these services increasingly costly and labor begins to perceive them as symptomatic of a commitment that is no longer acceptable, changes in the form and extent of services have appeared. However, all such changes have been compromises with the traditional system, rather than breaks with the previous approach. At the moment, it does not seem that alterations of the wage system, the work ethic or even the structure of industrial labor competition will end a practice so deeply a part of Japanese industrial life.

Israel--Yoav Santo

The delivery of workplace services in Israel rests on the premise that the workplace is a setting for the enactment of social roles in addition to the occupational ones. This premise derives from the nineteenth century writings of A.D. Gordon on the "religion of work." Gordon viewed work as the core of social life and the basis for man's self actualization. Manual work, a way to conquer new lands, meshed with the national aspiration of creating a new state (Preuss, 1965). During the British mandate, freedom of action in the economic sphere coupled with restrictions on political activities turned the workplace into a locus of economic, political and cultural life. In the developmental stages of the society, primary services available at the workplace, such as food, dormitories, transportation, security and recreational activities, were customary and expected.

During that period, collective agricultural settlements, such as the Kibbutz and the Moshav, were established, creating unique forms of integration between work and other social roles. Kibbutz life styles are rooted in utopianism and communalistic ideologies. The Kibbutz is a workplace which remunerates workers entirely through services without, for all practical purposes, monetary compensation. Some Kibbutz manpower is occupied in the provision of services to the community without the degrading connotation of personal service. The division of labor in such a situation is constrained in its rationality by the requirement that tasks be rotated among members to maintain an egalitarian social system. Both productive and service tasks, such as child care, laundry and food services, are subject to some rotation.

In the private industrial sector of the economy, in which the Histadrut (Federation of Labor in Israel) plays a broad role, union sponsored services are available. Partly for historical and partly for ideological reasons, the Histadrut embodies several functions, serving as a trade union, as a major employer and as a social welfare agency (Sobel, 1962). As a trade union, workers' committees on the plant level organize credit unions, cultural and educational programs, short range financial aid and recreational activities (Friedman, 1963). As an employer, the Histadrut lends its facilities and personnel for community activities, youth movements and political associations and also gives assistance to border settlements. Its social responsibility is manifested by support and management of a national medical care system, a chain of resort establishments, programs of educational training and cultural activities.

In the public sector of the economy, services are often ideologically rationalized. In the private sector, a utilitarian philosophy tends to be invoked in explaining their existence. To be competitive, this sector maintains a level of services comparable to that available in public service and through the Histadrut. In some cases, however, private industry has initiated additional services to overcome wage freezes or increase the flexibility of its incentive system. A monetary policy which taxes wages but not services encourages employers to subsidize, for example, meals, telephones, apartments, child care and vacations.

Probably equal to their economic role, services contribute to the maintenance of a differentiated status system. Company-maintained services tend to be more frequent on those levels at which power and prestige increase in significance relative to economic gains.

Services at the workplace in Israel in their current form emerged from the pre-statehood economy in which labor fulfilled a major political and social function. Although economic and political conditions have changed with the establishment of the state, the basic ideologies of the Histadrut, the Kibbutzim and the governmental sectors still prevail. These ideologies enlarge the scope of social responsibility expected from private employers and, thus, along with the need to complete for manpower, encourage the establishment of services. Involvement of the

workplace in non-work social roles through services provided to employees as well as to the community is taken as an expression of social responsibility.

Services and the Character of the Workforce:
The Case of Women

Women in the Labor Force--Shirley Pascal

The proportion of women in the labor force has increased between 1960 and 1971 from 14.5 to 41 percent of all married women living with their husbands. The increase at this time has been explained as a consequence of greater job opportunities, higher prices and the declining fertility rate (Waldman and Gover, 1972). In the year ending March 1971, about one third of the women in the labor force had both husbands and dependent children (Hedges and Barnett, 1972). Working women, in this case, not only have the responsibilities of a job but also the responsibilities of a home.

Perhaps, the most common role conflict facing working mothers relates to child care. As many as 52 percent of mothers with school age children were in the labor force as compared to only 31 percent of the mothers with preschool children in the year ending March 1971 (Hedges and Barnett, 1972). Community day care facilities are not adequate to meet this demand. Besides, working mothers are far from unanimous in their choice of an institutional facility as their way of meeting their child care needs. Most women have a relative or someone else in their home caring for these children while they work rather than day care facilities (U.S. Department of Labor, 1970). Day care at the workplace may be especially relevant in this context.

A related problem faced by working women is overload. Too much is demanded in working and trying to take care of a home. Studies have shown that husbands do not usually help with household tasks whether or not their wife is employed (Hedges and Barnett, 1972). Roles have not changed as much as might be expected. Wives remain responsible for the inside work, with home maintenance and yard work as the husband's responsibility. Thus, the working woman must reconcile the often conflicting roles of employee, wife and mother. Home maintenance services could ameliorate these pressures.

As an employee, the woman is expected to adhere to a regular work schedule which is often not sufficiently resilient to adapt to absence due to illnesses of her children. Working part time or dropping out to have a child could possibly hold her back in the normal advancement procedure of her job. Flexibility in daily time schedules and alternative career pathways may be crucially important for women (Poor, 1970).

Eastern European countries have made significant efforts to solve problems of women in the labor force. Marxist ideology is partly

responsible for this, but the shortage of labor is also a factor. There has been legislation in these countries against discrimination which was designed to redefine women's roles. Day care is available for employed mothers along with other public service facilities, such as catering. A high percentage of women are working in Eastern European countries, but they face many of the same problems as working women elsewhere. Although legislation has in a few cases been proposed to require that husbands help with household tasks, the employed housewife still does most of them. The traditional roles of women in these countries seems still to be the rule. Eastern European policy responses can be suggestive of ways in which these problems might be faced in Western countries (Fogarty et al., 1971).

Industry Sponsored Day Care:
The Andrews Learning Centers--
 Ross Koppel

The services at the workplace with which the report is concerned are defined as non-production related activities which take place at the worksite. It is not uncommon for these services to be displaced by a benefits program in which, instead of becoming palpably involved in a non-production related activity, the industry issues a check to the employee who is then free to purchase the service elsewhere. A less common development is for the industry to conclude that the service activity could be formally developed and extended beyond its employees--in effect, added to its product line. This is what occurred in the case of the Andrews Learning Corporation, manufacturers of home machine equipment, that had experimented with day care centers for female employees. The Andrews Learning Division had become operators of several day care centers in the United States.

The Andrews Corporation conceived and developed the Learning Division as a profit-making service industry. Two years of research and development for this project included the evaluation of teaching machines (manufactured in other divisions of the Corporation); the conceptualization and development of teaching and child care programs, the training of personnel and, most important, the selection of market sites convenient to families who would need and could afford their services. Associated with this was the planning and building of facilities that would be attractive to the prospective customers--the parents--and acceptable to the staff and children.

The Corporation concluded that the most economically feasible sites for their day care centers would be affluent suburban areas. They reasoned that, in addition to the ability to pay for day care, the parents in these areas would manifest the middle class concern for child development, which is associated with the belief in a "stimulating" environment and the positive value of other children's companionship. Furthermore, these areas, being characterized by high social mobility, would lack not only formal parent cooperatives for child care, but also the grandparents, aunts and other relatives who traditionally served as supplemental child

care help. Finally, the women in these areas would probably be employed or have other outside interests necessitating or, at least, motivating them to find acceptable accommodations for their children.

The Andrews Learning Division's seven suburban day care centers have been in operation for under three years. The children attending these centers range, by and large, from two to five years of age. A few centers have been certified to teach children up to the third and fourth grades. The Centers are open from approximately 6 a.m. to 6 p.m. The cost to the parent per child is \$35 per week. A ten month service contract is \$1500 and a year is \$1800. The cost includes lunch, snacks and all materials. Almost half of the children are registered on a half-day basis with a corresponding reduction in cost. Busing is provided for children to and from the Center for an additional charge.

Only 40 percent of the mothers of the children in the suburban centers held jobs, many of which were part time. The existence of a center in their area, however, was providing a major inducement for these mothers to enter the labor force. Some who had not envisioned taking jobs were now either working or looking for jobs. Single parent families found the centers particularly helpful.

With the spread of word of these projects, the government and several corporations approached the Learning Division with requests to provide day care facilities for children of their employees. Andrews currently operates two industry related centers: one with a company in Ohio and another with a corporation in the District of Columbia.

In such arrangements, the Andrews Corporation rents facilities from the sponsor firm or from independent realtors. Unlike the suburban centers, no transportation is provided for the children. The day care center in Ohio arranged for public transportation services on which parents could accompany their children to the center and then return (free of charge) the several blocks to their place of work. The employees of the sponsor company pay \$15 per child per week, with the sponsor corporation paying the balance.

The Andrews Corporation tries to maintain autonomy from the sponsor corporation except, of course, for those regulations included in the original contract limiting the number and age range of employees' children. The sponsor corporation, and, in many cases, the Andrews Learning Division, seeks to restrict the interference or control of the parents in the operation of the day care centers in both general administrative areas, such as the schedule of the centers, and the criteria of acceptance or rejection of children, as well as with respect to discipline and behavioral control.

This is in contrast to the suburban day care centers in which parent participation is encouraged. The relationship of parent to day care staff in the suburban centers is that of a client to a professional. That the suburban parents pay the full cost of the child care helps maintain their more direct relationship with the center. Also, in the

case of industrial employees there is a greater class differential between the professional staff of the learning center and the parents than is the case for the suburban centers.

Management is motivated to provide day care to attract capable women who had been forced to leave or were prevented from entering the labor force because of responsibilities for their children. They also believe that such facilities may give a company a competitive edge in recruitment and help reduce turnover of personnel.

The implications of these data are significant. Day care, as represented here, is very expensive and would appear economically feasible primarily for very large corporations, or if shared by a number of work-sites and/or the state. The financial burden of this service, if carried entirely by the worker, could be prohibitive. Like other services, however, some part of the cost is borne by the employer. In the case of the Andrews Corporation, the original offeror of the services has found a way not only to subvent the service for their own employees but to formalize their involvement in the activity turning it into a contribution to their profit account.

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CHAPTER II

CORPORATE EXAMPLES

Services and Corporate Organization: Case Studies

The International Manufacturing Corporation--

Ross Koppel

"International Manufacturing," the overseas division of American Manufacturing Corporation (AMC), employs over 100,000 people in more than 100 countries. All but a relatively few of the employees of the division are native to the countries in which they are employed.

While AMC has a world-wide benefit concept, it tailors its service and benefits to be competitive in the local market. However, the company still strives to achieve a similarity of conditions, provision of services and personnel policies throughout the Corporation to the extent possible. Obviously legal exigencies of multinational operation make total homogeneity of ancillary activities impossible. National legal requirements frequently stipulate a framework of services and benefits to which the company must conform. These laws typically affect access to pension funds and set requirements for hospital benefits, housing allowances, retirement age, safety provisions, etc. Within Italy, for example, a nation with very extensive social legislation, about 50 percent of the payroll is devoted to benefits and services. This compares dramatically with Canada, for instance, where only about 15 percent of the payroll goes to such areas, or even with Japan, where about 25 percent of the basic monetary compensation is budgeted for benefits and services.

Specific services the company provides to its workers may be set by statute. Some countries require the employer to offer a housing allowance. Israel, Germany and Mexico stipulate a portion of the worker's salary that must be budgeted for housing. Other countries have plantwide home ownership programs, usually providing a subsidized or guaranteed loan. Large Japanese companies have a tradition of company-provided homes and dormitories although, as yet, AMC in Japan has not entered this area of service.

The provision of cafeterias and noontime meal subsidization are seemingly of lesser importance to American business analysts but of appreciable concern to foreign labor. Throughout its world operation, AMC has encountered worker expectations and even government regulations requiring company-supplied or subsidized midday meals. AMC International Manufacturing Corporation "usually" subsidizes lunches. In Germany and France, the company pays about one-third of the cost of cafeteria operation; in Italy, the company contribution is about two-thirds of the food service budget; while

in America AMC cafeteria operations are designed to "break even." In countries where the AMC plant is too small or only temporary, the Corporation may supply workers with meal tickets redeemable at local restaurants.

Where differing cultural expectations do not affect services, structural and economic conditions may. The lack of highway and road networks, the comparative absence of automobiles in many countries, in addition to the often sparse public transit systems, can create a personnel problem to AMC international operations. Plant managements provide a variety of transportation services, the most common of which is a bus, either supplied by an existing transport service or operated by the company, to carry employees from their residences to the plant. Transportation facilities may sometimes be obtained from the local or national governments of the places in which the plants are located.

Isolation from services due to plant location can also be problematic. For example, one AMC plant in Japan, located in a rural area, provides in-plant dental care. Previously, employees had to take a "vacation" day to travel into town for such services. The same dental care now takes only one hour--a savings to the firm and to the worker, and, at the same time, AMC is rebated from the National dental care fund, an employer-paid government medical plan.

AMC also subsidizes a network of employee recreation-social organizations through a per capita payment and by reducing the work demands upon elected officers of such groups. The Corporation supports a few annual company activities--usually a picnic and party as well as contests and award presentations, e.g., chess matches, bowling teams, fashion shows and awards for winners of such contests. These groups may also arrange tours and secure reduced fares for personal travel arrangements, sponsor football, baseball and other sports; operate libraries, conduct parties on special occasions and, in some countries (e.g., Japan), go on department-wide weekend trips. Occasionally, some clubs act as buying cooperatives for the members, offering discounts on some items.

A Large Urban Medical Center-- Ross Koppel and Yoav Santo

Hospitals function twenty-four hours a day, delivering medical care and providing food, laundry and security services at all times to their patients. Employees of nearly all ranks work, on shifts, throughout the day and night. Some services, such as counseling, medical care, store discounts and food services, while established for patients, may be made available to employees.

The Hospital Center is housed in a complex of buildings occupying four square blocks in a large city in the Northeast corridor. Two

related facilities, one for rehabilitation and the other for extended care, occupy the same site, while the hospital administration is also responsible for another "division" elsewhere in the city. The Center grew from a Civil War hospital and became a major medical institution in 1952 when it merged with two local hospitals. The total number of employees in both divisions is 2,900, with 2,200 at the study site.

The study of the hospital was conducted over some weeks through interviews with management representatives as well as with thirteen employees. A team of participant observers spent time in the Center observing the use of the service facilities and speaking both formally and informally with administrative and lower level personnel. Since services are differentially accessible, visible and used by the various employees, interviews were conducted with a chief technician, cafeteria manager, RN specialist, RN assistant head nurse, LGPN, medical technologist, blood bank technician, cafeteria supervisor, nursing assistant and a clerk in personnel. All of the employee respondents, apart from the RN specialist, were women. Thus, while most of the case study material in this report relies heavily on information supplied by executives, this is a case study of a hospital from the perspective of its workers.

Most of the employees interviewed felt that management had a positive attitude toward employees and that services were adequate. In their view, several services had been instituted by management to prevent unionization, but they felt that a union was unnecessary, either because so many benefits and services were already available or because hospital workers should not strike. Services at the workplace were not salient to the employees interviewed. When asked to list specific services, few mentioned more than three, health service facilities, education and training, shopping and food services being the most often mentioned. Day care was mentioned by several workers as a service of the hospital, but, in fact, the hospital has never provided day care and has recently, once again, rejected a proposal for it. A questionnaire recently distributed by management on the topic of day care is probably responsible for the workers' perception of its existence. Most employees interviewed would vest control of services at the workplace in a joint council of management and workers. None felt that services should be controlled by workers alone, while several felt that management should have full control. Our interview data suggest that the provision of services by management may become an issue to employees only after the salary and benefit packages are assured. Once the worker's basic job definition is settled, day to day working conditions, e.g., the length of the work day, seemed to commend priority attention.

To ascertain the services actually offered by the Center, the personnel director of the Medical Center was interviewed. He listed the following services: cafeteria, health services, tuition reimbursement, gymnasium, preparation of references, help in employees' attempts to secure mortgages, credit accounts and loans. When presented with a list of forty-six services occasionally offered at worksites, he checked

thirty-four as provided at the Center. This very high proportion is quite remarkable when one considers that the list of forty-six represents almost the total range of services provided at all workplaces. The services he acknowledged in this way included a library, educational leave, both full and part time, educational subsidies for up to two class-hours per semester, uniforms or uniform allowance, a concessionaire-gift shop, a coffee shop, security services, including a parking lot guard, personal leave, optional retirement age, limited schedule flexibility, discounting on prescription drugs, automatic payroll savings plans, some help for personnel in locating apartments and moving, Christmas parties, sport teams and activities, including a city hospital league association, free tickets to plays and concerts, rare now, though previously frequent, the use of the auditorium and meeting rooms, reduced rate parking lot privileges, telephone message service for those who cannot receive calls and yearly medical exams. In addition, the hospital provides free medical care and hospitalization to all employees and hospitalization to their families. Included are also free hospitalization, psychiatric counseling for the nurses in the coronary care unit, a blood donor program and English language classes for all who so desire (the Board of Education provides a teacher two hours a week).

The Center is involved in several community projects, all of which are available to the employees. The weight control program, smoker cessation clinics, expectant parents classes and defensive driving class are all utilized by hospital workers. This year, the educational services director will initiate a sex education program. Because the hospital subsidizes these programs, classes have only minimal tuition (\$10-\$20), which is further reduced for Center employees.

The availability and use of services varies considerably among members of the Center's workforce. Some services are intended for specific classes of employees while others have de jure universality are utilized only by select groups of personnel. Nursing assistants and unit clerks, for example, are given free uniforms, whereas nurses (RNs and LGPNs) have been refused subsidies despite frequent requests for them. The disparate professional statuses and expected attitudes of the two groups is given as the rationale for this differential treatment.

The differential uniform policy, however, is symptomatic of another distinction made on the basis of class and, more specifically, of race. The RNs and higher skilled nurses are mostly white, while those below them are usually black. The hospital, by supplying the uniforms for the lower status group, is assured of the appropriately dressed personnel. RNs are assumed professionally socialized into the desired dress code. There is, in fact, little difference in the type and style of uniforms worn by the two groups.

The key services in the Hospital Center are the gymnasium, cafeteria, library and transportation and parking. The "gym" has an interesting history. Several years ago, the Center acquired a nearby church building, intending to convert it into office space. The educational services director, however, suggested that the hospital would benefit

more by opening the gymnasium in the building to the employees. This director organized a successful campaign aimed at a wealthy health enthusiast on the medical staff to raise funds for purchasing equipment and to obtain a commitment for further support from the Board of Directors. The hospital currently operates the "gym" three evenings a week, staffing it with a physical education instructor. Because only one locker room is available, men's and women's groups alternate in their use of the "gym." Special arrangements are made for sports teams, which occasionally use the facilities on lunch hours and during some afternoons. Hospital administrators, however, are the only ones who regularly use the "gym" outside of the normal hours, usually during the afternoons.

During the general "gym" periods, the users are about representative of the hospital population, with a slight over-representation of the lower paid employees. Since lower paid workers tend to be younger than the employee average, this could simply reflect an expected over-representation of the young. The teams, relatively representative of the workforce, are comprised of administrators, medical staff, technicians and nurses' aides. The softball, basketball and bowling teams are selected for competence and competitive spirit. The hospital is a member of the "hospital league" of sports teams and its teams compete with those of other similar institutions within the city. The administration considers these programs a contribution to improving employee morale, cooperation and, ultimately, service to clients.

The cafeteria is open to all employees. The personnel department estimates that about 80 percent of all workers eat lunch in the cafeteria. Since most employees have relatively short lunch breaks (30 to 45 minutes, depending on the status of the job), and because the hospital subsidizes the cafeteria operation to 15 percent of the cost of the meals, the cafeteria is the most available and the least expensive eating facility.

Because of the character of hospital work, employees in a work group can seldom take lunch together. This fact might be thought to generate a socially random seating pattern in the dining room. The opposite, however, is true. Work groups tend to be heterogeneous by status, consisting of a head nurse (or department head), an assistant administrator, several underlings and some clerical personnel. With separate eating schedules within each workgroup, that basis for integration is removed and employees enter the cafeteria without work-related affiliations. Race, status and class become the salient organizing dimensions for seating. The type of social integration visible on the floors thus differs from that reflected in the cafeteria. Tables tend to be homogeneous by race and sex, as well as by similarity in work status. The latter are, of course, related to the former categories, most of the low status jobs being held by blacks and women. Age does not seem relevant to cafeteria seating except as a secondary factor within the above categories. A table will not have just old people, but older black female nurses' aides. The informal groupings at lunch allow the worker to express other than work identifications and, perhaps, return him refreshed to his work group.

The library is nominally available to all employees but is used by few. Required for certification of the hospital, the library functions mainly for the medical staff and does not go beyond its required role. Records indicate that about 70 percent of the use is by interns and residents, with physicians comprising another 15 percent. RNs account for 9 percent of the use and the nursing school students for another 5 percent. The remaining one percent is divided between the dietary personnel and a few nurses' aides, usually motivated by an interest in a specific patient's condition.

While most of this usage is work related, the librarian noted several non-work related services performed by the library for the hospital staff. These included ordering of books, an arrangement with a local university to purchase books at a discount, photocopying of material, interlibrary loans and literature searches. These services are, however, available only to doctors and are not offered to RNs and others. Furthermore, the nursing school coordinator had difficulty in obtaining some shelf space in the library for a few nursing texts. Accommodation was eventually made by physically separating the texts on an isolated shelf. The librarians seemed less eager to serve females entering the library, though all presented identification badges.

Undoubtedly, since the library is specialized, the use patterns are determined by interest, training or ability. Those defined, by experience and by the biases of the library staff, as the target population receive many services and polite help. The relatively few other individuals who use this facility seemed to accept the condescending attitude as part of those conducting the service.

Although the Center is convenient to public transportation, our investigation showed that over 65 percent of the employees used automobiles to get to work and the Hospital Center's parking lot is a crucial service. The status or salary of the workers do not seem related to their method of transportation. Nor, for that matter, was there any correlation between the distance from work and the use of the automobile. The lack of space in the Center's parking lot was one of the few service-related complaints of the workers. Nevertheless, all workers interviewed who used private transportation were "satisfied" with their method of getting to work.

The purpose of services stated by the administration is a mix of instrumental policy and moral sentiment. Management believes that services help attract and maintain the hospital workforce, thus implying that it is "good business" to provide services. The Director of Personnel noted that services are very important to workers "as time goes on." Initially, wages and location are primary, but services assume greater importance once the worker has established himself in his job. On the other hand, this same director proposed that the employer has a "moral commitment" to provide services for the workers.

The personnel manager, usually the best informed person in the organization regarding services, did not have a complete picture of the

services available and their usage by employees and the community. Although aware of good public transportation and shopping facilities in the area, he somewhat overestimated the use of local shops by employees. He did not know how many of the Center's employees eat lunch outside the hospital, even though he was interested in (and pleased with) the Center's cafeteria. His perception of the convenience of local banks was also at variance with our information from employees. The banks in the area were indeed used by the employees, but at the expense of their lunch. The only service he said that was requested of him but had not yet been established, was the credit union. This, he felt, is an extremely difficult service to maintain, often causing more animosity than good will.

The manager's comment about the credit union, along with the decision, previously noted, not to institute day care facilities, suggests that while services which are extensions of those offered clients at the hospital are easy to maintain, the institution of major new services specifically for employees is difficult. Management seems to institute services when there appears to be an instrumental reason, as in preventing the union; when the structure for the service is already in existence, as is the case for services already provided for patients or when it is believed that the service will improve the morale and work production levels of employees, as in the case of the "gym" and special counseling for nurses on the coronary unit. This does not diminish the value of these services to the employees, but does suggest the type of meaning they have for management.

A Manufacturing Conglomerate--William Gomberg

International Acoustic Industries is a British based conglomerate with extensive American holdings. It is engaged in a wide variety of related acoustic industries, employing some 190,000 employees, 137,000 of whom work in the United Kingdom and another 53,000 outside of Britain. Some twenty-four establishments are located in the United States employing approximately 15,000 employees. Of these sites, 10 are sales offices employing less than 100 employees. The remaining fourteen are manufacturing plants employing between 250 and 1,000 employees each.

The entire North American operation is supervised by the American headquarters site located near a major interstate highway in the Delaware Valley. It is made up exclusively of executive and white collar employees. This headquarters staff is divided up into four major divisions in accordance with the corporate structure. There are some 1500 employees at this headquarters site.

The headquarters site is made up of a number of buildings, constructed in Georgian style, laid out to simulate a movie scenario of a Hollywood college campus. The buildings are separated by extensive green lawns, interspersed with parking areas for all employees, in close proximity to the office buildings.

All personnel and employee services are directed by the manager of industrial relations, Mr. James Jenkins. Mr. Jenkins supervises a personnel staff of 110 people, nine of whom report directly to him. He is responsible for all personnel, both union and non-union, throughout North American. Each plant site has its own personnel director and staff who work under his policy direction.

Mr. Jenkins was originally with Samson Electronics, which later became Samson Acoustics as it expanded from electronics into related industries. When International acquired Samson some five years ago, Mr. Jenkins was placed in charge of personnel for all of International's North American operations. Among his duties are the negotiation of personnel policies including the provision or denial of a wide variety of personnel services.

The location of the headquarters site opposite a large suburban shopping center makes available to the headquarters employees a myriad of shopping and personal service facilities. Also, the location of the headquarters site permits the worker to avail himself of the usual services such as shopping, acquisition of home maintenance, beauty and barber shop services, tax and legal assistance at his home or at the shopping center. In more isolated areas the personnel department would be pressed to make provision for such services.

Since the 1500 executive and clerical employees are either in union-exempt occupations or have chosen to exercise no collective bargaining rights, personnel services remain exclusively in the hands of the management personnel department. On the other hand, the unions exercise collective bargaining rights at most of the plant operating sites. At the headquarters site, grievances are treated informally, in contrast to the personnel procedures at the plant sites, where voluntary arbitration is the terminal point for unresolved grievances.

These white collar employees at headquarters follow regular office hours in contrast to the multi-shift complements industrial workers are required to keep at the worksites, to enable the plant to operate around the clock. The headquarters working week consists of 37 1/2 hours. There is a lunch period and coffee breaks are at the employees' discretion. Though employees may leave the worksite at lunch, they are expected to take their coffee breaks at the worksite. Cafeteria services, providing 400 seats, for lunch and snacks for between mealtime consumption are provided by a plant concessionaire. The cafeteria is subsidized at \$20,000 per year, primarily in the form of plant space provided free of charge. The cafeteria is a full-service operation and not a bank of automatic machines. Machines are provided for the usual between-meal snacks.

The nature of the office work is such that work teams are not necessary. Workers set their own pace in accordance with the pressure of their immediate work load. None of this work is process or machine paced, leaving the employee practically complete autonomy in setting his or her pace.

Although there is no union, there is a headquarters social club that provides entertainment and amusement services. The social club also arranges bowling, dances, golf, vacation trips, softball games, bridge tournaments, photo and hobby shows, the acquisition of tickets for recreational activities, picnics for everybody and a big Christmas party.

Other services, provided on an informal basis by management, include check cashing, the extension of loans, a credit union operation and payroll deductions for various charitable contributions. In addition, new employees are aided in finding a residence and making provisions for moving to the new residence.

Important medical services are provided free of charge for the employees including yearly examination and a dispensary for minor medical problems. Although psychiatric care is not included, services are provided for drug abuse and alcoholism and personal and family counseling.

A free parking space is available for each employee at the office site. It is estimated that the parking space costs some \$20,000 per year to maintain although this does not include rental for the property estimated at a land value of \$2,000,000. During office hours, a shuttle bus service is provided among buildings on the "complex site."

The cost of all these services, including the budget of the social club, is estimated in the area of \$50,000 per year and is provided by the management. Management justifies these expenditures in that they attract a desirable labor force and help them identify with the company.

We then went on to discuss services at the operating plants and a different picture emerged. Excerpts from the conversation with the writer are reproduced literally because of the flavor that is imparted in giving the management's point of view in thinking of new services, e.g., day nursery care centers.

JENKINS: Well, Bill, take a look at the headquarters, which is where we are here and in relatively, you know, an unstructured environment, with the main shopping centers you saw just across the street, and with the people having 45 minutes for lunch. You can get almost anything, service right over there at lunchtime that you need. Anything at all. Then, again, because we are dealing with white-collar, clerical and professionals, there is a great deal of personal time off. For example, let's suppose that when a child needs to be taken to an optometrist or something, well, we're fairly lenient with giving a girl or a husband, letting him go pick up his kids from work. I think that we're, this service, is probably more critical in our plant locations where you might be working around the clock, three shifts, seven days a week and you don't have the time off, you're restricted by the job.

GOMBERG: That is the difference between blue-collar and white-collar. White collar gets certain privileges that blue-collar doesn't.

JENKINS: Right.

GOMBERG: But let's talk about the blue-collar workers. After all, you're in charge of the whole industrial relations policy, I take it, throughout the United States.

JENKINS: Right.

GOMBERG: Now what have you done, Jim, in an effort to answer the question, how can I improve the attendance, or how can I stabilize the labor force at some of my blue-collar operating sites? I take it that at each plant you have cafeterias similar to this one here.

JENKINS: Right.

GOMBERG: That's for in-eating. But what if a woman has to go home or she has to have dinner ready for her husband. Some plants have thought of giving them a work quota. I have recommended that in the garment industry, instead of straight piece work, give them a quota, let them go home at the end of the quota. Have you experimented with that at all?

JENKINS: No, Bill, I regret that we haven't. And, of course, you know, maybe the last one to know I think one of the advantages we have in almost all of our locations, we're out in communities where we start fairly early in the morning, anywhere from 7:00 to 7:30 so most of our day shifts break about 3:30, so just to take the point you raise about someone trying to get home in time for dinner, most of our people are home well in time.

GOMBERG: Well, now, let's look--the kids have to get off to school, if they are small kids, and she has to be at the plant at 7:00 a.m., doesn't that sort of raise hell when kids, let's say in the primary grades are left pretty much to themselves, they have to get their own breakfast and go off to school?

JENKINS: Well, I would have to be honest with you in saying that when we select women in the work force, we do take a look at what arrangements, but frankly, we put the burden on the employee. Just suppose we have a gal coming for work and she says I have three children. Well, one of our questions our employment interviewer would say, well, now, how old are they? Well, let's suppose they are 5, 3 and 1. One of the immediate responses will be, well, how are you going to take care of those children when you are at work? We really have honestly to say we place that burden on screening out as much as you can. Now, you can obviously say, hell, that's great until she gets married and then comes on with your employment. But even I would say out in our plants where we have primarily women, we've largely seen that it's the ingenuity of the worker that takes care of it. We have not experimented with day centers, or local groups of community service.

GOMBERG: Well, let me ask you this. We anticipate, at least, we hope, that with full employment, we get what employers would call a tight labor market. At the present time, we are moving towards 5% unemployed, according to today's (March 9, 1973) newspaper listing the statistics for March. Now suppose we start getting into the vicinity of 4.8%, 4.5% and then ultimately 4.0% and 3.5% and you have a very tight labor market. In fact, the labor market is so tight that you are trying to bring people out who are not members of the labor market. Have you put any thought into what measures you could take that would alleviate this kind of problem?

JENKINS: Bill, I would think that if we got into a position such as that, and of course, I might say also one of the reasons why I think we are lucky is that we do have a community practice of trying to be a leader in wages and benefits so even though we might be a particularly tight labor market, overall, generally, I would say to you, I could take you around to probably almost all of our plants, and you would find a backlog of applicants.

GOMBERG: In other words, you "cream" the labor market.

JENKINS: I think we do. All I am trying to say is that our practice minimizes the problem because workers are more willing to try to make some arrangements. If we wanted to do something, and we haven't given it a hell of a lot of thought, but my honest judgment is the thing that we would be interested in looking at probably first, I would think, would be day care centers.

GOMBERG: Day care centers?

JENKINS: Yes, I think that would be because I'll tell you something that's becoming more and more pronounced. At least, in this state and we see it out in California and Texas. That is these markets of all kinds, including clothing stores and all are open seven days a week, 24 hours a day.

Well, I would say the place where we would think of doing something would be where we have a high percentage of women employed. And I would think also you would need a fairly large installation, Bill, because you know to take care of, let's say you had a female work force of 200, probably of that 200 only maybe 25% would be childrearing age. If you are saying to me, where specifically would I have a place to think about it, probably the best place to experiment would be a plant near Louisville, Kentucky, where we must have about 2,500 women. So I would think where we might have...

GOMBERG: Have you thought of it in terms of a budget that it would probably take?

JENKINS: No, it has not advanced to that point, and one of the things, of course, that I would be interested in doing if we were an employer and we were in that situation and we needed, and let's suppose we were going to fund it ourselves, is the thing I would think, is like a consortium of the local employers, and say, look, we're all in the same ballpark, how can we organize this thing on a basis...

GOMBERG: A community basis?

JENKINS: A community basis.

GOMBERG: Let's begin thinking in those terms. We are almost thinking in terms of making it, as has been thought of elsewhere, part of the, what shall I call it, the public school system.

JENKINS: Right.

GOMBERG: The advantage, of course, of it being at the plant, I suppose, is two-fold. One is that it becomes the company's operation. And so it will follow the standards you expect rather than the--what the marginal chiseler is willing to pay. The second thing, which is more important, is that the women would drop the child on the way to work, and the third thing is that if anything should happen, an emergency of any nature, suppose the mother is right there and feels a certain sense of security which she would not feel elsewhere. Otherwise, the remedy you are suggesting simply makes these nursery schools part of the public school system.

JENKINS: But, Bill, as you know from your experience in collective bargaining, let's suppose we had a company one, then it becomes, you can just see it. The women say that the meals the kids are getting are not sufficient, there ought to be sirloin steaks for lunch, and we get into a bargaining demand.

GOMBERG: Be as bad as being their landlord.

JENKINS: Yes, the women now want a play break. They won't want a coffee break, but they want a play break to go down and play with the kids, and so I think we would have a disadvantage.

The conversation was interrupted here and resumed later. This excerpt gives the flavor of management's thinking as it exercises the problems of a new service and the kind of problems that can be encountered. It is my belief that this industrial conglomerate might be ready to consider day care centers as a possible new service at some of its plant sites.

Headquarters of a Major Petroleum Corporation--
Joseph R. Piasecki and Yoav Santo

Major Petroleum (a collection of firms legally joined and controlled by a central unit) is a vertically and horizontally integrated multi-national enterprise. The operating arms are engaged in extraction, transport, manufacture and sale of large quantities of petroleum and petroleum products. The firm is ranked within the top 100 firms in Fortune's 500, with total assets between \$2 and \$5 billion and annual sales from \$1 to \$3 billion. Worldwide, the organization employs about 25,000, 80 percent of whom are in the United States.

This is a case report about a regional headquarters of this enterprise. Officials at this site engage in control of operations, planning and forecasting, evaluation and policy formulation and execution for the company. No physical product is produced at this site and no physical resources flow through or terminate here excepting those directly required in support of the staff.

Services at this workplace will be traced as a flow of resources through the organizational net. Discussion will revolve around the differential demand for and access to services, the impact of the organization's authority structure on service decisions and the evaluation of services and the potential for change in the level and types of services available at this worksite.

The site, in the downtown area of a major port city, includes several contiguous multi-story structures owned and leased by the organization. Most were built about 50 years ago. The age of the physical plant imposes some constraints on the availability of services, most notably the inability to automate the elevator service. Most of the floorspace is carpeted and sound-controlled. Music and paging service are present on some floors. The facility is clean and well-lit. In some areas, rented floral displays, painting and color-coordinated wall paints and carpeting contribute to an aesthetically pleasing effect.

Most workers are in enclosed or semi-enclosed offices, with the exception of some large reception areas and some large open space for activities such as printing. Large numbers of employees move through the floor on which they work during the day with many moving between floors in the building.

This urban location provides ready access (walking and public transport) to services ranging from small personal services like buying a newspaper to larger consumer purchases such as furniture buying. A fairly open schedule of mid-day meals means that these services are accessible to employees within the floating lunch hour. Grocery shopping is, however, of limited value during the lunch hour since many items must be refrigerated or stored until the journey home. Most employees do not live in the metropolis itself.

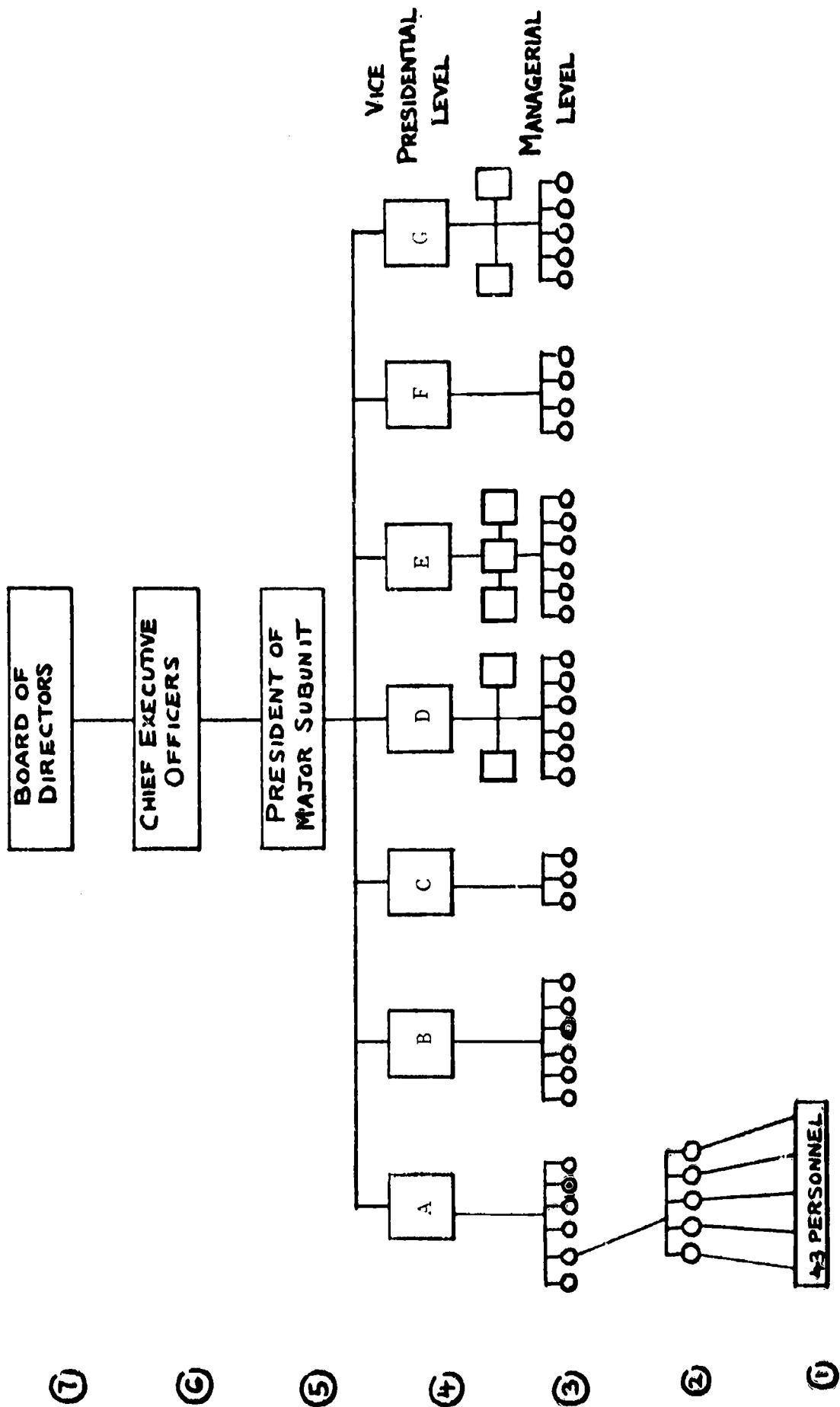
From interviews and documentary sources, an abridged organization chart has been constructed for one of the major units at this site (see following page). We may observe that the span of functionally differentiated units reporting to an authority layer such as layer 4 ranges from 3 (the number of managers reporting to vice president C) to 6 (the number reporting to vice president A). Functionally differentiated units at a lower level have a clear reporting relationship to only one superordinate unit (chain of command formatting). No subordinate unit reports to more than one superordinate unit. From layers 2 through 7 inclusive, no one person is delegated more than one specific organizational function.*

The corporation owns most of the building space it occupies. A small, incorporated unit is charged with the functions of office space allocation, space planning, and maintenance within the site. The executive in charge of this unit reviews requests for space allocation, plans renovations and repairs and generally supervises the activities at the site which involve or impinge upon the physical structure and the flow of physical activity at this site. A highly standardized (general and universal rules) and formalized (codified and written) system of space allocation has been developed by this unit. The impersonal and centralized nature of space allocation decision-making may diminish frictions associated with the allocation of work-space. Executives may choose from a variety of furnishings. The choice of office furniture, i.e., conference style versus personal and individual, reflects various styles of management (emphasizing or minimizing staff participation in decision-making). Space for services at the workplace is a responsibility of this specialized unit. It controls the employee recreation-lunch room, a beverage service, the internal security system, the interior maintenance (rented plants service) and the printing services for employees (several copying machines for free use). The employee recreation-lunch room, located within the main building, currently includes limited food and beverage vending services in an area of about 2000 square feet. Recently, this space was reduced in favor of an office operation, with no substantial protest on the part of employees.

The unit decided that a beverage center facility should replace the circulating coffee service provided by a private firm. Reasons cited included queues at vendor locations, cleaning problems and the presence of "foreign" personnel in the worksite. Despite vocal objections from several employees, the outside circulating service was terminated and was replaced by a combination water cooler-water heater. Forty hot and cold water units, located at central points on each floor,

*In "The Morphology of Organizations" [Administrative Science Quarterly, XV (December, 1970), 439-52], Kaufman and Seidman note the value of counting up from the bottom of an organization pyramid. Since some higher level staff functions do not have subordinate levels to the organizational base, the best method of counting the total number of layers is from the bottom up.

ABRIDGED ORGANIZATION CHART *



*The full range of layers of authority at this site is charted only for part of functional unit A. Each of the other functional units has additional layers of authority not shown here.

are rented for approximately \$8.50 per month and bottled water at 85¢ per bottle. Including installation costs, the total annual cost of this service is about \$16,000 or about \$10.00 per employee.

A large medical facility, open to employees at any time of the work day, is located within the central building. The facility, covering some 4000 square feet, includes conference rooms, a men's and a women's ward, an X-ray room, doctors' offices, a small medical laboratory, a dispensary, an examination room, a nurses' station and a reception area. The usual services include treatment of employees for minor distress, yearly physical exams and health consultation. The staff consists of three physicians and several nurses. While treatment facilities are minimal, the diagnostic and preventive medical service is better equipped than that ordinarily available from a family physician. This diagnostic service is geared mainly to serve the older (above 40) males who hold responsible posts within the firm but could be extended to more employees without proportionate increases in costs to the firm. The space allocated is adequate for a larger volume of activity and the equipment and staff already present could be used in an enlarged preventive medicine program. Although not located at the medical facility, a psychologist is on the staff and available for clinical service to the higher officials.

The yearly budget for medical service (including equipment depreciation) is in excess of \$100,000, or about \$67 for each of the approximately 1500 onsite employees. Since males over 40 make disproportionate use of the facility, the total cost of providing an equal level of service for all employees would be substantially higher.

The employee lunch room is also the main onsite recreation area. An FM radio provides music and news. Employees may use the room any time during the workday, but it appears to be only minimally used at other than the midday meal time.

Employees are involved in three organizations: a collective bargaining agency representing all regular office workers employed at this site, an employees' credit union and an employees' social club for both office workers and managers. These three organizations reflect a loosely structured community of common employment. Collective bargaining is conducted by a single independent "company union." The credit union allows for cooperative use of financial and other banking services. The employees' club, which concentrates on recreational activities, fulfills, mainly, integrative functions for the employee community.

The employees' club, founded during the second world war, has changed structurally in recent years. It was formerly geared mainly to recreation through group activities, e.g., sports and parties. Today it offers opportunities for individual self-expression through hobbies and specialized recreational activities such as fishing and photography. Interaction between club officials and management seems to have become more relaxed. Until recently, the club budget had been authorized on a line basis; management now seems receptive to making

block grants. The company president and other officers respond to club officials as though they were representing regular organizational units.

The community of common employment faces its most difficult challenge in creating a corresponding social unit outside the workplace for employees who are geographically dispersed. Perhaps for this reason the club prefers small scale activities. The integration of the leisure and the occupational roles is achieved by increasing the physical accessibility of recreation and by reducing its cost. Administering and subsidizing recreation, using company time and financial resources, is a means by which a community of common employment is extended beyond the working hours. Through membership of the collective bargaining organization, the credit union and the employee club, employees may interact even when they do not meet through work.

This large, multi-national set of related corporate units identifies several "significant" publics to which it addresses its community oriented services and public relations. Several public service efforts are aimed at minority groups, especially blacks. The corporation provides tutors (current employees) to aid inner city high school students. Such community service is also a service to employees in providing an opportunity for them to express social and philanthropic interests. "Minority vendor purchasing programs," seeking out minority suppliers, extends the service into a regular production related activity. The organization has recently sought to deposit cash resources in minority owned banks and contracted some employee life insurance to a minority owned firm. Resources of the business are routed through these agencies to improve the position of disadvantaged firms or individuals.

The public relations department formulates and applies social policy. An in-house publication entitled "Community Relations Guidelines" sets forth the policy on community services. "[The company] policy encourages participation in the life of communities in which the Company operates as a means of assisting in solutions to social and economic problems. Community service is one such avenue." The policy encourages individual employees to participate in community affairs and expresses the organization's willingness to make financial or service contributions to community groups.

Major Petroleum also publishes a formal statement, "Campaigning For and Serving in Public Office," defining the political activities in which employees may engage while associated with the firm. A "Contributions Policy Statement" provides guidelines for corporate support of social activities. These three documents reflect the formal manner in which the organization responds to its publics.

Rationales for corporate interest in public service are expressed in its "Community Relations Guidelines":

For a business, unfavorable attitudes can lead to restrictive ordinances and delays or refusals when permits or other authorizations are sought from local governments. They [unfavorable

attitudes] can hamper recruiting efforts and diminish sales opportunities. They [unfavorable attitudes] can result in confrontations, or in milder forms, a flood of complaints. The net effect is to divert effort, absorb time, raise costs and diminish income.

The organization tries predominantly to identify and influence attitudes through various modes of communication. There is no evidence that the organization is currently under attack by civic or special interest groups but it does anticipate pressure for minority and female hirings and advancements.

The chief executive of Major Petroleum recently stated that "The key to achieving productive growth lies in more fully and more effectively developing and utilizing the creativity and capabilities of people." What might be the effect on services of such an orientation? Several respondents stated that the organization, until very recently, had a history of retaining employees for a considerable length of time. Involuntary terminations were reportedly low, job security very high. More recently, however, the rate of involuntary terminations has increased, probably spurred by a decline in profitability. Criteria for retention or dismissal have tended toward performance evaluation with a decrease in the paternalistic concern with job security. At the same time, top organization officials expressed increasing interest in the personal and professional development of employees, especially in their workroles. The chief executive speaks of management's task "to erase the lines around those little boxes [rigid job descriptions] and to develop a new way of thinking about people at work and to raise our expectations about what people can, and will, want to do."

The benefits structure includes a tuition refund plan and a program of support for students in advanced study in their own or related fields. The organization also underwrites various professional activities such as membership in professional associations and provides clerical services for paper and publication preparation. The current level of support for personal and professional development does not radically depart from the norms of the industry of which this firm is a member. Considering employees as organization resources, this concern for the development of human resources may reflect a perception by management of constriction of access to other resources. A reduced ability to acquire external resources in order to maintain a favorable market position may encourage management to develop its long term internal resources which are, in the case of headquarters, almost exclusively human resources. A recent observation by management suggests that this may indeed be their perception:

In the face of this urgent need for growth [to meet social and economic demands of the future], several of the traditional means of achieving it [growth] are losing some of their force and effectiveness ... examples ... cited [include] lessening economies of scale as we approach practical limitations on the size of facilities, the impact of environmental and social

considerations on the application of new technology, and the increasing costs and difficulties of developing new energy and other resources.

Management seems to postulate that increased involvement in human capital (training, education, reorganization) will have significant positive returns contributing to the success of the organization.

An orientation stressing human resource development might increasingly specialize individuals or work teams rather than tasks. A trend toward human capital development impacts on services. Specialists and professionals require greater information flow both at the work site and in the community. Provisions for library resources, memberships in professional societies, etc., may be part of a service package which facilitates professional development. Additionally, without the interchangeability of labor inputs, as assumed on the production line, more intense maintenance of human resources through increased medical service and expanded health service including mental health and preventive medicine is required.

But, at the same time, managers appear uncertain as to how to measure the returns to their efforts. When services are provided to the community, as, for instance, in the support of minority owned business, goodwill, publicity and the meeting of social demands are accepted arguments for defending allocation of corporate resources. No cost-benefit analysis has yet been attempted by this firm to evaluate such activities. Increased experimentation with the concept of human resource development seems to be in the offing. But such experiments are quite limited. Experimentation involving space planning and internal landscaping seems easier to implement than experimentation involving functional role adjustments in which authority and responsibility relationships are fundamentally altered. One high-level manager stated that top management seeks to experiment with different types of managerial style which stress two-way communication, group or team units of responsibility and sensitivity training. He noted that while top management desired activity in these areas, mid-level managers have expressed some reluctance and even hostility toward tendencies in this direction. The resolution of this debate cannot be predicted, but if its resolution leads to increasing concern with the quality of human resources the structure of services at the workplace may be affected.

ENUMERATION OF SERVICES AT THE SITL

<u>Service Name</u>	<u>Estimated use and rank of users</u>	<u>Estimated Cost*</u>
Commercial Market Services		
1. Mechanical food service	low number users from lower levels of organization	none
2. Xeroxing	unknown	unknown
3. Typing and secretarial	low, from professional and technical employees	unknown
4. Credit union**	high, all levels of employees	unknown
5. Check cashing	moderate, all levels of employees	unknown
6. Stock purchase plan, brokerage service, investment counseling	high, all levels of employees	from \$250,000 to \$500,000 for all employees per year
7. Travel planning service	moderate, middle levels of employees	\$1-2.00
8. Ticket service	low, from middle and low levels	minimal
9. Accounting, tax aid	unknown	unknown
Family Services		
1. Family/company picnic	high, all levels of employees (2500 employees and family members)	\$2.24
Community Services		
1. Charity collection	unknown	minimal
2. Community Activities	Managers (20), staff tutorial program	unknown
3. Community Services	employees participate basically in work roles such as "purchasing agent"; thus boundary personnel have greatest contact with service recipients	substantial, largely in terms of "opportunity" costs
Affirmative Action Pro.		
Minority Vending Pro.		
Purchase of services from minority company		

*The estimated cost of a service refers to the per user cost incurred by the organization in the provision of the service; opportunity costs are not included.

**The services provided through the credit union include savings and loans and other minor banking services.

<u>Service Name</u>	<u>Estimated use and rank of users</u>	<u>Estimated Cost</u>
Professions and Professional Services		
1. Health Service (see section on Health Facilities)	moderate to high, all levels	\$67.00
2. Blood Bank		minimal
Transportation Services		
1. Limited parking	highest levels only, less than 50 users	\$100 per month, per user
Recreation and Leisure		
Basically provided through the employees club; see Appendix E for enumeration of activities, participation rates and costs.		

EMPLOYEE SOCIAL CLUB ACTIVITIES 1973

<u>Activity Name</u>	<u>Participants</u> (Number and category)	<u>Total Cost</u> (Direct)	<u>Per User Subsidy</u> by employer	<u>Percent of Subsidization</u>
Card playing	20 participants	\$ 60.00	\$ 3.00	100 %
Fall Activity (yet to be determined)	200 expected	1500.00	3.75	50
Fashion Show	250, mainly females	1650.00	3.60	50
Fishing	80	760.00	4.50	47
Golf	303, mainly males	7850.00	18.50	71
New Employee Luncheon	100	300.00	3.00	100
Bowling (men)	54	5260.00	48.40	50
Bowling (women)	40	3216.00	45.40	56
Hobby Show	50	200.00	4.00	100
Picnic	2500 (employees & family)	7225.00	2.24	78
Spring dance	200	2000.00	5.00	50
Softball	25	80.00	3.20	100
		<u>TOTAL \$30,101.00</u>		

TOTAL SUBSIDY: \$ 19,285.00

Services and the Making of a Worker
Community: The Case of City Bank--
 Samuel Z. Klausner and Robert H. Edelstein

A recent Annual Report of the City Bank Corporation is prefaced by a quotation from the Chairman of the Board:

If we are to continue to make progress in our recognition of the worth and dignity of each individual human being, then business must acknowledge its role as the lode star of all social advancement. And if business fails in this responsibility, the entire fabric of our industrial society will be torn apart.

The transition from an individualistic to a social ethic is an American twentieth century theme. A half century ago, the establishment's religious leadership, with but minor success, preached the social gospel to the leaders of the business community. The Social Darwinism of the old elite, now under challenge from the literary and political spokesmen of the rising classes, is being replaced by the concept of "corporate responsibility." The justification of the social ethic in terms of its contribution to the realization of individualism reflects the transition between the ethics as this idea achieves acceptance in the corporate world. The message to shareholders, in this same Annual Report, reminds them that the "Corporation is committed to a sound growth strategy that establishes a minimum goal of 10% increase in corporate earnings each year." Growth of the bank's commercial banking operations, consumer finance, real estate finance and investor services all attest to soundness and profitability. The major part of the document reports on conversations on corporate responsibility between the chairman and representatives of the American Tiers Monde including Ralph Nader, who appeals for courage in the business community, Carl Stokes, who discusses what industry can do to stop racism, Barbara H. Franklin, who warns against stereotypes about working women, and Glenn T. Seaborg, who calls for long range planning of resource use. Financial statements of the Corporation conclude the report.

From a corporate point of view, services at the workplace express a fusing of corporate responsibility, a social ethic, with "good business." The Director of the Bank's Urban Affairs Office explicitly justifies attention to minorities, a matter of corporate responsibility, as a way to prepare future employees and future clients. The roughly half a million dollars committed by the Bank each year to services to employees and to the community is defended as an investment, though, in the overall investment picture, this represents an infinitesimal portion of the bank's one and a half billion dollars in assets.

While communal and employee services may both be good business, it is doubtful that this factor is decisive for the City Bank. In this most economically rational of corporations, the officers do not know the dollar cost to them of the services they render. The long range benefits to be reaped remain a conjecture. Economic rhetoric is offered to justify services; the "real" consideration for instituting

services are not consciously economic. This case study of the City Bank Corporation will document the community and employee services offered, conjecture about their role in the corporation and in the lives of the workers and then attempt to assess the cost of these services to the corporation.

The City Bank Corporation, which has been organized and reorganized with splits, mergers and acquisitions in the past decade, embraces a consumer finance program with four subsidiary companies, a real estate finance program with two subsidiaries, investor services with five subsidiaries and an affiliate holding company as well as the City Bank, the original operator of the corporation, which, itself, now has three subsidiaries. Corporate headquarters and most of the banking operations are located in or near a metropolis. Of the Corporation's 7000 employees, about 4300 are employed by the Bank. This report is limited to services offered by the City Bank.

Banking encompasses three worlds of work. Headquarters, in the metropolitan center, is a white collar world numbering of some 1450 banking officers, junior executives and supportive administrative and secretarial personnel. They are the professional community with the exception of the top officers and officers who deal with important clients and, of course, the public relations and personnel recruiting staff. These employees have little contact with non-bank workers in the course of their day's work. Some 1650 employees in the 80 or so branch banks in the Metropolitan Department are the bridge between customers with small and medium sized accounts and the representatives of the bank. Their working day is spent with the community. Each branch serves a community, some in center city business districts, others in suburban shopping malls and others scattered around the neighborhoods of the city. For these communities, branch bank managers, loan officers, tellers and bookkeepers constitute the world of banking.

The third world of banking is a vast data processing and accounting system processing the millions of bits of paper reflecting the actions of the branches. This world, located in a six-story building a short distance from the main offices, is like the headquarters, internally oriented. Few of the roughly 1000 employees of the production unit or operations group see a bank customer. They sort checks, key-punch, program for the computer, enter data and retrieve it, receive drafts and checks from outlying branches as well as from several other commercial banks and, ultimately, distribute checks and other advice to their destinations.

Thirteen executive vice presidents, eleven senior vice presidents and thirty-five vice presidents manage this staff of 4300 in the metropolitan area. At the moment, the staff is continuing to grow; with the completion of a new building in the downtown area, the current 2000 employees in center city will grow to approximately 2300. In the Bank as a whole, about 60 percent of the employees are women (the proportion is higher in the operations group), and more than half of the employees are between 21 and 40 years of age.

The Services. Services to employees express interest in involvement, beyond direct requirements of the tasks, in the lives of employees. Despite the highly rational character of the Bank's operation, the relation between employees and management tends to be traditional, even "paternalistic." Perhaps, the very nature of a Bank's operations--the handling of cash, the extension of credit--presumes a strong ground of trust among employees and of employees by management. As in most banks, these employees have no union and no collective bargaining arrangements. The emergence of a union and collective bargaining, implying an independent role for employees, presumes a conflict of interest one consequence of which is a greater delimiting of managerial involvement in the workers' lives. Through a formal grievance procedure, employees may bring their complaints to their superiors. The matter is settled within the bank community.

All employees, excepting some of those in the operations group, work a single shift. In all three settings, however, workers generally may leave the site of their work for only short breaks. In the branch banks, tellers spell one another during coffee break time, but at Headquarters and in the Operations Group the coffee cart arrival signals the break. At Headquarters coffee is returned to the desk but in Operations coffee calls for a general work stoppage and a few moments of sociality at the immediate location. The binding of workers to the worksite is, in part, a consequence of the technology and system but it also contributes to their image of themselves as socially attached to the site, as a site-defined little community.

Both of these units are located in a business district with temptations for workers to leave for lunch or shopping. The workplace cafeteria, a major service at both sites, suppresses such tendencies. The importance which management attaches to retaining the employees at the site during lunch is evidenced by the company's expenditure for the cafeteria. Until 1955 food was free. Even today, subsidization by the company, at 50 percent of the half million dollar budget, keeps food costs below those at outside restaurants. Lunch hours become an opportunity for workers to meet and chat in small groups. Each seat of the 200 seats in each of the cafeterias is used six to eight times during the lunch period. Rank is the criterion for admission to special dining rooms in which officers assume a bit more of the real cost of their food. A worker-management group supervises a concessionaire who operates the cafeterias. The very act of supervision, which is also a control of menu, prices and profits, contributes to the sense that this is the bank community's dining room. With this arrangement, nearly all employees at Headquarters and in the Operations Group spend the entire day as bank employees.

Employees at branch banks cannot, of course, participate in these luncheon communities. Branch bank workers either bring their lunch or eat in a neighborhood restaurant. Even those at branches near the downtown headquarters cafeteria tend not to leave their immediate settings to walk over. The branch, with its very different work setting, tends to evolve its own sense of small community.

Branch workers, however, participate in the larger banking community through other services, many of which are extensions to employees of the bank's customer services. These include reduced rates on loans, safety deposit boxes, traveller's checks and free checking accounts. It is estimated that three fourths of employees, from all levels of the bank, use these banking services. The availability of these services is not likely to influence recruitment, though some bank officers rationalize them in these terms. These banking services connect the employee's household economy and work setting. In this way, the employee is drawn into the life of the bank not only as a worker but also in his or her family life.

The cost to the bank of these services does not seem to be much of a consideration in the decision to offer them. The Bank has not computed a real cost to themselves. They know, of course, that loans to employees at 3% represent funds that could otherwise earn them 7% or 8%. We have, nevertheless, attempted to derive a rough cost figure. There are, in a typical week, approximately fifty employees, averaging \$1500 each, under this bank program. This may be estimated to cost the bank on an annual basis, in terms of forgone revenue because of the preferential interest rates charged employees, about \$115,000. The bank, by offering free checking account privileges to its employees, reduces its banking service charges revenue by about \$180,000 per year. Obviously, these forgone revenues are an insignificant portion of the bank's total earnings each year.

The overriding attitude of the City Bank leadership seems to be that availability of the firm's "product" at "wholesale" to workers is the "appropriate" thing to do, particularly if the general sense is the cost is small. The "decision" then is to follow what is perceived to be a general norm of the society more than it is a conscious utilitarian act--at least with respect to services such as a cafeteria where many workers are at the same site under the same authority and the extension of regular customer services, the "product," to employees. A slightly more utilitarian rationale perceived by City Bank officers is that the banking service helps employees identify with the clientele of the bank, to understand the process from the other side of the counter. The banking services must also have another educative influence on the employees.

The employee population has, for a "white collar" setting, a disproportionate number of high school graduates without college. They learn on the job to be part of the world of banking, to think of life in terms of credit, checking accounts, payroll deductions and savings. The bank crystallizes this socialization of employees by making financial advisory services available to assist them in preparing tax returns or in planning investments. The employees, thus, internalize both the role of banker and of client.

Free medical care is offered at both Headquarters and at the Operations Group. During a year a third of the employees use the medical care unit which includes a nurse and an assistant. When their salaries are added to the cost of space and equipment, this service costs the bank some \$15,000 per year.

The medical service emerges when arrangements for emergency treatment are extended and elaborated to the level of general services. Employees may receive regular treatment and routine check-ups. This service certainly contributes to the health of the employees and to their productivity, and might be justified in these practical terms. However, the medical care unit is located in a central business area in which clinical facilities are available nearly at the door. City Bank could, alternatively, simply contract with those facilities. Providing this service on the premises, however, reduces occasions for the worker to be elsewhere during the working day, encourages him to look to the company for aid with so personal a matter as health and, from the company's view, demonstrates their concern for his welfare.

On the boundary between employee and community services, City Bank facilitates philanthropic contributions to the general community causes such as the United Fund and the Heart Fund for employees. This is an employee service in that it assists them in acting in philanthropic roles which otherwise they might enact outside of work. This is a community service insofar as its consequence is support of community institutions. Some four fifths of the employees, from all ranks, participate through a payroll deduction plan. The bank management organizes the program. Three or four employees are assigned virtually full time during "the drive" to develop the program, and about 250 employee-solicitors in various locations, in a part time basis, approach employees to obtain their commitments. This service costs the Bank \$14,000. In this way, the worker performs communal duties and comes to appreciate his workplace as part of his wider community.

The company provides a number of services indirectly by the support of Company Club, to which some 80% of the employees belong. Membership is open to all regardless of rank, though officers are, in practice, less likely to participate in its activities. It is managed, on a volunteer basis, by employees elected to lead it. City Bank subsidizes the activities of Company Club this year with a \$50,000 contribution against a Club budget of \$200,000. The Bank also subvents the Club by remitting some work time for its leaders, assigning a part time secretary and some office space.

The activities of Company Club include both employee and community services. On the employee side, in cooperation with management, new employee luncheons and an annual banquet are organized for the entire staff. Approximately three fourths of City Bank's employees attended the last banquet. Christmas parties and sunshine clubs are organized at the two major and at the branch sites independently of the Club. Special groups of employees enjoy a fashion show, shopping trips,

bowling, dances, golf, group picnics, softball and hobby shows, all organized by the Club. Tickets for local recreation activities may be obtained through the Club. Under Club aegis a choral group obtains an earmarked subvention from management. The thrust of Company Club's efforts is recreational with a touch of the philanthropic. It functions like a fraternal order in the general community--but here the bank is the community. Doubtless, it helps sustain morale among employees insofar as they can live their recreational lives through it and increase their commitment to the organization.

On the community service side, around Christmas Company Club organizes employees to prepare gifts for orphanages. A service to an employee draws the company into a non-work role of the employee. Community services have this same character insofar as they serve employees in their roles as members of the community. They are not, however, developed with respect to the personal, individual needs of employees but with respect to some common good of the community or of some class within the community and, thus, are not limited to employees of the company. They implement the concept of corporate responsibility in its commonly accepted sense.

The City Bank Corporation maintains a foundation authorized to contribute to community organizations. This activity is, in the definition followed in this report, more a community "benefit" than a community service. Aside from the negotiation for the contribution, the corporation is not concretely socially involved with the recipient. While support of the recipient may affect the reputation and status of the donor corporation in the community and may advance the recipient, the productive activities of the City Bank do not mingle with the activities, roles and individual constituting the recipient's social system.

More explicitly classifiable as community service is the involvement of City Bank Personnel in community relations committees of the Bank, with outreach to the community, and on advisory boards of community development. These latter involve them as members of the community giving them a community policy role. Employees are encouraged to engage in community service projects. They give talks about consumer problems in schools and to other community groups--essentially a personal contribution to the community but given against his or her background as a bank officer. Insofar as bank time is involved, it is a bank service. For example, an educational program, in existence since 1966, is aimed at potential school drop-outs. A vice president coordinates the program with the part time assistance of two teachers who otherwise train new employees. High school students have half a day at school and half a day at the bank. This year the program is training 25 senior high school boys and 25 girls. Some of these young people will become bank employees. To that extent, this program is part of bank recruitment activities. Most, however, will likely go on to other work. This training program costs the bank about \$10,000 a year.

The bank supports the cause of environmental improvement through the sale of earth bonds, a plan offering credit on relaxed terms to activities to improve the environment. This, of course, is an extension of a usual bank activity. According to our definition, it is a service only in a limited sense since the bank's involvement is that of processing, granting and monitoring of funds. This would be a community "benefit."

The bank also has provided reduced rate loans for urban renewal and low income housing development. In this case, bank employees work directly with committees advising and managing these projects. A bank committee advises on minority enterprise and monitors special efforts for minority employment. Under these programs, higher risk loans are made for the sake of community relationships, more a "benefit" than a service. However, within this program, concrete relationships emerge between officers of the bank and minority businessmen thus drawing bankers into non-banking activities.

In fact, it is not necessarily true that the development of a substantial minority clientele by any particular bank through a minority loan program is in the bank's long run economic self-interest. For example, if other banks are developing the minority loan market, they will probably do this at substantial initial costs (though it is presumed that there is profitability in minority lending in the long run). A bank that has adopted the alternative strategy of refraining from actively developing the minority market, and has conducted business in the interim through more traditional lending channels, may be able to enter the minority market after it has been developed. In this way, the late entrant bank into minority lending may reap supra-profits in the long run by avoiding the early costs of a market development. Thus, City Bank is indeed behaving in the light of its philosophy of corporate responsibility.

City Bank has conducted or is experimenting with several other notable community-oriented services. The bank supports and encourages an athletic program for youth in the community. Through it, bank officers and other employees involve themselves in their communities on their own time. The bank contributes coordination services to the program and designates two employees to work part time on the project. The athletic program costs the bank some \$80,000 per year.

Art exhibits and theater groups are being supported with cash grants. For instance, the bank sponsored a production of Orpheus with a grant of \$25,000 during this last year. These are community benefits rather than community services--except to the extent that bank employees may exhibit their art, arrange the exhibits or participate in the play production.

The Public Relations Department is the channel through which community services, which are not extensions of regular bank functions, are supported. The Public Relations Department and the Urban Affairs Department have a role in community services similar to that of the

Personnel Department in supporting and monitoring employee services. As in the case of employee services, the bank has no clear record of their costs of community services beyond the cash grant amounts. The expressed rationale is an expectation that these services create a climate which in the long run will be beneficial to the bank's business. Since this fact is not demonstrated, one suspects that they evolve more as an expression of the current interplay ranging from political pressure of minority groups to general sentiment about the image of a good corporate citizen between the bank and its community. Statements about future benefits remain board room rhetoric based on intuition.

Vignettes of Life at Two Branches. The branches are the bank's thin red line, the interface between small and medium clientele and the banking system. Some quick loan service, mostly to meet budgetary needs of private clients, safe deposit service, sale of foreign drafts or traveller's checks and of government bonds are branch activities. Most of the activity is the exchange of checks and cash between the community on one side of the teller's window and the bank on the other. The sacks for deposited checks lying behind the counter and the quick telephone calls by a teller to ascertain a balance in an account are visible hints of the world of operations that stretches far behind the teller's window. Tellers and guards are the uniformed front line personnel. City Bank teller's uniforms imitate the leisure clothing of the upper class, in contrast to the military type uniform of the guard, and bespeak relaxed but correct service. The decor of a center city branch--blue-green carpet against geometrically spaced wooden desks--sets the tone. The uniforms are designed to fit in with this decor. Tellers are no longer in cages, nor is the architecture monumental. Only the main office of the bank retains vaulted ceilings, marble walls and floors and the long metal chandeliers characteristic of a palace of high finance.

In a downtown office, Mr. Adam, the branch manager, is friendly, business-like, quiet, as he supervises a staff consisting mostly of women. Mary Tyson, a teller, is, at 51, a widowed mother of two boys in their late twenties. She joined the bank a year and a half ago with some experience as a hostess in a restaurant and a bookkeeper. She didn't like "being stuck" in an office, but she does like "meeting the public" and handling money. Mary recognized regular customers. After being at her window from 9-12 and then from 12:45 to 3, she goes home to clean and cook. Her shopping and laundry occupy Saturday morning. She feels she is holding down two jobs.

Her salary is deposited in a checking account with no charge to her. As an employee of the bank she has taken a loan at 3%, bought traveller's checks at no charge and has been treated by the nurse in the Headquarters building. Sometimes she takes lunch at the cafeteria in the Headquarters building though it is a bit of a walk from her branch office. She likes working in a uniform for the savings it entails. She changes to her own clothes for after work appointments. She finds Company Club helpful, enjoys their outings and theater tickets. She has gone on Club arranged shopping trips with some other tellers and secretaries and soon she will attend a play in New York

through a Club arrangement. She hasn't taken the long trip to Spain and England, which Company Club organizes, though the branch manager has plans to do so. Were the bank to extend its program of services, she would not mind having a cleaning person come to her house though she prefers to do her own laundry.

Phyllis Houston, an officer assistant at the same branch, is 26 and married to an electrician who installs burglar alarms. She has been with the bank for the nine years since she graduated high school. She answers telephone inquiries and deals with some customer problems. At night and weekends she cares for her home, shops for food. The free checking account, she says, makes it easier to budget. She has taken a personal loan for a car, used a safe deposit box and, in nice weather, has walked to the cafeteria in the Headquarters building, but, if ill, she prefers her own doctor to the bank's medical service. She is neatly dressed and agrees with the bank's disapproval of "minis" and "hot pants" while permitting "pants suits." Company Club's banquet has been enjoyable as have the ice skating parties, picnics and shopping trips.

Nancy Martino, 22 and single, a secretary at the same center city branch, has been with the bank for the five years since her high school graduation. She helps customers open accounts, answers the phone and types a good deal. She has never taken a regular loan but has used the revolving cash account. Four years ago, when a metal box fell on her foot, she visited the company nurse, but feels that few of the others at this branch have seen the nurse. She enjoys being in uniform especially because it saves money. Like most bank employees, Nancy commutes some 25 to 45 minutes to work by mass transit. She has purchased opera tickets through Company Club but has not taken an overseas trip. Through the sunshine club of the branch, Nancy is in charge of sending birthday cards or "get well" cards and arranging for visiting an employee in the event of a death in the family. Last year four weddings in two months kept her unusually busy. She appreciates the opportunity to dress dolls for orphanages at Christmas time and is happy about donating 8¢ to hospitals and orphanages for each Christmas card which she refrains from sending. She is the employee representative at the branch for the United Fund and for the Red Cross Blood bank.

A suburban branch office was, six years ago, the first building constructed in a shopping mall where it stands today a small but neat, clean and glassy pillbox at the entrance to a physically deteriorating ring of shops. The dirty and cracked fronts of the retail shops reflect the jerry-built character of the suburban shopping center. A community bulletin board alongside the teller's counter has pinned notices of church and synagogue meetings and affairs--though no listing of their worship schedule. The mall is surrounded by row upon row of new, rather uniformly designed, brick and frame houses. Skilled working people, firemen, policemen and retail salesmen are typical owner-occupants of these homes. A home which six years ago sold for \$14,000 would today bring about \$22,000. Mrs. Le Blanc, a businesslike 60 year old, is Assistant Manager. She supervises employees, including auditing of

tellers and executing the more complex actions for customers. The Personnel Department assigned her to this office in fulfillment of their promise to place her in the general region of her home. Indeed, she is about ten minutes by car from her home where she lives with her husband, a retired assistant manager for inventory control in a wholesale business, and a nephew. She worked three days a week until her daughter went to college. Her husband takes care of the outside of the house and she, attending to its inside requirements, shops in the evening and cleans on the weekends. Among bank services to employees, she has availed herself of financial advice and tax advice and likes the idea that she can buy company stock through a payroll deduction without broker fees. She has even taken a personal loan and bought traveller's checks without charge. Mrs. Le Blanc is the local volunteer for the United Fund drive while the head teller manages the sunshine club.

Mrs. Shirley Barstead has been a teller at this branch for the six years since its opening. She lives nearby and personally knows many of the customers from the neighborhood. Her husband is a trucking supervisor and salesman. Of her three children, ranging from thirteen to twenty-nine, one attends Jesuit University while another is an assistant manager in a local store. She enjoys having her boys, who work in the shopping center, join her for lunch. Her workday is from 8:15 to 3:30 except on Friday when she works 5 to 8. Thursday is hair-dresser day. Her ability to use a revolving cash account at one half percent per month has been helpful when bill collectors come to the bank to catch her at lunch time. Shirley, however, has taken her home mortgage from another bank because it offered better rates than City Bank. The children have enjoyed Company Club's activities--summer picnics and visits to the zoo. The chance to help with the Girl Scouts, which the Club has arranged through the branch, is taken by her as an opportunity to do a community service.

THE SOCIOLOGICAL ANALYSIS

Samuel Z. Klausner

CHAPTER III

ORGANIZATIONAL IMPROPRIATION: PROBLEM AND METHOD

As organizations, historically, become rationalized and distinct in their functions they, paradoxical as it might seem, see ties to other social organizations. One reason for this seeming universal is that narrowly specialized role relations must, nearly always, rest on a broader ground. Individuals persistently related through task performance also relate to one another in other respects. The incorporation of elements of the activities of other organizations is one mechanism by which these bonds are established and interorganizational ties elaborated. These incorporated elements tend to be non-production activities in a productive enterprise. This process we term "organizational impropriation."

Impropriation is to be distinguished from appropriation which refers to taking exclusive possession of or assigning a thing to a particular purpose. Impropriation does not mean to "take over and make one's own" but to transfer property from one social institution to another. The term roots in the transfer of monastic property to lay ownership. Thus, it involves the taking of activities appropriate (proper to) one organization into another.¹ Impropriation is an

¹The concept of impropriation should be distinguished from organizational "imperium" in which a "master institution" of society controls specialized institutions. Thus, the political institutions exert control in responding to political implications of activities in other institutions--such as art or the economy. The regulation by the state of an economic activity would, however, be an example of impropriation. A religious institution that critiques the values of other institutions is acting as a "master institution." When a church finances itself through a profit making corporation, we have an example of impropriation.

Economic action is carried out by a religious organization. The question of impropriation in contemporary society arises, especially, with respect to task oriented institutions. Thus, a medical organization may conclude that, to treat its patients, it needs a wider relation to them. Insofar as the doctors anamnesis asks into family history, in its relevance to diagnosis and therapy for the patient, no extension of organizational prerogatives is involved. When, as part of a program in "comprehensive medicine," a hospital advises on hygiene, on family living arrangements or offers a family planning service, it is impropriating. Similarly, when an educational organization, out of a concern for the

adaptation to institutional disengagement. Some degree of impropriation is doubtless required for the differentiated institution to operate at all. "Services at the workplace" or "auxiliary activities" (both terms will be used interchangeably) are cases of impropriation by occupational organizations of activities generally pursued in other settings. This report will examine some conditions leading industries to "impropriate" activities from other institutions. The exploration of this question requires a rather careful definition of "service" as well as a delimitation of "an industry" as the unit of analysis.

The Definition of "Services"

The referent of "services," as a research variable, has both a "what" aspect, delimiting the events intended by the variable, and a "how much" aspect, specifying the measures of values of the variable. An employee "service" (the semantic loading of the word should not prejudice the activity as help extended by management to workers) is offered at or close by the worksite (country clubs for executives or use of a company airplane are exceptions to this rule) and is offered intentionally and on a regular (institutionalized) basis. Auxiliary activities are sometimes informal. Employees may, with tacit understanding, use the telephone to call home and so, technically, use an institutional facility to stay in touch with their families. Children may play baseball on company property. Indirectly, the organization is providing an area for youth sporting. These types of informal activities were not counted. On the other hand, an executive availing himself of a typist for his personal correspondence was accounted as a clerical service to executives if the appropriation of a typist is considered a legitimate and regular entitlement. Institutionalized access to company equipment or time is a service. Non-institutionalized access may be either a legitimate exception or pilferage of that equipment or personnel time.

A distinction is maintained between a "service" and a monetary benefit. The latter facilitates activities through cash wage supplements. The employee may, at his discretion, expend these funds for services outside of the plant. The company is not then engaged in providing those services. Services to employees, in the sense of this study, involve the organization substantively and palpably in the activities of another social institution. A tuition grant, permitting an employee to go to school, is a benefit rather than a "service." The firm does not offer the education. When the company offers an educational program, unless it is a school, it acts in a way generally characteristic of an educational organization. A hospital which offers

"whole child," provides extracurricular activities, uses the PTA to advise parents on child care or sponsors a summer work program or Christmas observances, we have a case of impropriation by the school of activities ordinarily (i.e., in our institutionally differentiated society) belonging to family, occupation or religion respectively.

its employees training in typing or language has not only nurses and doctors but teachers of typing and language as staff members and its professional and administrative employees interact with them around curricula--a matter not specifically related to the organizational goal of providing health care.

A final element in the definition of an auxiliary service is that it is not directly work related. A training course to increase worker skill in the use of their machines would not be considered an auxiliary service. Such a course is training in direct support of the productive goal.

Our interest in the differentia specifica of service is not to settle upon their "attributes." In this study services are classified in terms of their "functions"--what they do. Thus, the descriptive material in Chapter IV specified what they do for employees, for the firm, and for or to the usual offerer of services and what the locus of the service in industry does to the character of the service itself. The existence of these auxiliary activities reflects "imperfections" in the institutional division of labor. The industrial institution may, while specialized in productive activities, still retains its association with the broader life of the employee and, through this, activity with other social institutions. For the worker, the ability to pursue activities of or in other social institutions while at work helps him attenuate some conflicting claims of his roles. The sundering of his roles or statuses by space and time becomes less than absolute.

Organizationally, we think of the company in economic terms. The environment consists of competitor producers and of other social organizations in their specific roles as suppliers of resources and recipients of a product. The boundaries between these organizations are breached by a cash flow. Corporate profits go to stockholders, salaries flow to managers and workers. Through them money is received by and distributed among family members and then channeled to other economic enterprises for the maintenance of the family as well as to political, religious and educational systems in which the family engages. This view of the interchange between the industrial organizations and their environment abstracts the economic from among all types of interchange. Services at the workplace also constitute an exchange between occupational and other social institutions. Through an industrial child care center, the industry exchanges child care for the labor and loyalty of the parents. Through a retail consumer goods market, the firm facilitates the employees' consumer behavior and, in return, reduces its own stress in coping with workers who must speed from work to their consumer responsibilities.¹

¹There are, however, numerous other interactions between organizations and an environment of other, non-economic, social institutions. Current attention to economic externalities specifies some unintended aspects of the economic interaction itself. An organization imposes "diseconomies" on its environment, when it emits polluting gases, the cost for which is borne by other institutions of the society; and it imposes external "economies" when, as for instance in the case of a

Our initial survey located 80 distinguishable specific services to employees which, for purposes of the study are, as described in Chapter IV, treated in 19 more general categories. Thirty-seven specific community services were identified. These have been grouped in 13 more general categories. Clients and operators of employee services speak of a drug store, food shop, dispensary or library. These are the names the activities carry in their settings outside the worksite. Colloquial references tend to classify activities according to the commodity provided. The service or good provided is but one element in a complex of social acts. Popularly, that single element is taken to designate the entire activity complex. We will treat the commodity implicated in the complex as a secondary concern. The key question in classifying auxiliary services is where else in the society the employee would obtain the good or service were it not offered at the worksite? That "where else" is the classificatory characteristic. That characteristic is not an intrinsic attribute of the service but specifies its locus, the usual context of the service. As a label it is meant to suggest that the industry is impropriating the service from that institutional locus. Implicitly, one of functions of the impropriation is to establish a link between the industrial organization and that institution.

Services, therefore, are classified according to the institutional sphere in which they ordinarily appear. Thus, employee services are classified, for instance, as market, family, or health services. Specific services within these categories are designated in terms of the implicated commodity. Thus, a physical health service includes specific services such as first aid, a blood bank, medical examination, general dispensary care, prescription service and the operation of a dental clinic.

Community services, as distinguished from employee services, constitute a second major division. Community services serve employees as members of the community but their benefits are not restricted to employees of the company. Community services are classified in terms of the community institution to which that service is directed. Community services originate at the workplace, some but not all are implemented at the workplace, but all of them involve staff members in their company roles. They include, for instance, participation in the community polity or in the community economy. Specific services under each heading are listed in terms of the concrete activity entailed. Thus, economically supportive services to the community include consumer education, product safety program and the provision of credit information.

The categories of services, theoretically defined, are mutually exclusive. The concrete activities belong to more than one institution setting. Each is, however, classified in its primary category.

transportation system, it creates economic opportunities for its neighbors.

The categories do not exhaust all the possible ones but are exhaustive for the empirical domain under consideration, the 106 Delaware Valley industries included in this sample.

The specific services, as classified by commodities, in each category constitute an open-ended list. The number of services in this list and the frequency with which a service is observed are functions of the way a service is circumscribed. For example, a firm operating a company store could be classified as offering one the retail market employee service. The store might, under single management, have a drug department, a food department and a newsstand and three different services said to be offered.

As another example, the physical health activities, such as first aid, blood bank, prescription services and dental clinics, among others, constitute an almost "arbitrary" list. Any one could have been broken down into finer classes. First aid might be partitioned into a provision for artificial respiration and another for the setting of broken bones in temporary splints. On the other hand, a small hospital section might be reported as a single service with the understanding that, of course, it includes first aid, a blood bank, and might even dispense pharmaceuticals. Any one of these elements is a link with the medical institution. The existence of several activities in a category may be thought of as multiple ties to the outside institution.

The subjective apprehension of the service at a particular site tells how social activity is organized around the service. This self-perception is the guide for classification in this study. If an industry defines its drug store and food store as separate, then it may be said to have two specific services in the retail market category.

The assignment of specific services to a category, deciding whether a drugstore is a retail market activity or a health service, is an interpretive act on the part of the analyst. The researchers were guided in this respect by their knowledge of the social location in which the activity is ordinarily obtained in the Delaware Valley setting.

Services may be aimed at specific populations within the industry. The diversity of services reflects the diversity of employees. For example, transportation services facilitate access of the worker to the place of employment. A shuttle bus may be available specifically for lower level employees, while private automobiles or airplanes are placed at the disposal of executives. On the other hand, the diversity of activities may be limited because specific services are functionally alternative to one another, the occurrence of one displacing the other. For example, a corporation with an all day manual food service or cafeteria would have little interest in an automatic vending service.

The institutional settings in which services are classified may be considered in four broad classes. The first includes activities by which a society adapts to its external environment through the allocation of resources or economic exchange. Occupations are a

primary way of engaging in economic activities. Auxiliary services in this occupational economic category include the retail market services, through which goods are obtained for consumption. Examples are "retail" consumer goods, market agent services (a liaison between a potential consumer and the market), commercial services (management and recording of the employees finances) and clerical and craft services.

A second major institutional sector involves political activities in support of social goals. Doubtless, political activity is conducted informally within the plant. Workers communicate evaluations of issues and, sometimes, management does as well. Yet, we did not observe any institutionalized arrangements for public political participation at the workplace beyond general encouragement of citizen participation. Certainly, on a managerial level, industries influence legislation. Representatives of industry appear at zoning hearings and workers participate in political activity through labor organizations. Institutionalized political activities of a union shop steward, like managements' lobbying activities, are not recorded as services. Both are directly related to the productive activity of the enterprise.

A third class of social institutions deals with social bonds or social order. Kinship activities, family arrangements and some religious activities structure relations in a community. Auxiliary services such as child care impropriate a family activity. The rules of social stratification are a way of ordering social bonds. A community service providing an education for minority youth influences the mobility of individuals through the stratification system.

A fourth institutional area deals with the knowledge, cultural rules and standards of judgment and with motivation or commitment required for performance in the other three institutional areas. Auxiliary services in industry of this character include leisure and recreation, transportation services, and educational activities as well as work facilitative activities such as the provision of security, a program of flexible working hours, communications systems in the plant, arrangements for the handicapped and, in some sense, attention to the esthetics of the worksite.

The most frequently observed employee services are those linking the worker to other economic activities. Among the most popular of the economically related services are monetary and book-keeping services. Agent services are the next most frequent class. Essentially, as an agent the corporation does not provide goods or the desired service but assists the employee in placing his order, implementing his instruction regarding those goods and services. The agent is a bridge between the worksite and activities occurring outside of the worksite in their normal institutional settings. Assistance to an employee in finding a place to live is the most frequent agent service. Third most frequent is a leisure and recreational service. Sports activities, such as a company bowling team, or worker-management baseball are common, especially in manufacturing firms. Parties and movies, sponsored by management, are a more passive form of recreation. The fourth most frequent is food service, an economic activity that

would, ordinarily, be found in the retail restaurant market. Clerical services, a right to use or have the services of clerical personnel for typing or copying, as distinguished from direct access to clerical equipment, is available in better than half of the firms in our sample. Better than four out of five of the firms provide an educational or informational activity. In some cases, this service is rooted in a library basically established in support of the productive activities. Educational programs may also grow out of vocational training as auxiliary courses are appended to it. Transportation activities have become important particularly in manufacturing industries located away from urban centers. By far, the most frequent support for employee transportation is through provision of parking space, which doubtless, encourages the use of private vehicles. Services to the retired are the primary family type activity. A more distinctively family function is provided by a child care facility--an activity which may become increasingly common as more women are drawn into the labor force. At the moment, few day care centers on industrial property appear in our sample. About a third of the industries have craft services, such as a shoe repair facility, beauty shop or a barber shop.

The Workplace as the Unit of Analysis

Industrial organization, in its systemic sense, refers to a complex of activities: production, management, raw material supply, labor supportive occupations, marketing, and consuming. The industrial system is also linked to schools which prepare its manpower, banks which finance production and offer credit to consumers, labor organizations and trade organizations. Activities may be circumscribed in terms of their function for this whole system. The enterprises of production and their immediate supporting organizations are the focal activities for this study.

An employee service is generally a subsystem within a unit of production. Sometimes services are available to several units of production and even to several corporations. This study deals with services at a single physically circumscribed worksite. The workplace is, thus, the primary unit of analysis and the service, an attribute of the workplace, is a secondary unit of analysis. In both cases, we are concerned with a social group that works in physical contiguity, usually in a single building or set of buildings in "walking distance." When a company has operations in several locations, a particular site is taken as the unit for observation. On the other hand, when several companies operate at a single site, only the employees of one firm are taken as the unit. Several buildings, housing the activities of a single company, are considered a single worksite if they are contiguous.¹

¹Centers of the same company at some geographic remove might well enjoy the same services and such a set of locations might have been selected as the unit of analysis, particularly if general corporate policy were the variable of interest. An initial assumption, however, was that services at the workplace are related negatively to

The universe of workplaces for the initial sampling frame consists of business sites in the Delaware Valley west of the Delaware River. This includes the City of Philadelphia and four surrounding counties--Bucks, Montgomery, Chester and Delaware.

The sample was stratified along three dimensions. In addition to location, as mentioned above, the other two dimensions were type of industry and size. Sites were selected within five major industrial activity groups: (1) manufacturing; (2) transportation, communication, electric, gas and sanitary services; (3) wholesale and retail trade; (4) finance, insurance and real estate; and (5) service industries.¹ Agricultural sites were excluded from the universe because of the transience of their workforce in this region and construction sites were excluded because of the mobility of their worksites. The study sought stable sites where services may be provided on a regular basis. The association between size and frequency of services was expected to be non-linear. Size (number of employees) of worksite was a sampling criterion. Sites having fewer than 200 employees (the minimum threshold) were excluded as a result of preliminary experience which showed them unlikely to have a program of regular services. Sites were sampled within three categories above this level: 200-299, 300-499, and 500 or more employees.

Five classes of industrial activity, 3 size levels and 5 country locations produced a sampling grid of 75 cells. One thousand, three hundred seventy-seven such worksites were identified within these cells. In general, we aimed to sample one tenth of these. A thoroughly random, unweighted selection would have too few of the larger worksites for analysis while the smaller sites would be well represented. Consequently 20% of the sample was drawn from the smallest size category instead of 58%, the proportion of this category in the population.

The obtained samples of 106 worksites is about 8% of all the eligible workplaces, and involves about 15% of the employees in the population of firms in the area. The sample may be considered

the accessibility of those services in "natural" settings, either in the neighborhood of the workplace or along the workers' route of travel and this assumption argued for a geographic locus. In the course of the study, this assumption was not entirely borne out.

¹The Standard Industrial Classification, as it is defined in the Standard Industrial Classification (SIC) Manual (U.S. Department of the Budget, 1971) and applied in the County Business Patterns (U.S. Department of Commerce, 1971) was used to classify the character of industrial settings. This classification, widely used by governmental agencies, contributed to the standization of the research procedures and permitted the comparison of our results with findings of other studies.

representative of the population with respect to the dimensions of classification. This sense of representativeness is buttressed by a comparison of sample and population along dimensions not controlled by the sampling design. (A fuller discussion of sampling procedures is provided in appendix A, volume II.)

The Instrument

Data were gathered through an observation of worksites and informant interviews with individuals at the site. The informants were, by and large, the directors of personnel for the corporations.¹ The interviewer followed a schedule of "question-like" items recording responses in established categories. The response categories, as well as the style of questions, were developed and tested during a pilot study.

The "instrument" was designed to elicit information about the social organization of the workplace, the primary unit of analysis, and about employee and community services, the secondary unit of analysis.² Employee and community service tally sheets were used to record information on services at each workplace. Informants selected a "most important" service in each category and, by means of a Service Description Form, employee and organizational involvement in the use and support of each service, its accessibility to workers, the year it was instituted and the recent trends in its usage were all recorded.

The search for explanatory variables concentrated, largely but not exclusively, on attributes of industrial firms. These included attributes of the physical setting as well as social organizational aspects. Following are some concepts of industrial organization on which information was gathered with some suggestions as to the way these variables were expected to be associated with services at the workplace.

The rules³ directing the establishment of services might emerge from a general company policy of a large organization or from a local exigency at one of its sites. Workplaces were classified

¹The process of finding informants is described in appendix B of volume II.

²Procedures by which the "instrument" was developed and rationales for its sections are detailed in appendix C. Comments on the field technique and informant interviewing, as well as a report on reliability, are given in appendix D. The frequency distributions of responses to all of the items are presented in appendix E. The form of the "instrument" will be obvious from its presentation there. All of these appendices are in volume II.

³In the following discussion referents of the concept are underlined. A set of words naming the indicator is placed in quotation marks. These terms may be located in the glossary appended to this chapter.

using a variable called "external authority levels" according to whether they are self directing (autonomous) or whether their rules and policies are given by some larger entity (heteronomous) and whether the site is its own headquarters (autocephalous) or is directed from elsewhere (heterocephalous). The geographical dispersion of organizational activities was measured by an item which asked: "How many sites (the visited site included) are there in the total organization with the following numbers of employees: 100-249, 250-999 and 1,000 and over?" Another question in this section was: "Who owns at least half of this company (or main corporate unit)?" Here, the alternative answers circumscribed various public, private and mutual ownership forms.

The degree of division of labor or horizontal differentiation within the organization is assumed associated with ability to provide non-work related services. To measure internal division of labor in the organization, we used E. W. Bakke's (1959) set of functions. His index of sixteen activities was incorporated into the instrument. Specialized units for differentiated functions increase the ability of the organization to respond and adapt to its environment. Measures included the number of specialists in "sales," "production," "personnel" and "management" departments as well as the "total of organizational departments." Services, themselves, are a functionally differentiated unit within the industry.

Attributes, such as hierarchical authority structure, measured as "internal authority levels," is related both to the division of labor and to the management and proliferation of services.

We used Healy's definition of span of control to measure that concept in the higher echelons of the organization and Evan's ratio of authority levels for other organizational units. For example, span of control at the highest levels of authority was recorded by responding to the item "How many members of this organization, at this site, report directly to the president (or chief executive)?" A similar question was repeated for every position in the second layer of authority. The ratio technique was used in two modes, first, by recording the number of executives in specific levels that report directly to the level "above" them and secondly by obtaining information on specific categories of employees such as operatives, office-clerical, and technical, and in terms of their exempt and non-exempt status with respect to overtime.

Size of the organization, measured by number of employees, reflects its scale of operations but because of its relation to demand, should correlate with services. By its influence on both horizontal and hierarchical structuring it should also correlate with services. Size of the personnel department, ordinarily the unit responsible for services, is also examined in this context.

The complexity of the personnel department was described using an index of universal personnel functions. Nine items were identified through review of management literature, further specifying Bakke's sixteen activities. To illustrate, Bakke's single activity, "acquire

and allocate human resources (employment, etc.)" was further particularized to include three activities of lower level: "acquire information on the job market (research manpower availability)," "recruit and hire employees for this site" and "assign employees to jobs at this site."

The schedule of work, "work shifts," and spatial organization of work determines when and where work is to be performed and thus when and where non-work related services can be consumed. (The spatial variable is not analyzed in this report.)

The temporal organization of work was covered by items referring to length of the "work week" and the organization of "work shifts." Since the utilization of services depends upon the degree to which the employees are ambulatory during their work or during break periods, the nature, frequency, and timing of breaks for most employees were scrutinized. The composition of the labor force, including measures of "employee education level," "employee age," "proportion male" and "employee length of service," also affects the type of services offered by the organization. More working mothers, for example, may imply a stronger need for day care centers.

A "statistical packet," returned by the informant by mail after the interview, requested data on the composition of the workforce of the site by age, sex, length of service and education. Information about turnover, absenteeism and pay were all recorded in the "packet." To avoid additional research efforts, the items were requested in the same format as required in statistical reports which organizations produce for government agencies such as the Equal Employment Opportunity Commission. The stability of the labor force, measured by various "quit rates," indicates the cohesiveness of the work community, as does the "existence of an employee association." Loyalty to local versus that to a transcendent community of workers is reflected in "unionization," a factor also affecting the degree of rationalization of the industry and the tendency to convert services into benefits. The location of the workplace relative to other institutions that provide services, referred to as "location," was recorded on the assumption that services at the workplace compensate for their unavailability in the vicinity (an hypothesis modified in the course of the study).

In addition to the structural dimensions of the organization, we hypothesized that its modes of integration with society and the character of the market and the clientele, measured as "market scope," "client's age," "client's class" and "individual/institutional clientele," should influence the appropriation of aspects of that environment.

The structure of the market is indicated not only by its geographic scope but also by the means used by the organization to advertise its product. Specific measures are "What are the primary media through which information of the product (or service) is communicated" and "Through what channels is the major product (or service) marketed."

The hypotheses which informed the instrument were developed in the course of the case studies reported in the previous two chapters. The next two chapters describe the services and then the above variables are employed in an analysis of those services.

Appendix

Glossary of Concept Names

This appendix serves as a brief key to the variables in subsequent analysis. It is not exhaustive of all variables measured (see appendix E in volume II) but is limited to those used in chapters VI-X. The first column gives the names of the concepts in alphabetical order. These are labels used throughout. The second column indicates the card number and column number(s) of the indicators for the variables as they appear in the "codebook." Using the card and column reference the form of the question and the response categories may be found in appendix E of volume II. Column three describes the mapping of the variable, the combination of "punches," or how it was quantified, and column four gives the formal computation when an index was constructed from several indicators. The last column gives a brief description of the referent of the concept.

Variable Name	Variable Card & Column Code	Final Form of Mapping	Computation	Description
Availability of company products	11 & 53	0=not available (1,2,4,6)=1=available at reduced price (3,5,8)=2=available at a significantly reduced price		Availability of company products or services to its employees
Client's age	16 & 62	open		Age distribution of the clients
Client's class	16 & 65	open		Class memberships of clients
Contact with public	16 & 73	open		Direct interaction with the public
Employee age	YNEMP	open	$\frac{18\&33}{18\&9}$	Proportion of employees under 30
Employee education level	EDEMP	open	$\frac{18\&50}{18\&9}$	Proportion of employees having a college degree
Employee length of service	YRSERV	open	$\frac{19\&43+19\&52}{19\&61+19\&70}$	Ratio of employees with up to 14 years service to those with more than 14 years service
Existence of employee association	11 & 74	(0-997)=1-any expenditure on employee association 998=2=no employee association		Having an employee association
External authority levels	2 & 65	open		Number of authority levels in corporation above the site
Female quit rate (quits per 100 employees per year)	18 & 62	open		Quit rate of female employees

<u>Variable Name</u>	<u>Variable Card & Column Code</u>	<u>Final Form of Mapping</u>	<u>Computation</u>	<u>Description</u>
Individual/ Institutional Clientele	16 & 69	3=3 5=5 8=8 8+=missing		"Corporate" status of clients
Industrial type	1 & 24	(2,3)=2=manufacturing (4-9)=4=service		Type of industrial activity
Internal authority levels	1 & 34	open		Number of authority levels at the site
Location	1 & 5	(1,2,3)=1=urban (5,6)=2=non-urban		Urbanization of the site
Male quit rate (quits per 100 employees per year)	18 & 60	open		Quit rate of male employees
Management offices	MANFUN	open	2&22+2&32+ 2&34	Number of specialists in management
Market scope	16 & 68	open		Geographic scope of company's market
Non-salaried quit rate (quits per 100 employees per year)	18 & 74	open		Quit rate of non-salaried employees
Ownership	1 & 17	(1,2,3,7)=1=public (4,5,6)=2=private (or non-public)		Public/Private ownership of corporation
Personnel offices	PRSFUN	open	2&12+2&14+ 2&16	Number of specialists in personnel

Variable Name	Variable Card & Column Code	Final Form of Mapping	Computation	Description
Production offices	PRDFUN	open	2&10+2&24+ 2&26 2&28+2&30	Number of specialists in production
Profit/Non-profit	1 & 19	open		Profit or non-profit status/corporation
Proportion Male	PCTMALE	open	18&44/18&44+ 18&47	Proportion of male employees
Salaried new hiring	18 & 68	open		Number of salaried employees hired annually per 100 employees
Salaried quit rate (quits per 100 employees per year)	18 & 72	open		Quit rate of salaried employees
Sales office	SALFUN	open	2&6+2&8+2&36	Number of specialists in sales
Scope of operations	1 & 18	open		Geographic locales of operations
Site's age	2 & 66	open		Date site occupied
Size	1 & 32	open		Size of labor force in the site
Size of employee association	11 & 71	open		Proportion of employees in the employee association
Size of personnel	PERSIZE	open	2&37/1&28 x 100	Ratio of size of personnel department to size of site
Size of public relations	PRELIZE	open	2&43/1&28 x 100	Ratio size/public relations to size of site

<u>Variable Name</u>	<u>Variable Card & Column Code</u>	<u>Final Form of Mapping</u>	<u>Computation</u>	<u>Description</u>
Size of total organization	1 & 16	open		Size of the total organization
Staying for lunch	3 & 33	open		Proportion of employees not leaving the site for lunch
Total organization	NUMFUN	open	2&6+2&8+2&36+2&30 2&10+2&24+ 2&26+2&28 2&12+2&14+ 2&16+2&22 2&32+2&34+ 2&18+2&20	Number of specialized departments
Unionization	3 & 10	(1,2)=1=unionized (8)=2=not unionized		Unionization or non-unionization of the site's labor force
Work shifts	3 & 20	1=1 6=1.5 5=2 (4,3)=3		Number of work shifts at the site
Work week	3 & 27	open		Length of the work week

CHAPTER IV

THE ARRAY OF EMPLOYEE SERVICES

The sheer discovery that employee and community services are not exceptional poses a question. The opinion is abroad that economic enterprise thrives on functional specialization, rational concentration on activities directly subserving the productive goal and the deferral of other social ties not obviously supportive of that goal. American industry is held to be more specialized and rationalized than any other and, following this logic, should be free of services at the workplace which draw industry into other institutional spheres. Yet, the ubiquity of services suggests that industrial production cannot be accomplished in abstraction from some traditional social ties. Some degree of impropriation of activities of other institutions seems almost necessary.

The previous chapter explained the manner in which specific services were categorized for analysis. The logic of the classification of services in terms of the institutional location in which workers would ordinarily find them outside of the workplace is further developed in the Appendices to this chapter. In this chapter the employee services are described and the frequency of each specific service in our sample of 106 Delaware Valley worksites tabulated.

The very act of classifying assigns a meaning to the services. In the course of the description, some additional meanings will be conjectured--the meaning for the worker of having a service at the workplace, the meaning for the firm of harboring an activity which, at times, may be quite different from their ordinary productive activities, the meaning for the character of the service itself when it is part of an industrial setting and the meaning for the service industry itself, in the community, resulting from the industrial impropriation. The next chapter parallels this one in a description of community services. The succeeding chapters, benefitting from these descriptions and conjectures, empirically analyze the correlates of selected services.

Retail Market

Consumer Goods

A workplace service having the character of a retail market in consumer goods assumes two forms depending on whether or not the good is

ordinarily consumed at the workplace. Food purchases in a company store are intended for consumption at home as contrasted with food service in the company cafeteria. We begin with services dispensing goods to be consumed elsewhere. Five specific services are classified in this way: offering discounts to employees on the purchase of company products,¹ the provision of a general retail store (either a concession or company sponsored), the provision of company sponsored specialized retail stores, specifically a drug store and a food shop. All of these activities are occasions for an industry to engage in retail market behavior--relating to employees as seller to buyer. Any of these services may occur either singly or in association with one or more of the others.

Table IV-1 shows the frequency of occurrence of each retail consumer service in our sample of industries.

TABLE IV-1
NUMBER OF INDUSTRIES WITH VARIOUS
RETAIL CONSUMER GOODS SERVICES^a
(N=106)

	Number of Industries
At least one retail consumer goods service	80
Specific retail consumer goods services	
Discounting on company products or services	74
Retail concession (general)	26
Company store (general)	23
Drug store	15
Food Shop	9

^aThe numbers in the table are to be measured against the total of 106 companies in the sample. The first line shows that 80 of 106 companies had at least one of the five services listed below it. Under the heading "specific" are each of the five specific services, subsumed under the "retail consumer goods" category, taken one at a time with their frequencies. Because some companies had more than one service, the total exceeds 106. Services in a specific category, such as two drugstores, were counted but once for each firm. Arrangements for "discounting on company products or services" are found in 74 of the 106 companies, while 26 of the companies invited a concessionaire to do general marketing for them, 23 of the companies manage their own general market or company store, 15 have a specialized facility for dispensing items customarily found in a drug store and 9 of the companies sell food, primarily packaged food, for consumption elsewhere.

¹In a "service," as contrasted with a manufacturing, industry,

With three out of four firms having at least one retail consumer goods service, the firm that has not impropriated a service in this category is exceptional. The most common retail consumer goods service involves the sale of the product or the service of the employing firm. As institutionalized, a section of the worksite, with products arranged store-like, or where orders are taken, is set aside. The employee may pay in cash or have his account debited. The characterizing point is that some of the firm's product is marketed to employees and that some employees act as retail salespeople. For a corporation engaged in marketing to individuals, such as a department store, few special arrangements are required. Where the product is ordinarily packaged in wholesale lots, it is required that some lots be diverted for internal sale. The thirty-two companies with no arrangements for discounting on company products include those, such as chemical or steel plants, with products not generally marketed to individuals. Apparently, nearly all firms with a consumer product offer it to their employees.

The list of retail consumer goods services is of interest for services not included as well as for those included. None of the firms market clothing or furniture, excepting manufacturers of these items. Some concerns have arrangements with "discount houses" that sell a department store variety of goods such as electric appliances--but this is categorized below as an agent service. The workplace market deals in small items having a large sales volume, standard items to meet routine needs. Access to a "stockroom" of small items simplifies the employee's market role. With all of the adults in a family away at work during the day while consumer outlets keep business hours, a facility which makes it unnecessary for employees to hurry from work to a closing retail shop is welcome.

The company does not engage in a "hardsell." Financial savings are not a crucial factor for the employees or is profit a concern of the corporation. Were this the interest, a contract with a "discount house," or a concessionaire, offering reduced prices, on the one hand, and a "kick-back," on the other, would meet the need. The significance of possessing what the worker himself produced must be central. After all, this is at the heart of Marx's analysis of "alienation."

All industries engage in some marketing though not necessarily to individuals. What is the effect, though, on an industry of marketing as a service when that is not its primary mission. A retail consumer goods market probably increases the work of the purchasing, sales and personnel departments. As the company engages a larger part of their employees' lives, the employees become more involved with the firm. Convenience to the worker, dependence upon the firm for the service, and company influence or control over the worker, are

the "product" would be a service rather than a material good. The purchase of company products is, nevertheless, classified here under consumer goods, rather than in the next section on the retail market in services.

correlative. Control is not likely to be among the explicit motives for establishing the service though the firm may anticipate lower turnover rates and greater worker commitment as a consequence of the service. Of course, were the employees a captive clientele and were the firm to show a profit on these services, they could be a focus of worker-management conflict--as in the case of the monopoly "company store." The conditions of labor contract and access to alternative markets in the Delaware Valley seem to preclude this outcome.

The character of a retail shop in a factory would not differ outwardly from a retail business in the community. The inventory with prices would not be as demand-responsive as they would be in a retail market outside. Paradoxically, though existing within a national profit-oriented firm, the decisions internal to the retail services are less rational and profit-oriented than they would be on Main Street.

The retail stores in the community might lose business were retail facilities regularly offered by industries. The viability of small retail outlets might be jeopardized and the business diversity of the community reduced. The industrial officials may meet the affected small businessmen at the Chamber of Commerce or the local Rotary, not as a competing small business, but as a major source of jobs and taxes that happens to tread in the retail sphere. The Delaware Valley is highly urbanized and such impacts are less likely than they might be in more parochial locales.

In each broad service category informants were asked to designate a specific service offered by their firm within that category, which they considered as one of their "most important" services. Their rule for judging importance was not questioned. Generally it reflects the personnel director's estimate of the contribution of the service to employees, the innovativeness of the service or the intensity of its use.

Characteristics of that specific "important" service were then explored with the informant. (The "marginals," as aggregated by broad category, for these descriptions are presented in Appendix E beginning with Card V, Col. 5. The number of companies providing such reports in depth is somewhat less than 106. Some companies had no service, or declined to specify an "important" one, in a particular category. Sometimes, because of time pressure, interviewers did not press this exploration. While the 106 firms are a representative sample of firms in the Delaware Valley, this in depth information is drawn from a biased sample. The responses presented are, therefore, but suggestive.

Of 80 firms having at least one retail consumer goods service, 70 offered more detailed replies about a specific service in this category. Thirty-nine offered further descriptions of discounting on company goods or services (about half of the 74 with that service), 12 referred to their retail concessionaire (a bit under half of the 26 with that service) while 6 mentioned the company general store, 9 the drug store and 4 the food shop. These reports suggest that these services are relatively recently established and are increasingly

attracting employee patronage. The impropriation of retail consumer goods services, which may involve the company in the retail business, may, in the future, mean taking a retailing specialist, a concessionaire, under its wing.¹

The image of the company store, particularly as a concession, dominates the picture of retail market participation. Yet, the involvement of industry in retailing consumer goods is dwarfed by a wider array of retail services including craft, clerical and commercial services--some of these to be "consumed" at work and others elsewhere. Consumer goods, as described above, are generally purchased for consumption elsewhere. In many traditional settings, workers could return home to lunch or bring a lunch box. An agricultural employer might deliver food to the workers in the field. Under contemporary American conditions the lunch box and the diner are the rule. The retailing of food to be consumed at the workplace may replace the restaurant and the lunch box. While, technically, eating is a non-work role, food service is directly supportive of the work role. Table IV-2 shows the frequency with which industries provide food either mechanically, by means of vending machines, or manually, in a plant cafeteria or restaurant.

TABLE IV-2

NUMBER OF INDUSTRIES WITH MECHANICAL
AND MANUAL FOOD SERVICES

	<u>Number of Industries</u>
At least one food service	102
Specific food service	
Mechanical	92
Manual	69

¹Documentation for these assertions follow: The percentages for this discussion are based on the numbers (here 39, 12, 6, 9, 4 respectively) citing each service as "important"--though for ease of discussion, we will refer to those "with" the service. Cases are sufficient for further comment respecting discounting (39) and the concessionaire (12). Sixty-two percent of the firms offering it had instituted discounting by 1960 and 39% report patronage of the service currently on the increase. Forty-five percent of the firms had concessionaires by 1960. This service is currently on the increase in 46% of the firms.

The breadth of use of a service (as measured by the proportion of employees using it) varies with the character of the service and the size of the employee strata to which the service is directed. A report that at least 40% of all employees used a service over the past year is taken as an indicator of "heavy use." With this criterion, heavy use of discounting is reported by 56% of the companies and 50% of those with

Clearly, food service, which occurs in all but four of the companies studied, is perceived as a practical necessity. At the moment, mechanical food dispensing equipment is almost universal in workplaces of 200 or more employees. The marketing efforts of the mechanical food distributors must be a significant factor here. The structure of the work day, carrying through the lunch hour, exerts pressure for some kind of arrangement. Food continuously available, or periodically available for breaks, suggests that food at the workplace may function to relieve work-generated psychological tensions as well as for nourishment. Eating together, a symbolic communal feast, supports the social solidarity of the workplace. Corporations stratifying eating facilities by rank apparently aim for integration of employees within strata. Coffee breaks are customarily taken with others in the same office but during the more extended lunch breaks a reshuffling of employees is not uncommon. Eating groups need not be identical with work groups. Food service becomes a focus for informal social relations within the formal bureaucratic work organization. Such sociation is more personal than that at the work bench, and less personal than that of the home. Unlike sociation at home, that at work is on an individual rather than on a family basis. Partly for this reason integration around food at work may cut across community racial, ethnic and class lines.

Food service at a worksite is not a simple reaction to its unavailability outside but is, in fact, common in large worksites in urban settings. The avoidance of crowded public lunch counters must reduce some stress for both supervisors and employees working under a thirty or forty-five minute lunch "hour" rule. Also, having the employees within the walls of the industry throughout the working day may contribute to discipline.

A manual food service, such as a cafeteria, draws the industry into an activity which, unless it is a restaurant, differs from its productive activity. The very requirements for food purchase and preparation, having cafeteria personnel on the staff, influence the climate at the workplace by widening company interests.

A manual food service may be managed by the company or by a concessionaire. Company subvention tends to be the rule in both cases. The subvention may be explained to the company's management by its

retail concessions. In 23% of the cases, discounting services were used mainly by upper and middle level employees while in 17% of the firms these strata are the primary patrons of concessionaires. In both instances, therefore, use is not limited primarily to these strata in over three fourths of the firms. In 31% of the firms, the cost of maintaining the discounting service was borne entirely by the firm while only 8% reported complete subsidization of retail concessions.

personnel office as a benefit to employees in the form of more economical food. In fact, it appears in this way as part of labor-management bargaining. At the same time an excessively costly food service will not be tolerated by the company. Decisions about it, however, as distinguished from decisions about costs of production, are likely to be made with reference to worker needs--to follow the principles of a "budgetary" or household rather than the formal economy of the firm. Cafeteria management may be a "non-rational" island in the midst of a "rational" productive enterprise. Impropropriating activities not directly related to production is, in general, a bow by the "rational" economic firm in the direction of more substantive, relational considerations.

A mechanical food service is comparable to having a concessionaire offer retail goods within the plant. The mechanical food vendors are profit oriented companies and, sometimes, are asked to share their profit with an employees' association. The workplace, of course, offers space as a contribution to this activity. If the vending service is sufficiently elaborate, it too may contribute to social relations among employees but has less impact on the industry than a cafeteria in that it does not draw the company into food service.

As the retail restaurant trade is impropropriated by industry, the character of the food service may change. There is probably more quality control where an industry is purchasing and preparing for its own employees. The menu may be more standardized. To the extent that sandwiches are displaced the diet may become lower in carbohydrates. The type, cost and quality of food is always subject to informal, if not formal, evaluation by employees.

Food service is classed in the retail category on the assumption that the employee would otherwise patronize a nearby restaurant.¹ In this sense, the plant cafeteria would compete with the retail restaurant trade. If a large workforce is involved the economic impact on the surrounding community might not be negligible. Income might decline for small restaurateurs and their employees while additional institutional food service positions are created at the plant. The restaurant food supplier would simply shift deliveries to the plant cafeteria, perhaps making fewer and larger deliveries. This, of course, expands the role of the impropropriating firm in the local labor market through their demand for food service personnel.

Sixty-seven of the 67 corporations offering a mechanical food service deem it more important for them than manual food service. One percent of the 67 firms provided a full subsidy, 78% a partial and 20% no subsidy at all. Doubtless, the choice between manual and mechanical food services depends much on the size of the firm. Mechanical food

¹Were the tendency for employees to "brown bag," food service at the workplace would substitute for food preparation in the home kitchen and might better be classed as impropropriation of a familial activity. In the community, food purchase would then be diverted from the retailer to the wholesale supplier of institutional cafeterias.

service is a relatively recently introduced service. Where it exists it tends to be available to all employees and is, by and large, subsidized. The breadth of use seems to have stabilized where it has been introduced.¹

Consumer Services

Access to company equipment and access to a copyist or typist or other clerical employee are, services in the literal sense. No "good" is consumed or transformed in either case.² Employees could ordinarily obtain them in the retail market on a "rental" or "for hire" basis. A power-saw or typewriter may be hired on a weekly basis and clerical services engaged on an hourly or page basis. Equipment services involve access to things and clerical services to people to facilitate some broader goal. Table IV-3 shows the number of industries with equipment service and clerical services.

TABLE IV-3

NUMBER OF INDUSTRIES WITH EQUIPMENT AND CLERICAL SERVICES
(N=106) (In Percents)

At least one equipment service	37
Specific equipment services	
Use of company equipment--without charge	35
Use of company equipment--rental charge	4
At least one clerical service	65
Specific clerical service	
Copyist	60
Typist	49

¹Eighty-six percent of these firms said this service was "heavily" used and only 8% limited it primarily to upper and middle rank employees. While 48% of the companies reporting this food service have instituted it since 1960, only 23% of them report patronage currently increasing.

²Restaurants are classed as a service industry in the Standard Industrial Classification. Food service at the workplace might as well have been included under the present heading as part of the retail consumer services as of the consumer goods market.

The kinds of equipment available to employees are associated with the industrial technologies. A lumber mill power-saw enables an employee to trim wood for his home. An office typewriter permits a secretary to type personal letters and a junior executive to type a school examination paper. The technology also sets limits to the practice. Blast furnaces are, of course, not adaptable to individual use.

Employees may use equipment to do favors for friends or turn access to company equipment into additional income, a form of "moonlighting" on or after the job. Secretaries type their own business and personal letters and craftsmen use company tools to make furniture, to weld metal or cut a stack of paper. Use of equipment, to be recorded here as a service, must be permitted and institutionalized. A secretary using her typewriter during her lunch hour is availing herself of a service. Using it to type personal items during working hours without permission is equivalent to petty pilferage on the part of employees with access to manufactured goods and is not recorded as a service. For the industry, access to equipment may be part of job attractiveness. A school might attract personnel by offering them free courses. A taxi cab company may "compensate" the cab drivers by allowing them to retain the cab after hours or permitting personal use between paid trips.

For the use of the service itself, equipment usage has a "positive feedback" effect. The more an industry engages labor skilled for equipment, the more it will be used beyond working hours. The "explosive" use of the copying machine, when employees are permitted to use it for personal work, may turn an item of marginal use in the productive system into an "essential" and heavily used item. The impact on the rental agents for this equipment in the community is probably marginal. Much of the activity with this equipment would not take place without the access at work. It may produce a need and so cause an expansion of the service to the community. This is the experience copying machines. The extent of economic diversion from the community as a result of company equipment use remains to be explored. As it encourages work, that would not otherwise be done, more materials may be consumed. It might promote a "do-it-yourself" trend which would reduce employment of craftsmen in the community.

While access to equipment depends upon skill in using that equipment, access to a typist for non-work-related typing, may depend on rank and placement within the organization. Clerical services facilitate performance in the employee's other roles. A letter typed in the office permits the employee to dispatch more letters and so, perhaps, maintain a more complex life or enable him to dispatch a typed in place of a handwritten letter and so project a symbol of rank, a non-economic reward. At the highest positions in industry, a secretary may be allocated to an executive specifically for his personal work. The secretary, involved in performing a wider range of duties and, perhaps, obtaining a perspective on ways of life of higher social strata, may contribute to her mobility.

From the company's perspective, an additional work load is accepted on time charged to its production budgets but considers this

a "trade-off" for added involvement on the part of the executive. The nature of the service is better than that which would be available outside because the clerical personnel are already familiar with the work habits of those having a claim on their time, the service is available on demand and it is rendered in a context of supportive services--including available supplies, equipment and mailing services. These services do not compete with those outside industry. Rather by use in the industrial system, they increase the total quantum of activities in the society--assuming that the executive would not otherwise engage a secretary for his personal work. It also creates an additional work opportunity for someone in the community.

Of the 35 firms reporting the use of company equipment as a service, 14 singled it out for mention as an important service. A small part of the workforce seeks or has access to company equipment, on an institutionalized basis, and that number seems stabilized. This is consistent with the lack of significance given this service by the companies themselves.¹

Of the 65 firms reporting a clerical service, 20 cited a copyist and 2 a typist as a most important service. Upper level employees tend to use a copyist while lower level employees use the equipment by themselves, often on an informal basis.² A copyist may reduce the load on a typist, especially for the preparation of stencils for reproduction.

Services are performed for employees, not only by clerical staff but, by craftsmen. These include personal craft services, serving the person of the employee (shoe repair, beauty shop, barber service), and technical craft services, operations performed on mechanical and other material possessions of the employee (appliance, repair, laundry, etc.). (Shoe repairing could, depending on perspective, be in either category.) Table IV-4 shows the frequencies of each

¹Only one of the 14 firms reported heavy use of this service, and only two reported use increasing. About a third restricted the privilege of equipment use to the middle and upper level employees. In most cases, the firm covered all the costs and in the remainder provided a subsidy. These costs, however, tended to be minor. Only one firm estimated a cost of over \$2,500 a year for this service.

²Half of the copy service arrangements have been introduced since 1960 and in 59% of the firms usage is increasing. Copy services are "heavily" used in 21% of these firms. Access to a copyist is perceived as a relatively low cost item, usually covered by the firm. In 40% of the firms the service is used primarily by upper and middle level personnel. In 90% of the cases, the total cost is borne by the firm. Ten percent subsidize a copying service requiring the employee to pay a nominal charge. Only 7% of the firms believe this service to be costing them over \$2,500 a year.

TABLE IV--4

RETAIL CONSUMER SERVICES: CRAFTS

Number of industries with various personal craft services:

At least one personal craft service	13
Specific personal craft services	
Shoe repair and shine	10
Beauty shop	8
Barber	6

Number of industries with various technical craft services:

At least one technical craft service	25
Specific technical craft services	
Appliance Repair	13
Printing	11
Plumbing	4
Laundry	4
Home maintenance	3
Roofing	3
Painting, waterproofing, janitorial activities, computer programming, building reconstruction, window cleaning and house cleaning each were available in less than 3 firms	

of these services in our sample of industries.

Personal craft services are not ordinarily extensions of regular production activities. A shoe repair shop or barbershop is generally introduced by design into the industrial setting. In "total organizations," such as the military, such services are expected. While no "total organizations" appears in our sample, hospitals in the sample approach that model. All employees of these firms have access to these personal services in the normal retail market.

By and large, personal craft services are offered against a charge to the employee so that the financial savings is not an important consideration. Workplace availability is a convenience. More significantly, however, these services establish a company-employee tie respecting the employee's personal needs. Corporation interest is expressed in the employee's personal appearance, associating self-enhancement with pride in belonging to the company.

An industry appropriating these services begins to take on the cast of a "total organization." It is now a society concerned not only with the production by its employees but with the corporate image they project. The effect on the services themselves is reduce their variety. The haircuts given in an industry barber shop are probably more limited in their styles than would be the haircuts to be obtained elsewhere. These services probably do not cut too deeply into the community economy. The employment opportunity created at the plant for a barber replaces one that would have been available in town.

An appliance repair service is likely in a manufacturing corporation which allows its electrical workers to interrupt their tasks or to work overtime to fix an appliance for an employee. Home maintenance or roofing services require that production workers come to the homes of employees. Such a privilege is, generally, granted only to a few ranking employees. With technical craft services increasingly difficult to obtain through regular community channels, availability of these services at work confers an advantage. Industrial involvement in this aspect of the retail market transcends work and home. Work on things for employees becomes continuous with the productive process.

Technical are less likely than personal craft activities to be offered against a charge to employees. Relationships of gift exchange may be established among employees around these services. The executive whose roof is fixed by a workman is incurring an informal obligation to the employee who does the job. Interaction occasions at home as well as at the plant deepen this relationship. The executive's power over the employment situation and the willingness of the skilled employee to render favors to an executive are both bases of the exchange. The relations on which these services subsist are easier to establish in paternalistic than in formal bureaucratic settings. Rights and obligations are more narrowly and more precisely defined in bureaucracies.

Thus, the discussion of the impact of these services on the industry is part of a discussion of the character of the industries. In privately owned, patriarchal organizations, craft services extend the personal relations of work. In publically owned, more bureaucratic organizations, they exist as an underground of informal ties among the formal.

Personal and technical craft services offered at a workplace differ from those offered in the community in that they are not directly part of a cash nexus as when offered by an entrepreneur. The entrepreneur can refuse to provide a service and forfeit the payment. A refusal to provide the service to a fellow employee could reverberate in the continuing work relationship.

Were craft services at the workplace widespread, community craftsmen would feel an economic impact. As it is, the workplace is but marginally involved with respect to the community economy.

Eight of 13 companies offering personal craft services reported on a most important one; 3 listing shoe repair, 3 the beauty shop and 2 the barber. Where these services occur, they seem to be recent innovations which are enjoying some growth.¹

Eleven of 25 firms reporting technical craft services cite 1 as a most important service; 1 specifies home maintenance, 2 specify printing, 1 its computer service, 4 appliance repair and 3 their laundry service as the most important. The descriptive information provided on these services is too scattered to even conjecture about their use by employees and cost to the firm.

Every industry in our sample has well developed payroll and accounting activities which are microcosms of commercial services performed by banks and accounting firms in the retail market. Commercial services may be divided between monetary services having to do with cash flow and bookkeeping services involving the recording of that flow. The extension of these on a regular basis to assist employees with their non-work related financial affairs is the foundation of commercial services at the workplace. Nearly every firm in our sample offers its employees some kind of monetary or bookkeeping service as shown in Table IV-5. The monetary commercial services by advancing credit or banking his funds facilitate his participation in the external markets. While available to individuals through banks or other retail credit agencies, these commercial firms are not always willing to extend credit to low-income employees. Further, an employer may offer loans at lower interest rates and easier terms than are current on the market. An advance on pay is a short term, interest free loan. A payroll advance expresses confidence by the firm that the employee will indeed continue to work. The use of credit cards, usually personally by executives, is an organizational courtesy as well as an expression of faith that the employee will not default. Savings and loan and credit union activities require banking-type facilities beyond the ordinary payroll activities of industrial organizations. Special record keeping, accounting and employees delegated to this service create a small banking facility within the corporation.

A credit union, particularly when employee operated, may foster a sense of mutual-interdependence, of community among employees. When the service is company operated, the creditor-debtor relationship creates a dependence on the part of the employee. A loan by the firm extends the firm's control, through the indebtedness over the employee. This, after all, is a traditional source of indentured

¹Most of these services have been established since 1960. One of the beauty shops, all 3 shoe repair and both barber shops are reportedly increasing their business. The barber shops, tend to be restricted to upper level employees and to be subsidized. The beauty shops also have some subsidization.

TABLE IV-5

RETAIL CONSUMER SERVICES: COMMERCIAL

Number of industries with any monetary commercial services:

At least one monetary commercial service	95
--	----

Specific monetary commercial services

Advances on pay	68
Savings and loans	52
Credit cards	44
Credit unions	44

Number of industries with any bookkeeping commercial services:

At least one bookkeeping commercial service	105
---	-----

Specific bookkeeping commercial services

Payroll deduction	97
Charity deduction	91
Check cashing	52
Tax aid	37
Investment planning	29
Accounting	6
Safety deposits	6

servitude. Where credit is extended to or beyond the employee's ability to repay, the danger of the debtor situation increases though nothing approaching this was apparent in our sample. We do not know whether the net effect of these banking facilities on employees is to encourage savings or to encourage spending beyond current earnings.

Banking services in industry require an increase in the size and responsibility of the finance department, a consequence which may increase the influence of that department over company policy. As a depository for employee funds, the corporation may have access to additional investment capital--depending on the rule circumscribing the use of these funds. Earnings on deposited funds may be limited to the fiscal and administrative cost of loans. Banking operations within industry probably compete more with small than with the large financial credit institutions of the community. The impact will depend upon whether the industry uses local banks for depositing these funds.

Bookkeeping commercial services, such as payroll or charity deductions, check cashing and safety deposit service are also commercial banking-type services. In bookkeeping, as opposed to monetary

services, no more or less money is placed at the disposal of the employee. The service consists of executing a record of instructions regarding the allocation of income and expenditures. A bookkeeping service is a step toward a cashless society in which an employer, by a bookkeeping entry, remits salary to an employee's account and then, by use of a magnetically typed card, the employee instructs the bank on the disposal of those funds.

Tax aid, investment planning, and accounting are advisory services in which the financial expertise available to the corporation is extended to the employee for the management of personal funds. Such advice may help employees rationalize their financial management. Whether corporate policy influences employee investment planning through such advice is unknown. Bias toward certain portfolios, a not surprising possibility, would permit the corporation to extend its own investment policy. Employees might, for instance, be encouraged not to invest in the stocks of a competitor but rather to buy shares in the employing corporation. The tie between employee and corporation is thereby strengthened. Tax advice shapes the employee's relation to the government and investment planning his relation to other industrial organizations. In this way the corporation is an agent mediating the relation between employees and other commercially oriented institutions.

Organizations have traditionally grow through control of some sector of the market. Recently, gaining financial control of other corporations producing a variety of products has been a common road to corporate growth. The corporation itself moves up the corporate hierarchy by shifting from production to financial management or commerce. Banking services for employees strengthen this talent within the corporate structure and so contribute, in some small way, to its potential mobility. The reverse may also be true. As the corporation expands its competence in financial management, employees have more opportunity to enjoy this service. Monetary and bookkeeping services are probably associated with corporate growth.

The character of this service itself, other than its cost to employees, is probably little affected by its occurrence in the industry rather than at the bank. At the workplace, the employee has greater access to it--a physical access supported by a social climate encouraging the use of the service.

The impact on bookkeeping, tax advising and accounting services in the community is probably marginal. While the commercial sector of the retail community is the official locus of these services, most workers would probably accomplish them on a "do it yourself" basis were they not available at work. Thus, an upgrading of the employees use of services is more likely than a diversion of them from the community. As employees learn to use these services they may, in the long run, increase the demand for them in the community.

• Twenty-four of 95 firms reporting monetary commercial services, selected 1 as a most important service; 8 specified the credit union, 7 pay advances, 6 savings and loans and 1 the personal use of company

supplied credit cards. The formalized credit union seems to have been an early leader among these services emerging in firms with larger and more stabilized labor forces. The more specialized services are more recent and, where they exist, not as heavily used. In all cases, these services are used by employees of all ranks.¹

Twenty of the 105 firms reporting some bookkeeping commercial service provided data on one of them as a most important service: 8 named payroll deductions, 7 the check cashing facility, 3 investment planning and 2 referred to bookkeeping for charity deductions. The payroll deduction service, introduced recently and increasing, is the more frequently used and more costly to firms. This service facilitates employee participation in other institutions without competing with them. The check cashing service, directly in competition with banking, does not seem to be pursued with vigor either by employers or employees.²

Agent Services

Financial advisory activities, as mentioned, help employees in dealing with other social organizations. Conversely, the corporation may represent the outside organization to the employee. In both cases, the corporation is an agent. Agent services are impropriated from the retail market. They require no operating capability in the areas of service but rather require a coordinating ability. Table IV-6 lists 7 agent services, in which the firm represents an outside organization to its employees, with their frequency of occurrence in our sample.

¹Seven of the 8 firms with credit unions and 5 of the 7 pay advance arrangements but only 2 of the 6 having savings and loan arrangements said these services are heavily used. In 1 case usage was primarily by the upper and middle level employees. In all cases, costs of maintaining these services were either borne entirely or well subsidized by the firm. Half the credit unions were established by 1960, and a third of the pay advance and savings and loan arrangements were instituted by that time. Use of the credit union is increasing in about a quarter of its instances; use of savings and loans is increasing in about a third of the cases in which it is reported.

²One of the 8 payroll deduction and 2 of the 7 check cashing plans were initiated after 1960. Six of the 8 payroll deduction plans and 2 of the 7 firms allowing check cashing reported the service heavily used. In nearly all the cases, the cost was borne by the firm. Three of the 8 firms with payroll deduction plans but only 1 of those allowing check cashing thought those services cost them at least \$2,500 a year. Five of the 8 with payroll, 1 of the 7 with check cashing believe that service to be increasing.

TABLE IV-6

RETAIL SERVICES: AGENT

Number of industries with various agent services:

At least one agent service	100
Specific agent services	
Finding and moving	83
Placement	57
Tickets	43
Travel	37
Purchasing non-company products	36
Advertising in company journal	22
Consumer programs	12

Nearly every corporation in our sample provided one or another agent service to employees, the most frequent being that for finding housing and assisting employees, new and transferred, with moving. From the employee's perspective, help with moving and finding, expands his job market--when he transfers between firms. Employees also more easily accept moves within the corporation. To the extent that traditional family relations, particularly those relevant to a residential location, dampen the freedom of labor to move and, thus, to negotiate better opportunities, a moving and finding service reduces that influence of family on occupation decisions. The service does not directly affect traditional family relations, the ties that might be sundered, but eases entry into a new neighborhood and to new ties. The family moving in response to corporate needs may find the corporate "family" may become the only steady neighbor. The employee may even become dependent upon the corporation for guidance in its residential decisions, a factor enabling the corporation to locate its workers in line with its image. A map of housing opportunities provided by the corporate agent and "welcome wagon" activities of corporate wives ease the transition--but these are social services which go beyond the agent services here being considered. Involvement of wives in these moves brings a second member of the family into contact with the firm.

With large corporations, taking the entire nation and beyond as a pool for executive recruits and with the high rate of executive transfer, finding and moving services become obligatory. The firm is enabled to deal more rationally with its labor market and with assignments. Thus, the service, while primarily in support of family roles (by mediating a relation to the retail market) also facilitates the production process.

Assistance with housing increases the employee's sense of security and so bolsters his commitment and loyalty to the company.

The industry engages personnel to deal with moving and becomes involved in the housing market from an agent's perspective. The personnel department, as an extension of its recruiting activity, becomes involved. The employee would still deal with moving companies and real estate agents in the retail market to whom he is referred by the corporation. Now, however, he has the collective backing of the corporation in those dealings.

The corporate agent services are not competitive with moving and real estate companies. The demand for their services, however, is reallocated among selected entrepreneurs in the community and, thus, indirectly, builds up sentiment in favor of the industry in the recipient sectors. At the same time, employees probably enjoy an economic advantage from these firms.

A placement service seeks a job for a spouse of a transferred employee or attempts to place an employee in another one of its locations when he must move for family, medical, or other personal reasons or because his work at the present location is terminated through no fault of his. Larger firms may explore placement at their other sites in this last event. The corporation, in this way, evidences concern for the welfare of the employee. As employees carry corporate skills and culture from one site to another, corporate life at the various sites takes on a similar hue.

Acquiring tickets for entertainment, making travel arrangements and arranging for the purchase of non-company products, all modestly frequent services, are conveniences for employees. Such services may be, but are not necessarily, associated with price reductions. The availability of theater tickets and discussion of travel plans at the workplace may increase worker participation in these activities, broaden their cultural horizons and give the corporation a more sophisticated labor force. Channels of communication are opened between industry and institutions of culture and recreation. The major impact on the community of this service is economic reallocation to the recreation industry and, probably, as a secondary effect, by creating an audience for theater and concert, raising the cultural level of the community and contributing to the viability of the performing arts.

Advertising in a company journal, a way of communicating among employees, has a role not unlike that of the "classified" in a local newspaper. Employees use this medium to announce that they have a car for sale or room to let. The employee community is a market for exchange of goods and services. Journal advertising facilitates the development of market links alongside of the work relations. The extension of employee relations results from employee rather than managerial action and probably contributes to the stability of the labor force. The impact on the community is less in the reduction in "classified" advertising in the local newspapers, or reduced business for the used car dealer as in the emergence of a sub-community of fellow workers who also buy and sell from one another, transfer used merchandise, offer typing and baby-sitting services or harbor one another's pets.

A consumer program teaches employees how to improve their efficiency in the retail market. Suggestions about good buys, quality of merchandise, and good stores, like other agent services, channel the employees among retail shops, turning them into a selective consumer community. Unlike other agent services, however, the consumer program does not implement the employee's instructions. Thus, this service, incipient to an act of agency, might have been categorized as an educational service offering information similar to that in Consumer Reports. The ethic of "consumerism" and of health and safety would inform this program. This service in industry does not displace consumer education in the community. Its major impact is in the more critical character of consumer demand the program may engender.

Seventy of 100 firms reporting some kind of agent service, 71 specify one of them as a most important service of which 28 cases cite finding and moving, 17 purchasing non-company products, 10 arranging travel, 5 acquiring tickets, 6 the placement service and 5 firms cite advertising in the company journal as their most important. On the whole, agent services are recent arrivals on the industrial scene and, by and large, meet specific needs at specific times for certain employees. Employee usage of these services is increasing. These services tend to be entirely subsidized, though the amounts of subsidy may be nominal.¹ The growth of agent services is consistent

¹Recalling that the criteria for "heavy" use is whether as many as 40% of the employees use a service in any given year, the finding of housing is not a heavily used service. The housing office may, nevertheless, be burdened with work. The travel, ticket, and placement services were also not heavily used and only one of the organizations citing advertising in the company journal as its important service reports it as heavily used. On the other hand, 7 of the 17 firms mentioning the purchasing of non-company products classed the service as heavily used.

In all but one case, finding housing and moving was restricted to upper and middle rank employees. Company travel and ticket agencies are used primarily by the upper level employees in almost half the cases, but in only about a fourth of the firms are executives the predominant purchasers of non-company products.

In 86% of the firms with finding and moving subsidy is total with three quarters of the firms believing their moving in service cost over \$2,500 a year. Costs of advertising and placement are also completely subsidized. The purchasing of non-company products cost this much to about a fourth of the firms citing this as an important service. Other agent services are of nominal cost.

Agent services are, in general, recently instituted. By 1960, 54% of the firms had finding housing and moving services, about a third had a placement service and a third had arrangements for purchasing non-company products, almost none had instituted travel, theatre ticket and advertising services by that time. Only a fifth of the firms report increasing use of finding and placement but about half report increasing use of travel and ticket services.

with the growing use of concessionaires--facilitating access to a service without direct corporate involvement in the substance of that service.

Primary Group

Industrial organization, in our society, has a particular affinity for the retail market. Productive work and economic exchange are two sides of the same activity. Impropriation of retail market services does not change the institutional cultural orientation but simply adds other work, business and commercial activities. Regardless of impropriation, industry has, for its productive needs, clerical, marketing, payroll and financial control and other administrative activities. Manufacturing concerns may also have the skills needed for personal and technical craft services.

Primary group services are impropriated from the family household or community and often resemble nothing that an industry would ordinarily do. The services substitute for some of those the employees would ordinarily obtain at home or in the community.¹ Table IV-7 the number of industries with various specific family and community services.

TABLE IV-7

PRIMARY GROUP SERVICES

A. Number of industries with any family services		
At least one family service		57
Specific family services		
Retirees	57	
Day care	2	
B. Number of industries with any community services		
At least one community service		86
Specific community services		
Charity collection	66	
Use of auditorium for community meetings	43	
Funerals	19	
Religious observances	11	

¹ Individuals often serve in the retail market in support of family and personal role, and retail market services in industry are almost solely committed to this end. Food from a company shop appears

The principal family oriented service is to retirees, primarily the extension of privileges of corporate life to former employees. These services are, to a great extent, recreational at the worksite and draw the retirees out of the home into the plant. The corporation which does not limit its interest to the employee's productive present but shows concern for his post-working life must perceive a stable labor force. For the retiree, the extended sociality in a familiar circumstance reduces the significance for him of a community based senior citizens' club. Since the social life around work generally tends to be less politically partisan than that in the neighborhood, retirees involved in a company program may be less likely to engage in political action.

Corporations with such programs must have lower turnover rates and a greater sense of continuity. The retirees remain as historical resources and examples of the caring spirit of the firm. Through the continuing contact with the retiree's family, the industry might even increase the probability of recruiting younger members of that family.

The retirement service in industry differs from those in the community along the lines in which the occupational world generally is distinct from the communal. The retiree is less likely to be bound to others of his ethnic or religious group or of a similar national origin.

Such programs are ordinarily coupled with retirement benefits and so ease both the economic and social burden on community welfare programs. This service, widely offered but not widely used, may increase in significance in the future.¹

Only two firms have established day care facilities at the worksite despite the number of firms with a majority of female employees. Company support of day care at other locations is not recorded here. Young working mothers generally arrange with neighbors

on the dinner table at home and technical craft services are used for home maintenance. Such activities, therefore, not only link industry with the retail market but, by means of these market impropriations, assist workers in supporting other roles. The full system of role and institutional relationships, direct and indirect, would complicate this presentation. The reader, though, should keep the interrelationships in mind.

¹Forty of the 57 corporations with retiree services cite them as important. Only 1 of the 40 firms reports heavy use of the service. In about a fourth of the firms, the primary users are retired upper and middle rank employees. The cost of these programs is almost always borne completely by the company and for one fifth of the companies, this cost exceeds \$2,500 a year. Usage is increasing in nearly half the cases.

or with a relative for child care or, in a minority of cases, use a community day care facility. Institutional day care, in any form, has not been popular among working mothers. A facility at the worksite is a significant innovation of an activity quite different from any that the industry, unless it is a school or hospital, carries on in its normal, productive, administrative and financial sections. Industries with large numbers of female employees, such as financial and medical, among service, and garment, among manufacturing industries, have tended to be in urban centers where alternative child care arrangements have been available. Interest of the churches and of federal government in preschool education have, perhaps, retarded a demand for this service within industry. The firm in the earlier case study sponsored day care centers in the community as well as for its own employees.

Industry facilitates the workers' community role through its philanthropic collections. Insofar as the firm merely remits a contribution for an employee, a bookkeeping commercial service is rendered. Collections and sometimes disbursements of funds is a direct philanthropic service. Aside from cash, industries collect clothing for distribution or, as in one firm, toys for orphan children. These are substantive involvements of the workplace which aid the worker in fulfilling a communal obligation. In all likelihood, the per-capita contribution is increased by company participation. The selection of philanthropics is, of course, limited to those on which there is general agreement. On a comparative level, small private companies contribute to partisan causes, generally by vote of their board allocating funds from a corporate treasury rather than through a campaign among workers.

The industrial organization sponsoring these activities assumes the role of a voluntary community agency--a role that might otherwise be filled by religious or civic organizations. Like child care, this activity contrasts with the instrumental, profit oriented, behavior of the firm as a productive enterprise. The activity doubtless adds to the public image of the firm. The direct impact on the community is reflected in the growth of community chests that depend on corporate aid. Voluntary agencies in the community supported through these campaigns are less dependent on government.

The use of corporate facilities for meetings of community organizations permits the worker to enact a range of community activities within the work setting. Since a facility rather than sponsorship is at issue and only workers who petition for the facility are involved, sectarian groups, though rarely political groups, can be accommodated in this way. The worker, providing such facilities to his community group, may, thereby, gain prestige within that group. As a consequence of his leadership, he will communicate the philosophy of his occupational group or of his industry to members of the group. In this way, industry is expressing its interest in community participation.

Industrial participation in the funerals of employees, or of members of employees' families, is less frequent but not

insignificant. Officers of the firm may attend memorial ceremonies, deliver eulogies, or offer floral arrangements. The firm may sponsor burial grounds or attend to the financial welfare of survivors. Such expressions are most likely when death occurs during an employee's working years. The contemplation of death in the occupational setting is cacophonous. Work, ordinary in a life giving, creative motif, is forced to face its finitude.

Rededication to the worthwhileness of effort, an affirmation of the solidarity of the working community despite the loss of some values underlying the daily routine, may follow. Industrial participation is supplementary to that of a wider community and offers no economic competition to funeral directors or to the church.

Religious observance at a factory takes place where employees are more or less religiously homogeneous, a condition which characterized religiously oriented medieval guilds. Rare is the American factory that opens its work day with prayer or, as in the Moslem world, is a setting for individual worship. Typical religious observances are on public, particularly civic, occasions, which have become sacralized, such as Thanksgiving and religious occasions which have become secularized such as the universal closing of businesses on Christmas and on Sunday. (Because of the universality of these practices in our sample, we did not record them as industrial participation in religion. They are a comment on the generality of religious services to employees rather than a factor differentiating firms.) Firms were classified as offering religious services if they did have organized prayers, a chapel for employees or a pastoral service.

Church support by industry and clerical support for industry have been traditional in the United States. On the one hand, some industrialists believe that a religious orientation supports a more honest and committed work force. On the other hand, a religiously toned work setting is less likely to be culturally pluralistic. In the light of pressure to remain competitive, industry might have to weigh the value of a homogeneous and loyal work force against their freedom to select the talent for the job on grounds of competence.

Forty-eight of the 86 firms reporting a community oriented service to employees describe one as a most important service. Twenty-five mention the charity collections, 17 the use of the auditorium for community meetings, 4 assistance with funerals, and 2 mention religious observances. Charity collections are occasions for broad participation by employees in a common activity. The nominal cost associated with these services is borne by the firms.¹

¹ Eighty percent of the firms report heavy employee participation in charity collection but few report auditorium usage so widespread. Some 4 out of 5 firms see little increase in the rate of participation at present. In about a third of the cases, auditorium is used primarily by the upper ranks. Charity collections are

Cultural and Work FacilitativeInformation and Education

Industries may sponsor vocational education as part of their apprenticeship program and in accord with their manpower needs. Organizations publish newsletters for public and employee relations and have libraries in support of their work, all of which may be developed into employee services. Table IV-8 shows the frequencies of firms with specific educational or informational services.

TABLE IV-8

NUMBER OF INDUSTRIES WITH ANY EDUCATION-INFORMATION SERVICES

At least one education-information service	85
Specific education-information services	
Library	56
School	55
Publishing professional material in company journal	31
Membership in professional organizations	21

About half of the corporations in the sample maintain a library which provides a service to employees, circulating books not directly related to the job. These non-vocational libraries are extensions, a few extra shelves, and a small additional budget, of regular library resources. Libraries, of course, vary in the nature of their collections, and so in their functions but, in all events, they offer an occasion for broadening the intellectual and recreational life of employees. Industry libraries are steeped in the culture of industrial capitalism. Yet, critiques of the system are not generally excluded as a matter of policy.

About half the industries support a non-vocational school. For some this involves classroom instruction on a course by course basis. Courses in financial management or in the crafts, for personal and avocational interests, are typical. Historically, industries have maintained educational systems, including elementary and high schools. None in our sample went that far. At the other extreme, the service blends into the financial sponsorship of employees' study at an outside school such as a university. That

restricted to the upper rank in but a quarter of the firms. The cost of charity collection is totally borne by two thirds of the firms and where the auditorium is offered, the cost is totally borne by 80% of the firms.

arrangement is more of a benefit than an employee service since the firm does not become involved in education. Schools under company auspices, like libraries, are bound to be limited in their curricula by company philosophy, even if not by company policy. The corporation assumes a role in the community's educational institutions through its public relations arm. Educational activities for employees tend to be conducted through the personnel department, to be focussed on the development of the employee community. Education at the plant may displace attendance at adult education programs and may affect participation in community groups, including religious and fraternal orders, that also sponsor evening educational programs. The impropriation of education brings elements of the employee's cultural life into the company orbit.

Organizations employing professionals compete with the professional community for their commitment. Some conflicts between administrators and doctors on a hospital staff may be understood in this context. At the same time the standing of a professional among his colleagues radiates to the reputation of the organization which, therefore, has an interest in his professional activity. Publishing professional material in a company journal or sponsoring memberships in professional organizations demonstrate this interest. The latter as a financial contribution is a benefit rather than a service. When, however, the employee uses company facilities to carry out professional organizational tasks, as when he serves as a journal article reviewer or arranges a meeting session, the firm is offering a service. Company publishing is a bridge between the firm and the professional community. A pharmaceutical house, for instance, whose researchers report their experiments in the house journal, is communicating its culture to the professional community and a sector of "outside" professional life is lived at the workplace.

The competitive situation of industry imposes some restrictions upon professional activity. The pharmaceutical research published in a company journal would not likely report serious secondary effects of a new compound to which that company is committed. The discussion of counter-indications for use of the compound would, more likely, be extended. This suggests a division of function between independently edited professional journals and those sponsored by industrial organizations.

The very sponsorship of such a journal has a professionalizing effect on the corporation, requiring an expansion of editorial and publishing activities and correspondence with scholars in the field. Because of this visibility, the task of recruiting quality professional personnel to the firm may be eased and the firm's professionals are more likely to receive other employment offers.

Sixty-four of the 85 firms reporting an activity in the education-information area selected one as most important: 36 mentioned their school program, 12 library resources, 12 the professional memberships of their employees and 4 the professional publishing of employees' work. The library tends to serve executives and to cost little to the firm. Schools, probably because of limited appeal, are not sponsored as

vigorously by management. Professional services too are relatively inexpensive.¹

Work Arrangements

Work facilitative services deal with problems of the worker, which do not arise from the work situation, in order to facilitate his productive performance. Dining facilities at the workplace are of this character and could have been treated under this heading. More directly, however, assistance in transportation from home to work, allowing flexible work hours which permit adjustment to the demands of other roles and adjustments for handicapped workers all relieve or adjust personal or primary group problems so as to facilitate job performance. The frequencies of firms with specific work facilitative services are shown in Table IV-9.

TABLE IV-9

WORK ARRANGEMENTS

A. Number of industries with various transportation services:	
At least one transportation service	100
Specific transportation services	
Parking	88
Company vehicles for personal use	39
Automobile service	13
Shuttle bus	12
Airplanes for personal use	3
B. Number of industries with flexible work hours:	
	39
C. Number of industries with arrangements for the handicapped:	
	39

¹Fourteen percent of the firms with schooling programs reported heavy participation, that is, over 40% of employees enrolled. Of course, such programs are directed at specific age cohorts. School programs are used predominantly by the upper and middle level employees in about half of the firms. A third of the organizations reporting library resources felt they were heavily used and use is increasing in about a fourth. But about three fourths of the libraries reported that this is primarily by the upper and middle ranks. Schooling was paid for in total by about half the firms. All but 2 firms spent over \$2,500 on the library service, but only about half of them paid that much for school programs.

The few firms without a transportation related service are either in the central business district or have such service available through another firm. Parking space is the most frequent support of firms to transportation. Parking facilities range from the vast lots of suburban plants to the few spaces for executives in center city buildings. By providing parking, the firm becomes a link in the network of automobile supportive facilities and encourages this mode of transport. A large parking lot is sometimes the complement of a situational requirement that an employee have access to an automobile to work at the plant. Allowing this means that workers may be recruited from a more extended area and opens options for plant sitting away from a mass transit line.

Transportation permits the worker to perform several roles in a day which ordinarily must be implemented at some distance from one another but, as a corollary, the worker may distribute his role commitments over a wider area.

The parking lot alone hardly is a serious impropriation by industry of a transportation related service. Auto service, maintenance, fueling and washing facilities may be incorporated in parking arrangements, introducing some service station or garage crafts into the workplace. Outside of the automobile industry, these services may require new classes of employees. They may be self-liquidating or company subvented. In some cases, they provide staff opportunities for employees who, for reasons of competence, illness or age, can no longer fulfill their regular duties. The impacts on the community are varied. The worker's need for a car for a journey to work rationalizes his expenditure and, as a consequence, facilitates the acquisition and use of a car for family and recreational trips--that is, for activity in other social institutions. The car also encourages more dispersed settlement and competes with mass transit in the community.

A shuttle bus service is a limited mass transit arrangement for workers at a particular plant or set of plants. Generally, a shuttle serves workers for whom automobile transport is too costly relative to their earnings. A shuttle, like the automobile, allows plants to locate on lower cost suburban property and yet to tap an urban labor pool. When mass transit is too inconvenient or does not connect the residential area of workers with the workplace, the shuttle appears as an adaptation which then relieves public transit of the need to cover new and lightly travelled routes. Pressure on suburban communities to accept low income workers as residents is also reduced when their return to the city is facilitated. A shuttle may also be used for travelling within the workplace, connecting dispersed units--but this is a production related activity, not an employee service. It is of interest, however, because it illustrates the possibility of support for production as a spin-off from a service. Examples of the reverse abound in our discussion.

Company vehicles for personal use or, in rare cases a company airplane, are, ordinarily, executive prerogatives. A vehicle may allow an executive to run, or send a subordinate on, a personal errand

during working hours or reduce his need for a private car to come to work. For executives with long working hours, this service reduces the conflict between work and family roles. A company car is also a "hidden" benefit which saves the cost to the employee of using his own car. As a symbol of prestige, the company car contributes to executive morale. Both company vehicles and airplanes are part of the regular business transportation facilities which are extended as an employee service in most cases.

Thirty-four of the 100 corporations reporting transportation services provide data on those they consider most important. Parking, the most frequent service, was excluded from the list. Thirteen firms cite company vehicles for personal use and 11 communications services as most important.¹

Flexibility in working hours does not mean the non-scheduling of working hours but rather the freedom to schedule part of the work time on a regular arrangement other than 8-4 or 9-5. Such flexibility facilitates recruitment of those whose other obligations conflict with work schedules, such as women who dispatch children to school or greet them upon their return, and flexibility helps workers avoid travel in the "rush hour." Industries in which the scheduling of aspects of production are not temporally dependent, in a rigid sense, find flexible scheduling feasible. From the industry's point of view this arrangement, at least, gives it a less fatigued labor force and may even permit a more efficient use of its equipment and plant and administrative "overhead" costs. More individuals may be able to enter the labor force while maintaining a complex set of role activities. This would influence the employment level in the community.

Provision for the handicapped include special tables, seats, instruments or special adjustments in work tempo, as well as parking arrangements, elimination of steps and use of elevators. Where these are possible, the disabled population becomes employable. For the disabled employee, this has therapeutic as well as economic consequences. The very presence of disabled workers must have a moral-emotional impact--sometimes salutary and sometimes disturbing--upon the other employees. The community is relieved of some of the economic burden resulting from disability.

Organizational or administrative mechanisms which adjust

¹Only 1 of the 13 citing company vehicles reports them as heavily used. In about two thirds of the cases, the total cost is borne by the firm, and this cost to the firm exceeds \$2,500 a year for about two thirds of the firms. Communication services are a frequently offered facility which, logically, might have been classed along with transportation services in their function of enabling workers to tie their work and away from work role commitments together. Companies arrange to have workers paged or come to the telephone to receive personal calls or deliver personal messages to employees on a regular basis. These services are almost always used by a large proportion of employees. Both transportation and communication service use are reportedly increasing. The company

work hours or work arrangements do not impropriate activities to the workplace in a substantive sense. The industry does not find itself doing the jobs usually done in other organizations. Rather, the industry subjects itself to constraints which have their origin in non-work situations. Like other services, they aid in integrating activities of the worker.

Flexibility of working hours is an increasingly popular service and widely taken advantage of by employees. Commuting to work under crowded conditions is probably a more significant determinant than is the convenience of women with family responsibilities in the labor force.¹

Eight of the 39 organizations reporting an arrangement for the handicapped give more details. Of course, a small proportion of employees need the service which has been introduced recently and, by and large, paid for by the firm.² The spread of these arrangements is, doubtless, due, in part, to their encouragement by federal and state offices of rehabilitation.

Leisure and Recreation

Work is, in current imagery, accepted for the income it provides and, through income, for access to resources. Activities designated as work may be identical with those pursued for recreation. Fishing, for instance, appears both as work and play. Activities become work when associated with a production-consumption system and when subject to the discipline of the workplace. Activities designated as recreational are ends in themselves. Leisure activities are those which fill time not committed to any obligatory roles--familial, economic or religious. Some leisure activities are recreational--others are creative, educational or contemplative, to

vehicle, it seems, is becoming an amenity offered to more and more executives. The increase in communications reflects an attenuation of the sharp divide between work and outside activities during working hours.

¹Of the thirty-nine industries reporting flexible working hours, 12 cited this arrangement as important. In 8 of the 12 firms, participation is heavy. In only one case is it restricted to the upper and middle levels. All costs of this service are borne by the firms but none believes any significant cost is involved. Flexible working hours have been instituted in 8 of the firms after 1960 and in 6, participation is now increasing.

²In no case does a large number of the employees use these arrangements nor are they restricted to any particular rank. Firms tend to bear the total cost though 2 of the 8 gave only a subsidy to these arrangements. Only one firm had this service prior to 1960 and in only one was usage increasing.

mention a few. Ordinarily recreation is a social activity of members of the family, common interest groups, ethnic and religious groups. A group gathered on the basis of skills and oriented to a specific accomplishment has not been the usual recreational group. Yet, the community of fellow workers as a recreational community is far from unknown. The spontaneous banter and play of workers during breaks as well as their organized recreational activities after working hours are a symbolic drama. The relations of superordination-subordination are informally and experimentally adjusted in a mock situation. Recreational activities in industry are typically either sports or a form of organized congeniality. Table IV-10 shows the frequency with which the firms have specific leisure and recreation services.

TABLE IV-10

NUMBER OF INDUSTRIES WITH VARIOUS LEISURE AND RECREATION SERVICES

At least one leisure and recreation service	97
Specific leisure and recreation services	
Sports	81
Parties, movies	71
Relaxation rooms	66
Employee association	52
Music, radio, TV	61
Country clubs	9

Almost all of the industries have some leisure or recreation activity, sports being the most popular. Sports are, generally, organized among workers of relatively equal status at the worksite. A plant bowling team, or baseball team, may limit itself to intramural activities or compete with teams of other companies. For the workers, this broadens the basis of relationships. Management may see sports as supportive of worker commitment and loyalty, morale, and as a means of reducing stress around work. Sporting teams express worker solidarity within the corporation. This solidarity is not organized against management, around a conflict of interests, but under the auspices of management. A symbol of worker identity is thus assimilated in a symbol of identification with the company.

Parties and movies, as employee services, function much as do sports activities as occasions for experimenting with work relations. The drama of workplace relations is not, however, enacted through skill competition, but through pleasure-oriented congeniality, perhaps a form of social relational competition. The occasions vary from a recognition, in a small workgroup, of a birthday, a victory celebration on acquiring an important contract, to a transcending community festival such as Christmas. The workplace, ordinarily identified with

narrow relationships, ascetic activities, restrained emotion and formal, bureaucratic interaction, allows, through both sports and parties, behavior which exceeds these bounds. Employees glimpse the fuller lives and personalities of their fellows and supervisors. The occupational institution, a segment of the community, acts as if it were the whole community. After a moment of fantasy, sobriety returns and the narrow bureaucratic forms reassert themselves.

For some employees, company parties are a focus of social life while others take them as occasions for relating socially to fellow workers with whom they feel little in common. The difficulty in exceeding the relational rules of work roles, exacerbated by cultural differences among their non-work roles, may make parties painful, a fact exhibited in stiff and forced behavior.

Sports and parties, as a focus of friendship, are alternatives to neighborhood cliques. A more significant portion of the worker's life is centered around the workplace. What is impropriated here is not so much the "technology" of bowling or the holding of parties, though these activities are, in themselves, strange to the production line, but rather the net of social relations which ordinarily constitute the leisure and recreational group. Expressive sociability is impropriated to the workplace.

About two thirds of the worksites have a relaxation room. Relaxation rooms allow the worker to "leave work" while remaining at work, to step out of the work routine, sit in a soft chair, or play a game. These are adaptations to the strains of an uninterrupted workday and allow recuperation for the fatigued. Such a rest facility is sometimes required by law for female employees.

Employees' associations do not ordinarily have a collective bargaining function but do organize leisure and recreation services. Sometimes, they organize, monitor or sponsor food, retail market and other services at the workplace and serve as a publisher of an employee newsletter or co-ordinate car-pools for the journeys to and from work. Their significance for leisure activities places them in this discussion. They are workplace substitutes for those voluntary groups in the community such as Y's and fraternal orders, that sponsor leisure activities. While union joins the worker to a community transcending the company, it is established with a conflict of interest with management. An employees' association is local, restricted to the company and assumes a community of interest between labor and management.

Music at work simplifies the emotional environment--setting a harmonious background for tense or boring activities. In a retail store, music as an employee service may be an extension of that provided for customers and, so, basically, evaluated for its sales value. In factories, music is held to influence level of production or, at least, contribute to employee morale. Continuous music is probably inconsistent with intellectual performance and so is rarely found in the executive suite. This employee service does not compete with entertainment in the community but supplements it. Radio and TV are

available either for entertainment or for information about the outside world and, while classified here with music, may be part of the furnishing of a relaxation room.

Country clubs, a service reserved for executives, become secondary sites for the conduct of business under the canopy of recreation. Just as sports allow the lower ranking workers to affirm solidarity, the country clubs allow executives to identify with one another in the enjoyment of a prerogative. The country club, not being at the worksite, does not literally fit that requirement of our study. As settings for market negotiations, they are work related. As places of employee recreation, they become a service. In this last sense, they blend with the vacation resort which some unions and industries maintain for their members.

Seventy-eight of 97 companies reporting at least 1 leisure and recreation service, cite one as most important, twenty mentioning a relaxation room, 17 the employees association, 16 sports activities, 15 employees' parties and 10 the fact that they have music or radio during work. The overall picture of leisure and recreation services suggests that they are widespread and, sometimes, not inexpensive. The more passive recreation services are increasing as is the interest in having an employee association run the service.¹

Health

Health institutions have been independent of religious and familial institutions only since the industrial revolution. Health and industry were joined as part of family life. "Sweatshops" were specialized production units concerned only marginally with worker health. Almost every worksite in our sample had some provision for protecting the physical health of workers. More than half of the industries offer psychological health services. These services are impropriated from medical or medically related organizations. The impropriation of retail consumer goods services or of craft services involve personnel similar to those already available to industry. The impropriation of educational activities involve, a teacher who, often, is already there for vocational training. In both cases, the

¹Some three quarters of the firms report their music, parties, or employee associations heavily used. Relaxation rooms enjoy heavy use in two thirds of the firms in which they occur. Only about a fourth of the firms mentioning sports say they are heavily used. Few firms report these activities restricted to any particular ranks. Practically all the cost of relaxation rooms, music and parties is borne by the firm. About two thirds of the firms carry the total cost for sports activities, while a third of the firms absorb the total cost of an employees' association. About half of the firms find that these services cost them over \$2,500 a year. Only one of the 10 firms offering music finds it that expensive. About a third of the reported sports services had been instituted by 1960.

personnel are selected by and are under the jurisdiction of the company. For health services, however, industry must engage personnel validated by a medical organization and, as a consequence, the appropriation of health services is less thorough--the service always remaining with a "foot" outside the industrial door (a situation not unlike the military's dependence on religious organizational certification for its chaplains--a root of divided loyalties in the chaplaincy). Table IV-11 shows frequencies with which the industries in the sample offer various physical and psychological health services. Security, only ambiguously belonging in this category, is included because of the association between health and safety, both concerned to protect the person of the worker. Certain sanitary conditions, the control of occupational hazards, such as the noise level at work, are protective activities adjunct to the productive process and are not recorded as health services.

TABLE IV-11

HEALTH SERVICES

A. Number of industries with various physical-health services:		
At least one physical-health service		104
Specific physical-health services		
First aid	101	
Blood bank	78	
Yearly medical examination	77	
General care (dispensary)	76	
Prescription services	20	
Dental clinics	2	
B. Number of industries with various psychological-health services:		
At least one psychological-health service		68
Specific psychological-health services		
Counseling	64	
Drugs and alcoholism treatment	27	
Psychiatric care	14	
C. Number of industries with security services:		85

First aid, at the top of the list, reflects a legal requirement as well as a concern of the company and the community with industrial accidents.

A blood bank is a form of "in kind" medical insurance for employees. Industrial organizations are one, among several convenient

centers of affiliation of larger blood bank arrangements. Membership in a blood bank through work usually precludes the worker's participation in one through another community setting because of a limit to his willingness to contribute. Thus, identification and commitment to the work organization is deepened at the expense of commitment to other groups.

A yearly medical examination, if given at the worksite, may require a dispensary, something not needed for a first aid or blood bank arrangement. The dispensary opens the way for wider medical institutional activity, perhaps offering prescription services. Medical examinations are, at base, work related to assure, for instance, that the worker is physically fit for the task. Examinations become a broad health service as they reflect interest of the industry in the worker's ability to perform any roles, his general competence. Workers may bring a specific complaint--using the service diagnostically. Examinations at the workplace save going to clinics and the expense of a private physician. Diagnostic decisions of a company physician may not coincide with those of a private physician. Workmen's compensation issues might discourage company doctors from relating disabilities to working conditions, and a sense of loyalty to the employer might impel the physician to return the worker to duty, to minimize the number of compensated sick days, more often than he might otherwise judge prudent.

In total institutions, such as prisons or the military, employer provision of health care is taken for granted. In more limited industries, it reduces the demands for health care in the community. Rarely, however, would an industry provide hospital or specialty medical services beyond those generally related to its productive activity.

Medical personnel on an industrial staff have professional as well as organizational goals, a point discussed in connection with information and education services and other staff professionals. Hospitals are an exception to this since their employee health services are a normal extension of their productive activities.

The innovation of psychological-health services is relatively recent. They, too, arise out of concern with task performance. Drug, alcohol, and psychiatric care may be alternatives to dismissal of employees, reflecting both responsibility towards the employee and interest in minimizing labor force turnover. The workplace, like the school, may be a target of mental health "outreach" by community groups. The impropriation of mental health services is a delicate matter since confidentiality and trust are central to the therapeutic relationship. The worker must feel that the counselor is serving him rather than representing the company.

Most of the firms offer some kind of physical health facility, but 22 have no health personnel available on a regular basis. Nine of the firms have only a nurse, 8 only a doctor on call, 3 a doctor on a daily schedule, and 22 both a doctor and a nurse on daily schedule. The comprehensiveness of the service must vary under these conditions. For 80 firms reporting on these health care services, the median cost

to them is about \$12,500 a year. The median space allocation for health is 300 square feet.

Every industrial organization in our sample has some arrangement for security whether it be a guard check-post, allowing entrance only to those with passes or badges, or a doorman meeting and announcing callers. Eighty-five of the 106 firms offer security as a service at the workplace. The service may include the protection of an employee's property, such as his automobile in the parking lot during a workday, detailing officers to accompany women from the plant door to a public transportation departure station. Organizations in more sensitive situations, such as those having pharmaceuticals on the grounds or managing defense contracts, have a more developed security arrangement which, in turn, is more adaptable as an employee service. The availability of security services may affect the willingness of employees to work at certain sites, particularly those in high crime areas and which dismiss employees, particularly women, during night hours. At the same time, workers are aware that some security arrangements are directed at their control--a root of ambivalent attitudes of employees toward the guards. Thus, security services have a labor force implication for management. From the worker's perspective, it is not a service he might consider obtaining elsewhere were it not offered at work. He might just not choose to work where the danger is. Security is an increasingly significant service used by large proportions of employees and relatively expensive for the firm.¹

¹Nineteen of the 85 firms offering some security arrangements give additional details. Sixteen of these firms claim heavy employee use of their security service, and 40% describe that service as primarily for the upper and middle rank staff though it is, of course, a public good. In all cases, security is totally paid for by the firm and in all but one case over \$2,500 a year is spent on this service. All of these firms had established their security services by 1960 and in three quarters of them, usage of this service is increasing.

Appendix IV-A

The Cost and Use of Services

The existence of services at the workplace, their use by employees and their cost to the company or to others, three possible measures of the "significance" of a service, are not always correlative. Some expensive services have relatively narrow use, such as the allocation of a company vehicle to executives. A widely used service may impose but a nominal cost.

The cost of a service to the firm was estimated by combining any direct budget allocation and the value of personnel time and space to the service. The expenditures of industries on each service are collated in Table IV-A-1. The presentation is limited to services for which we have sufficient information on at least 20 firms and shows the proportion that expend \$2,500 or more for each service. All firms spend this much on health care and nearly all spend this amount on security. These are not listed.

TABLE IV-A-1

PROPORTION OF FIRMS SPENDING OVER \$2,500 PER YEAR ON EACH SERVICE
(Only for those in which detailed information is available on 20
or more cases).

Service Name	%	N
Finding housing and moving	77	(28)
Schooling	53	(36)
Relaxation Room	45	(20)
Discounting Company Products	39	(39)
Mechanical Food service	29	(52)
Retirees	22	(32)

The agency service of finding housing and moving for executives seems to be the most frequent high cost service. Here, clearly, the number of beneficiaries is not at issue. As an institutionalized service in large firms, this may well require the allocation of a staff person. The second most likely to cross the threshold is schooling for employees. Market oriented services, other than the mechanical food, the most frequently found types, are not a financial burden of industry.

The table is only useful impressionistically. The cost of a service will vary with the size of the plant and with the way the company decides to implement the service. Health services are inexpensive when limited to first aid but become costly when a physician is retained.

A listing of services in terms of currently increasing usage offers an impression of the direction that services at the workplace is taking: Table IV-A-2 shows the services in increasing order of the proportion of firms reporting increasing usage.

TABLE IV-A-2

PROPORTION OF FIRMS REPORTING CURRENTLY INCREASING USAGE OF
EACH OF THE SERVICES
(Where at least 10 services are reported)

Service Name	%	N
Communication	0	(11)
Music	0	(16)
Use of Company Equipment	14	(16)
Finding Housing and Moving	18	(28)
Auditorium Usage	19	(16)
Mechanical Food Service	23	(60)
Charity	24	(25)
Purchasing Non-Company Products (agent)	24	(17)
Relaxation Room	25	(20)
Library	25	(12)
Schooling	25	(36)
Security	26	(19)
Parties	27	(15)
Vehicle for Personal Use	31	(13)
Discounting on Company Products	39	(39)
Concessionaire	46	(11)
Flexible Work Hours	50	(12)
Employees Association	53	(17)
Retirees	56	(36)
Sports	56	(16)
Professional Membership	53	(12)
Copy Service	59	(17)
Travel Agent	60	(10)

Communication, music, use of company equipment and finding housing and moving are least likely to be currently increasing in employee usage. These all seem to refer to conditions internal to the plant. On the other hand, service to retirees, professional memberships, copy service and travel agency service are the most rapidly growing. These seem to concern the extension to roles outside of the plant with the possible exception of copy service which is attributable to the arrival of a new technology. These figures should not be confused with absolute level of use. For instance, charity collection and mechanical food services are increasingly used in about a fourth of the firms. However, a high proportion of the firms are already offering these services to a high proportion of their employees.

Appendix IV-B

On Categorizing Specific Services

Specific services are categorized in this chapter and in the remaining parts of the sociological analysis according to the social institutions from which they are impropriated. An impropriation, bringing an activity ordinarily associated with another institution under the aegis of the workplace, establishes a connection between industry and that other institution. An industry may impropriate several activities from the same institution. Each specific service in such a cluster might appeal to a sub-population in the industry and, thus, be mutually supplementary ways of relating to that other institution. They might appeal to the same population as alternatives for achieving the same connection. The occurrence of one such service in a particular plant might exclude the other.

Among social scientists, a common way to cluster specific services in broader categories is with reference to their joint occurrence. Items are clustered on the basis of their correlations with one another. Where one occurs the other tends to occur and where one is absent the other tends to be absent. Items constituting a scale, such as a Guttman scale, for instance, are several objectifications of the same underlying continuum. They are joined by a thread of meaning. To predict one is to predict the other.

A factor analysis is one method of clustering items according to their joint occurrence. The outcome is a series of clusters-- items highly correlated with each other or, in factor language, sharing a high loading on some common factor. Table IV-B-1 presents a factor matrix based on the intercorrelations of the specific services in each of the 106 firms. The computer program was permitted to proceed until 10 factors, identifying 10 clusters among the 54 services, had been extracted. Only those factor loadings which exceed an absolute value of .300 are shown. Services which did not have this high loading on any of the 10 factors are, then, not included in this list. Also, services which occurred fewer than 10 times are excluded.

TABLE IV-B-1

TEN FACTOR MATRIX
 ONLY ITEMS WITH $\pm .300$ LOADINGS ARE SHOWN
 (Statistical Package for the Social Sciences
 Iterative Factor Program, Varimax Rotation)

Service	Factors										h	
	1	2	3	4	5	6	7	8	9	10		
Concessionaire	.565											.505
Muzak	.521											.451
Flexible Work Hours	.504											.410
Consumer Programs	.428											.327
Drug Store	.408											.515
Investment Planning	.352				.316							.395
Communications	.340											.284
Appliance Repair	.310											.304
Check Cashing	.309											.214
Copyist		.663										.537
Typist		.611										.450
Company Vehicles		.525										.428
Use of Co. Equipment		.452										.277
Banking		.382			-.357							.353
Blood Bank			.546									.355
Library			.530									.419
Employee Association			.513									.355
Publishing in Company Journal			.458									.362
Manually Prepared Food			.456									.346
Job Placement			.418									.342
Advertising in Company Journal			.394				.306					.299
Use of Auditorium	.371		.383									.416
Retirees' Program	.327		.369									.436
Education Program			.323									.234
Discounts on Company Products				.651								.517

TABLE IV-B-1--Continued

Service	Factors										h	
	1	2	3	4	5	6	7	8	9	10		
Automatic Payroll Deductions				.556								.470
Company Store				.479								.271
Savings and Loans			.320	.395								.399
Mechanically Dispensed Food					-.499							.299
Computer Programing					.483							.382
Automobile Service					.461							.502
Tax Aid					.402							.438
Drug Abuse Program						.686						.504
Psychiatric Care						.674						.530
Shuttle Bus						.437						.308
Dental Clinic						.428						.329
Counseling						.410						
Credit Union					-.336	.338		-.333				.483
General Medical Care						.334						.333
Sports Activities							.673					.491
Parties, Movies							.669					.588
Religious Activities								.521				.340
Funeral Services								.452				.426
Prescriptions									.449			.453
Home Finding or Moving									-.419			.330
Parking									-.378			.384
Credit Cards										.789		.746
Charity Collection										.451		.306
Relaxation Rooms										.320		.321
Travel Service										.391	.471	.492
Printing					.487						.482	.591
Purchasing non-Company											.426	.265
Security											-.386	.324
Ticket Service											.315	.315

It is instructive to see how the specific services listed under retail consumer goods market (Table IV-B-1) distributed themselves among the factor clusters. The first and third items in Table IV-B-1, discounting on company products and a company store, are grouped under factor 4 along with such services as payroll deductions. It is as a monetary convenience to employees is the underlying theme of these services. The second and fourth items, concessionaire and drug store, are grouped under factor 1 along with items which suggest the reduction of the rigidity of the boundary between work and non-work such as music, flexible work hours and communications with others outside of work. (The fifth item, food shop, does not appear in the matrix.)

The factor analytically generated clusters seem to gel about characteristics of the settings which produce the services. The underlying determinants are genetic factors. The clusters as theoretically conceived in the chapter, reveal a function the services perform for the employee or the industry. The underlying dimension is "purposive." Thus, the principle of clustering, a data treatment technique, significantly defines the "what" of the variable. The analysis in the remainder of this report proceeds with the "purposive" cluster, the institutional definition.

Any manifest item, a concrete activity, may have several dimensions of meaning and so have significant loadings on more than one factor. These additional loadings are also only shown when they exceed the absolute value of .300. The common dimension may be specified in terms of the common meaning of the events clustered, what they have in common as social activities. Alternatively, the items in the cluster may all be attributed to the same cause, a common interpretative variable, outside of the cluster. It is possible to combine these approaches. The factor may be given a name consistent with the common meaning of the specific services. Their joint occurrence may then be accounted for in terms of some factor external to the services in the industrial situation.

Factor 1 seems to group services which facilitate the worker's daily routine through the plant, making the plant a bit like the home community. Thus it becomes possible to pick up small items from a concessionaire, or a drug store, to cash checks, enjoy Muzak, and receive messages from people outside. These are lunch break activities. These services may be managed by administrative arrangements, perhaps a section in personnel concerned with such facilities. They are the type of arrangements one would have for female employees who were hard pressed to buy food for their homes because of their working hours and needed to be able to hear from their children when they arrive home from school.

The second factor seems to cluster facilities at the workplace, like a copyist and a typist or a company car, as used for personal ends. This becomes possible when some attitude of privileged access exists, when work and personal roles are perceived to have relatively permeable boundaries. They can occur at almost any level

of the organization, but these particular items seem weighted towards the executive.

The third factor seems to bring together more personal and relational services, perhaps having some notion of gift exchange. The employee commits his blood, arranges some of his social life through an employees' association and, if a professional, shows his identification with the company by publishing in a company journal. As reciprocal expressions of care and in the interest of his self-improvement, the corporation allows him to use the library, receives him as a retiree, offers him an education program, and arranges for him to eat. Like the activities under factor 1, these require someone, usually within the personnel department, to organize them. They tend to follow the interests of professional and white collar workers.

Factor 4 brings together items revolving around money management, especially those concerning adjusted or deferred payments. They receive discounts on company products, make remittances through payroll deductions and have a company store. The appearance of the company store here rather than with the drug store, under factor 1, suggests that the company store is not simply a place to facilitate small item consumer behavior but is a budgetary matter. The industry's comptroller talents are called upon for these services. The activities of a purchasing department can be extended to service the employees. Discounts on company products are limited to products which individual employees can consume. This suggests that the services clustered here occur in companies which interface rather directly with consumers, such as department stores.

Factor 5 clusters printing services, computer programming, tax aid, and investment planning--services associated with rational record keeping, with particular reference to monetary records. Facilities of larger organizations such as a computer and a finance department would increase the probability of offering these services. The negative loading on this factor of mechanical food dispensing is probably related to the fact that large organizations, which tend to be the ones involved here, would tend to have manual food departments. The negative association with banking suggests that service involved in cash flow arrangements are alternative to the record keeping services. Technical data processing companies would be more likely than financial corporations to have the services clustered in factor 5.

Factor 6 brings together medical and counseling services, on the protection of the employee as a person. All the services, the medical, shuttle bus, and credit union are such as to reduce impediments to job performance, eliciting in the course of the services a group commitment to the workplace. This set of specific services requires a cultural attitude which understands that socially induced tensions as well as economic pressure affect performance. A large organization is needed to support these activities. The inclusion of the shuttle bus probably hints that these services occur in relatively isolated sites.

Factor 7 quite neatly brings together two recreational activities:

sports for lower ranking male employees and parties and movies that cater a bit more to low ranking female employees. Basic to these is a sense of community among the employees which encourages them to find part of their recreational life at the workplace. In this sense the industry is more than just the place where they perform an instrumental task. Advertising in a company journal also has an above threshold loading on factor 7. This reinforces the notion that this factor is associated with a sense of community, since, through advertising, employees exchange items with one another, sell appliances or a car or rent a home.

Factor 8 brings together religious and funeral services and is negatively associated with finding homes and having a company parking lot. These are symbolic or expressive activities which express relationships among employees, particularly healing relationships. On the other side are practical assistances to the employee in relating to his roles outside of the plant. Prescriptions, which also contribute to healing, has a negative loading on factor 2, a factor which clusters instrumental services. The negative association with home finding suggests that factor 8 is associated with a stable labor force or with small privately owned corporations that have little occasion to transfer employees. The negative association with parking suggests that the community characterized by factor 8 is not based on long distance commuters.

Factor 9 brings together four items which, with the exception of relaxation rooms, refer to agency services. The administrative apparatus of the corporation is used to engage other institutions of the society, whether monetarily by collecting charity and using credit cards for personal charging or for arranging vacations. The inclusion of relaxation rooms suggest that this factor is associated with white collar settings.

Factor 10 also clusters agency services and, apparently, overlaps with factor 9 as indicated by its loading on travel service. These activities--travel, tickets, purchases--involve the personal and social recreational life of the employee outside of the workplace. The negative loading on this factor of security service may suggest that where it is necessary the situation militates against a free social recreational life. Another possibility is that these services occur in white collar service industries. These are less likely to extend their regular security apparatus as a service.

Appendix IV-C

Measuring Involvement in Services

The question of "what" is but precursor to the question of "how much." The classification of services is a stepping stone to their treatment as variables, the values of which express the extent to which the service is available or its degree of importance at the workplace. The method selected to measure "intensity" affects the interpretation that may be given to the concept of "how much." The principal method to be used in this study derives from the constructed categories in which the specific services are clustered throughout this chapter. Thus, under retail consumer goods services (see table IV-B-1) 5 specific services are recorded. This set of 5 concrete services was used to construct an index which will be used in subsequent analyses. An industry having none of these 5 services is given a "score" of 0, affirming no commitment to this class, an industry with 1 of the 5 a score of 1, and so forth, with an industry having all 5 receiving a score of 5 and being considered the most involved. These scores are the values of the variable, degree of involvement in the category of service in question, which enter the analysis. The object to which this variable or attribute attaches is the workplace. Services are a variable attribute of the workplace. The factor analytic loadings tells us the likelihood of finding each service in the company of another service in the population of industries. The values refer to attributes of the services.

The index illustrated here presumes an overly simple notion of equality between the categories (a drug store is equivalent to a food shop), as well as a notion of arithmetic additivity (no adjustment is made in the index for intensity of employee use, differential use by the various classes of employees or differential company investment). Perhaps one company does "more" in discounting its products to employees than another company does by supporting all four of the other activities. If concern were with those measures of commitment, weights could be developed for each service.

The measure, as conceived here, reflects the diversity of services rather than the magnitude of services. This measure tends to ignore growth of the same type of service, from a small drug store to a large drug store, as not relevant as a measure of increased industry involvement in services of that type. The assumption is that diversity corresponds with extent of involvement in the sense that each service represents an alternative or additional way in which the company inappropriates activities of other institutions. The very proliferation of service types makes the firm's commitment to services.

An economist might adopt an alternative measure of "intensity" of involvement in services. Using information on the cost to the firm of each service, such as that discussed in appendix A to this chapter, he might assign values to the variable based on the sum of the costs of the services in a class. That class might or might not be our theoretically formed cluster. This quantitative method does not assume an equivalent weight for each service as does the method to be used for the

sociological analysis. It does, however, treat them as interchangeable-- a dollar spent on a company food store is equivalent to a dollar spent on discounting company products. The empirically observed cost is assumed to correspond to the underlying extent of involvement of the company in a service of that type.

These two measures of intensity do not, as tested empirically in this study, correlate. Each measure relates differently to exogenous variables. The cost measure correlates with quit rate, the rate of personnel turnover. The more a company spends on other services, the lower the rate of labor turnover. The "diversity" measure is not consistently correlated with quit rate, sometimes it is positively and sometimes negatively associated. On the other hand, it correlates with organizational characteristics, such as form of control of the company and, especially, horizontal differentiation of functional units in the firm.

Analysis using these measures of intensity might be given in parallel. Services could be categorized for analysis by using items as clustered in the factor analysis, or as clustered in terms of a theory of institutional functions--of impropriation. The factor analytic clusters would lead to an understanding of the conditions under which services are likely to be established within an industry. The discovery of these conditions in which the services of each type have emerged in the past would suggest the conditions propitious for their emergence in the future. This would allow a guess as to the viability of each service in various industrial settings.

The clusters based on the external institutional reference are purposive in character. Here services are classified in terms of what the industrial organization "intends" to do in relating the industry to the larger set of social institutions. The conditions under which these clusters emerge are those leading an industry to link itself to external institutions. This explains less about the current state of institutional structure and more about the nature of the aims or goals of industry and leads outward into an analysis of the relationship between industrial and other social institutions.

Data are available in this study for pursuing both lines of analysis. The constraints of time, however, require that a choice be made. We have chosen, for purposes of this report, to look at the links between the industrial and other social institutions. Even with that, time constraints restrict us to analyses of 5 of the 19 categories of employee services, those dealing with retail consumer goods markets, the agent services, education-information services, leisure-recreation and physical-health services. The other 14 must await subsequent analysis. Respecting community services, we will not be able to go beyond the descriptive level--as presented in the next chapter on the array of community services.

CHAPTER V

THE ARRAY OF COMMUNITY SERVICES

For employee services at the workplace, the "at" has been taken literally. An activity usually associated with another institution is impropriated by the company and enacted on its premises. Agent services are a borderline case in which the facilitated activity occurs in an organization outside the workplace. The specific services of a country club and transportation services are also borderline with respect to the locational requirements. Secondly, for the employee services, the activity either involves the employee as an individual or collectively. The firm also offers services, on its own, directly to members of the outside community, these are also services to employees. Their intent is, however, to affect a larger class of individuals, some of whom constitute the market for the industry's product and others are simply of the community to which the firm pays taxes and in which workers' children go to school.

Its products and the wages it pays are the primary "output" of industry to the community. Disamenities imposed upon the community such as traffic "jams" at quitting time or noxious stack gases which may culminate in an economic disamenity of a drop in the land values are secondary "outputs." The people it draws into the community and their influence on culture, education and crime as well as the impact of satellite enterprises it attracts into the area are, in a sense, tertiary "output." All of their impacts are direct consequences of its productive processes.

Community services are yet another form of "output" to the community which, like employee services, are not directly part of the productive activities. Executives of business corporations participate in local luncheon clubs, such as Kiwanis and Rotary, and serve on the boards of churches and boards of education. To the extent that they enjoy their association with other business executives and contribute to communal and philanthropic activities in their private capacities, these activities are outside the scope of this study. When, however, they are authorized by the corporation to serve community groups and, in particular, when the corporation allocates funds to these activities, the executive has a representative role and the activity is a community service of the firm.

These services, like employee services, may be classified according to the institutional areas to which the firm is linked by these activities.

Firms participate in community relations committees and so maintain a visible presence among the voluntary agencies of the community. By providing education and training, firms help qualify individuals for improved occupational status. Firms have a program for youth and minority employment and sometimes for advising minority enterprise. The advantage of this service for the employees of the firm as members of that community is ambiguous. These programs increase the labor pool and, thus, the competition for positions. In a broader sense, however, all members of a community benefit by a decrease in the number of economically marginal individuals. Some firms offer consumer education, education about product safety and some sponsor community health programs, including specific programs of mental health counseling or drug education. Industrial firms, now presented as despoilers of the environment, have, for a long time, taken an interest in the physical environment of their communities, contributing to the development of parks, towns and beautifying the area they occupy. Concern with the built environment, with housing programs and urban renewal programs is considered a corporate responsibility. Participation of firms in the leisure and recreational lives of their community, sponsoring athletic programs for youth, art exhibits, theater groups, music appreciation and cultural awareness programs all have a long history. Of late, firms have also begun to participate in a non-partisan way in the political lives of their communities as, for instance, by supporting voter registration drives.

These services are judged by friends of industry as an expression of corporate responsibility and by critics as self-interested company domination of the town. The conscious intents of company officers can be quite complex. The actual functions have something of both as does any inter-organizational relation. These services involve a cost to the firm and do assist the outside agencies in attainment of their own goals. The corporation may, at the same time, through its services, influence zoning decisions or taxing decisions in ways advantageous to the corporation. Political and economic activities motivated by explicit expectations of a quid pro quo would not be included as services in the light of the definitional requirement that an activity not be directly related to production and not involve simple cash transfers. These compare to interaction between workers and management around questions of wages and working conditions. To be classed here as services they must also be activities "in kind" rather than in terms of a cash payment. The firm would be involved in discussion on implementing an environmental improvement program or in establishing and staffing an educational venture.

General Community Affairs

Community services broadly civic in orientation, not tied to a specific institutional sector of community life, are classed as

general community affairs services. These are nevertheless specifiable in terms of focal concerns of the civic groups such as community relations, a euphemism for race relations, social service and community development. Table V-1 shows the number of firms having each of the specific services in the category and the number having at least one community affairs service.

TABLE V-1
NUMBER OF INDUSTRIES WITH VARIOUS GENERAL
COMMUNITY AFFAIRS SERVICES
(N=106)

	<u>Number of Industries</u>
At least one general community affairs service	53
Specific general community affairs services	
Community relations committee	48
Social service agency	31
Community development committee	31

Half of the firms in our sample are involved in at least one community affairs service--the most popular being a community relations committee. Facilitating relations with groups outside the firm, this activity tends to fall within the interest of the public relations department. Formally, this is analogous to agent services for employees. An activity at the worksite is intended to facilitate an activity elsewhere. Community relations committees initiate or cooperate in a range of programs in the community. The initiative for these committees may be the firms with outside leaders invited to participate. Social service agencies and community development groups are generally formed outside the firm. Officials may leave their offices to participate in these meetings. Industry commits, at least, their work time to this service and sometimes provides office support. Staff may be allocated to tasks evolving from these meetings. The employee may give his evenings to the work. The person rendering the service may receive kudos from his employer for representing industry to the community and enjoy a special status in the community. At the same time, his participation is constrained by an awareness that he speaks, not for himself alone but, as a representative.

The term impropriation has been used with respect to services to employees in which the industry takes under its aegis activities ordinarily belonging to other social institutions. To some measure, this is also the case for some community services--such as offering skill training for youth. A training facility may be established on industrial premises and under industrial control. In the present

example, linking industry and community organizations, activity takes place outside and under the control of other agencies. Yet, activities occur in the plant in support of this outside activity which would not ordinarily occur in connection with the productive activities of the firm. The industry executive shuffles papers about a community development project and his secretary may arrange a reception for the local garden club. Unlike employee services, however, these activities generally take place at the behest of the outside agency. The degrees of influence over the agency policy varies. At the extreme, probably rarely reached, agency policy would be an extension of industry policy and could be thought of as a full impropriation. Employee services concern the internal life of the industrial community and, therefore, are managed primarily by the personnel department. Community services concern the external relations of the industry and, therefore, tend to be the responsibility of public relations departments.

Industry justifies its community services to stockholders in terms of an influence on the community's image of industry. The interchange is, of course, deeper. From industrial representation on social service committees, industrial cooperation in social service activities must follow. Industry may provide jobs and even cash support to welfare programs. A social welfare program which trains the jobless may reduce pressure upon industry to engage unproductive employees and so, increase industry's ability to hire on competence grounds alone. Community development is, of course, an intrinsic concern of industry. The economic and cultural development of the community and the nature of its housing market affects industry's ability to attract a labor force.

The community activities themselves change in virtue of industrial participation. Proposed solutions to social problems are less likely to be sought through a serious reorganization of society or even through economic reallocations such as by changing a tax structure. At the same time, the activities of these committees are facilitated by the material aid which industry brings. A secondary effect of these activities is in the support lent to the solidarity of the community managerial class. Corporate officers meet men and women of equal status in other businesses in the community. Contacts may be established as well between the managerial and upper echelon governmental and professional classes in the community.

It is the business of the corporation to be involved in the economy of its community through marketing its products and paying wages and through its financial investment policy. A company may, in addition, attempt to improve the economic behavior, or economically relevant behavior, of members of the community. These are economically supportive community services. Table V-2 shows the numbers of firms in our sample engaging in five such economically supportive services.

Over a third of the firms engage in an activity supportive, in this narrow sense, of the economy of the community. About a quarter are involved, specifically, in community service projects such as helping the Girl Scouts run a "sale," a marketing activity. Through consumer

education and credit information, companies help members of the community become wise actors in the market. The knowledge required for this is already present in the firms' own marketing arrangements. Driver education and product safety education are economically supportive insofar as such programs attenuate the economic damage of accidents to a community. At the same time, these services draw the firm into educational programs, the scheduling of classes and lectures or the publishing of brochures, all of which may be substantially different from the activities of their production line.

TABLE V-2
NUMBER OF INDUSTRIES WITH VARIOUS ECONOMICALLY
SUPPORTIVE SERVICES
(N=106)

	<u>Number of Industries</u>
At least one economically supportive service	36
Specific economically supportive services	
Community service projects	28
Consumer education	10
Product safety education	6
Driver education	5
Credit information	4

The community recipients of these programs are schools, ladies clubs and consumer organizations. They do not support the economy on a broad scale but focus on micro-economic behavior of individuals in the market. For the industry, they merge with "institutional advertising." They keep industry in touch with the market and they help keep behavior in that market economically rational.

Physical Environment

Public interest in the preservation of our physical environment has encouraged industry to consider its own impact on the physical environment, both the natural and the built environment. A number of industries are, of course, involved directly in environmental programs as a consequence of production. With respect to the natural environment, they, for instance, control effluents and, with respect to the built environment, they design their plant esthetically and landscape their grounds. Beyond adjustments of their own externalities, however, firms participate in citizen activities with respect to the environment. These include community action for pollution control, recycling programs and education of citizens and sponsorship of research on

environmental problems. Table V-3 shows the number of firms participating in a selection of environmentally oriented programs.

TABLE V-3

NUMBER OF INDUSTRIES WITH VARIOUS SERVICES ORIENTED
TO THE NATURAL AND BUILT ENVIRONMENTS
(N=106)

	<u>Number of Industries</u>
At least one service oriented to the natural environment	29
Specific services oriented to the natural environment	
Pollution control	18
Environmental improvement program	10
Recycling	7
Pollution research	6
Pollution education	5
At least one service oriented to the built environment	9
Specific services oriented to the built environment	
Low income housing	8
Renewal programs	7

With 29 firms in programs related to the natural environment, it is clear that other than those imposing disamenities are included. The motivation for participation may be quite varied. Of course, industries whose production process contributes to pollution or that endangers the health of employees are concerned to stay in touch with environmental social movements, at least, to temper the recommendations of "environmentalists." Banks finance environmentally corrective actions. Insofar as these are low interest loans, the bank is providing a public service which must draw them into substantive activity around environmental issues. Environmental movements attract the technically oriented. Industry, then, through them, has a non-work related connection with the technical community. The cultural base for environmental community services is available. Industries processing raw materials are familiar with environmental issues. Some industries would influence environmental legislation. Industries may be interested in learning how to handle their own pollution problems or exploring markets for anti-pollution equipment.

The number of firms involved in community housing is surprisingly low considering their relevance to the housing of their labor force. By and large, housing programs bring industry into contact with municipal authorities and, perhaps, state or federal authorities. Most likely, industrial personnel contribute know-how on housing, finance and land use.

Social Mobility

Industry affects the community class structure, particularly in a small community by introducing an elite executive class. Its wage structure, if different from that prevailing in the area, may also affect the rank of its workers in the community. In recruiting certain types of workers in a community, an industry strengthens the hands of that group of families from which they come. Certain community services may, in addition to the production related activities, accelerate the upward mobility of specified populations. They affect community stratification by affecting the occupational chances of individuals and families. They do this, for instance, by imparting particular vocational competencies. Industries engage in tutorial programs supplementing the education provided by the schools and in adult education programs. Considered in terms of the particular populations benefitting from them, these services may be classified according to whether they serve minority group members and/or youth in general. Involvement in specific community services affecting social mobility is shown in Table V-4. Ordinary industrial manpower training programs are not included here unless they have some wider community purpose. Thirty-six of the 106 firms had at least one skill training activity for the community. Some of these programs are offered through the facilities of the industry itself. Others are sponsored courses in association with community adult education projects or in conjunction with federal programs such as those for school drop-outs and may use the facilities of schools in the area. Liaison with education would, in the eyes of industry, improve its image, contribute to a sympathetic climate and, by raising the general level of education, improve the quality of the manpower pool available. These services are accomplished by the delegation of company employees to committees organizing educational curricula and faculty. Members of the firm may teach courses.

Eighty-three of the 106 firms have some service assisting minority group members. The provision of minority employment opportunities constitutes the largest proportion of these activities. To the extent that these opportunities are offered by the firm itself, the activity borders on that directly related to the organizational goal. At the moment, however, minority hiring programs are not governed solely by rules of economic rationality. To the extent that a hiring is motivated by a sense of commitment to the betterment of minority groups or by a response to community pressure it must be considered a community service. Advisory counseling to minority enterprise is an effort to establish and maintain the viability of other businesses in the community. It is a sharing of the business acumen and know-how of the members of the corporation.

TABLE V-4

NUMBER OF INDUSTRIES WITH VARIOUS SERVICES
AFFECTING SOCIAL MOBILITY
(N=106)

	<u>Number of Industries</u>
At least one skill training service	6
Specific skill training services	
Tutorial programs	20
Programs for drop-outs and ghetto children	14
Leadership training	13
Adult education	12
Reading laboratories	4
At least one service in aid of minority group members	83
Specific services in aid of minority group members	
Minority employment opportunities	81
Minority enterprise, advisory committees and counseling	30
At least one service in aid of youth	55
Specific services in aid of youth	
Summer employment	47
Junior achievement programs	15
Counseling and guidance	12

Much the same can be said about activities in the aid of youth. Summer employment programs for youth are not governed simply by norms of business rationality. They may contribute to a future manpower pool, but, for the present, as a form of service to the community, they generate a sympathetic climate in the community. Summer employment programs stressing vocational training are aimed at working class youth. Junior achievement programs aimed at the potential executive are designed for middle class youth. Mobility potential is the contribution to the candidates in both instances.

All of these programs promote a business mentality in the community. The society and culture of the business enterprise is prescribed as the appropriate social ladder. This increases the probability that future community leaders will be selected from the world

of business and industry rather than, say, from that of academic, religious or medical professionals.

Health

Employee health service was one of the most frequently observed employee services. Concern with the physical environment is, indirectly, a concern with community physical health. Programs in support of the community economy and of social mobility contribute to community mental health. Direct provision of health services, in the narrow sense, has become an area of corporate responsibility to the community. Table V-5 shows the number of firms engaged in community health activities.

TABLE V-5

NUMBER OF INDUSTRIES WITH VARIOUS PHYSICAL AND
MENTAL HEALTH SERVICES
(N=106)

	<u>Number of Industries</u>
At least one physical health service	14
Specific physical health services	
Community health facilities operated by organization	9
Research on community health problems	8
Mobile dental and health units	3
At least one mental health service	22
Specific mental health services	
Drug education (films, talks, etc.)	16
Counseling	6

Health delivery and insurance industries are in the lead here-- as would be expected. One would hardly think of a hospital without an outpatient clinic. The obligation is so natural and so close to the organizational goals of hospitals that one would hesitate to class it as a service to the community. Yet, the acceptance of this kind of activity in the case of hospitals and the lack of such an expectation in the case of other industries does not change the general character of the service. Some, in addition to this, have outreach, or neighborhood health facilities, operated, in part, with federal assistance.

Within the framework of mental health activities drug education is prominent. Drug and alcohol abuses affect work performance among the employees of corporations. Corporations realize that a drug problem among its employees must be met in the wider community. Unlike the treatment of physical maladies, meeting the drug problem requires community action since drug operations rest on a social network.

Sports and Arts, Politics and Family

We have seen how organizations support sports as well as cultural activities for employees. As part of their public relations programs, they promote these in the wider community. The extent of industrial participation in leisure and recreation programs, separated into sporting and art programs, is shown in Table V-6.

TABLE V-6

NUMBER OF INDUSTRIES WITH VARIOUS SPORTS AND ART SERVICES (N=106)

	<u>Number of Industries</u>
Sporting activity service	21
At least one art service	23
Specific art services	
Exhibits	19
Theater groups (performing in the community)	9
Cultural awareness programs	8
Music appreciation programs	7

Typically, industry may support an activity such as junior league or "sand lot" baseball. Some employee time is committed and employees of the corporation participating in these services may obtain support of the corporation for uniform and equipment expenses of "their" teams which may then carry the name of the sponsoring organization.

Industries support music and theater and art in the community. This may create a cultural climate that will attract employees to the area. While it would not be likely that industries would support art which has an anti-industrial technology theme, few other constraints are apparent. These activities keep industry in touch with some of the broader humanistic concerns of the community.

While there has generally been a rule that partisan political

activity is not to be engaged in by the industries (the influence of industries on local governments notwithstanding), 14 of the 106 industries claim that they do support politically oriented activity in the community. These tend to be political education programs, general programs supporting democracy and participation in the democratic process. Five of the industries claim to have family oriented activities, including day care centers. These overlap with the social service type activities insofar as they may affect families in the community. Mental health counseling activities are also, in a sense, family oriented.

These brief descriptions of services to the community must suffice for the moment. Community services are generally an impropriation of activities of another institution in an attenuated form. Those community activities such as health and recreation which are offered by industry are full fledged examples of impropriation--though the meaning of this is ambiguous when the industry itself is engaged in health care. Those oriented to social mobility are impropriating educational tasks. Participation in outside committees is the weakest form of impropriation. In all cases, though, the industrial organization, through these activities, becomes a working element in a net of community organizations.

CHAPTER VI

RETAIL CONSUMER GOODS

Correlates of Impropriation

The Frequency and Diversity of the Service

A market for consumer goods at the workplace is a traditional form of impropriation, a descendant of the company store--but a much reformed one. Gone is the absolute company ownership and gone is the captive market of employees. As described in chapter IV, specific consumer goods services include a concessionaire selling a variety of small items, a company owned store with a similar array of merchandise, a more limited arrangement dispensing only company products at a discount and stores limited to specific products, a drug store or a food shop. The degree of impropriation of the retail goods market is measured by the number out of these five specific services available at a workplace. The value of this diversity index may vary from 0 to 5. Table VI-1 shows the number of firms with each index score.

TABLE VI-1

NUMBER OF FIRMS WITH VARYING LEVELS OF DIVERSITY OF
RETAIL CONSUMER GOODS SERVICES
(N=106)

Number of Services	Number of Firms
None	26
1	40
2	20
3	14
4	5
5	1

$\bar{X} = 1.39, sd = 1.18$

Twenty-six firms have no retail consumer goods services, 40 have only one and only 1 firm has all 5. The average for the 106

firms is 1.39 services in this category. [Table IV-1 of chapter IV shows that 80 firms have at least one service in this category. That is, of 106 firms, 26 have no retail consumer goods services ($106 - 26 = 80$ or $40 + 20 + 14 + 5 + 1 = 80$)].

The earlier discussion conjectured about the meaning of this service for the employees, the industry, the community and for the nature of the service itself. In the first three cases, the question concerns the effect of having the service and, in the last, the impact on the service of being in this particular setting. The description of the situation the industry may achieve by impropriating the service is a set of hypotheses to be tested. In this chapter, the index value will be correlated with a number of attributes of the industry and its setting. The index will, by and large, be treated as a dependent variable. The purpose is to ascertain the characteristics of the industry which lead to this particular impropriation, the "dynamic" of impropriation.

Superficially, the question could be dismissed with a single reference to industrial imperialism—extending control over more of the worker's life. This is too facile, however. The service is not necessarily under control of the industry nor are the workers a captive market. Yet, as a consequence, management and employee do become more involved in one another's lives. The industry itself changes as a consequence of impropriation in ways not entirely explicit in the decision to impropriate. The purpose in mind of industry management does not necessarily coincide with the range of effects of the service. The analysis will deal with objective correlates.

The first part of the analysis will examine one factor at a time in an attempt to build up a picture of the dimensions of impropriation. The chapter will conclude with a "path analysis," a multiple-regression method in which a set of factors is examined simultaneously. Since this is the first of five analytic chapters, we will digress to explain something of the meaning of each of the twelve dependent variables as it is introduced. These variables will appear again in the subsequent chapters.

The impropriation of a retail consumer goods market in an industrial setting means that industry brings under its wing a retail structure with personnel, a labor force, behaving according to the rules governing retail business. Impropriation involves taking in a technology, type of production and relations with clientele which might diverge from those of the impropriating industry, unless it be, say, a department store.

The provision of retail consumer goods services no doubt rests on broad cultural factors which condition management's conception of an industry and its relation to employees. The broader American industrial culture may, however, be considered as relatively constant among these Delaware Valley industries. Our analysis is limited to differentia within this group, among industries that provide a retail consumer goods market of varying complexity to employees.

The social organization and the culture of firms in the sample vary, in part, with their technology and mode of production. These factors, in turn, influence the managerial structures and the occupational characteristics of their labor forces. We will deal with several attributes of the productive system--its labor force, bureaucratic structure, form of control and type of clientele, among others.

Manufacturing and Service Industries: Two Social Types

A highly specific classification of modes of production is precluded by the small size of the sample. The Standard Industrial Classification, based on end-products, is unsatisfactory for sociological analysis since physical products, such as steel, pharmaceuticals and paper, are not good proxies for the social system's characteristics of industry which are the determinants of the social activity called services at the workplace. The gross distinction between manufacturing and service industries, however, of the SIC, does have social correlates, and so can be a useful proxy for social differences.

Of the 106 industries, 55 are engaged in manufacturing. These include chemicals, metals and paper industries among others. The remainder, 51, are service industries, providing transportation, communication, utilities, health services, wholesale and retail trades, finance, insurance and real estate and personal services. (Frequency distributions showing the number of firms in each of these specific categories are given in Appendix E in Volume II.) The mean number of retail consumer goods services in manufacturing industries is .98 (sd=.87), while in service industries it is 1.82 (sd=1.32). Thus, service industries are significantly more likely ($p < .001$)¹ than manufacturing industries to impropriate retail consumer goods market activities. This is not to impute "causality" to this industrial classification. As a variable, albeit a nominal two-valued one, the manufacturing/service distinction is far too complex. The classification rests on important social differences. The differing frequencies of retail consumer goods services in these two settings is one reflection of those differences. These classes of industry do not differ merely on narrow attributes but refer to two social "organisms." Both are formally bureaucratically organized and both have an instrumental goal--production. Yet, the comparison is a "cross-cultural" one, like comparing events in two separate societies. Therefore, we will

¹The test of significance in this case is based on the one tailed t statistic. This will be the general practice where differences between two means are being assessed. Where differences among three or more means are tested, the F statistic will be used. For contingency tables, the X^2 statistic will be used. For brevity, only the "p" value will be provided. The values of T, F and X^2 and the corresponding degrees of freedom may be computed from the means, standard deviations or percentages and numbers of cases upon which they are based which will be given in the text.

conduct separate analyses of employee services within each of the two settings.

To document the assertion that these are different "social types," a short discursus into their characteristics is merited. Almost by definition, manufacturing industries deal with material things which are processed and then transferred to clientele by means of a market. The persons of the producers and of the client, the ultimate owners, as Marx long ago noted, remain distinct. Service industries, as their name suggests, place the activities of the workers at the service of the clients. Agents of a financial institution perform bookkeeping and accounting activities at the behest of clients. Employees of medical institutions work directly on body and mind of the patient. The "product" binds together the "producer" and the client, albeit as classes rather than as individuals. The client uses the "product" but it does not become property. Service industries may, of course, facilitate material transfers and consumption.

The 55 manufacturing and 51 service industries have a number of characteristics in common. Partly because the study was limited to industries with over 200 workers, the firms tend to be well-established. A goodly number have been in business since the mid-nineteenth century. In fact, three out of five had been established by 1910 and four out of five before the second World War. Thus, the manufacturing and service firms have developed side by side in the Delaware Valley. In fact, their sites are relatively tenaciously held, with about half of the manufacturing and service industries having occupied their present sites by 1948. Perhaps, though, it is a sign of the times that about one in five service and one in six of the manufacturing concerns have occupied their sites for less than ten years.¹

Roughly half of both manufacturing and service firms in the sample have 500 or fewer employees and three out of ten over 1,000 employees. Despite the notion that manufacturing is being displaced by service industries in "post-industrial" society, about half of both types of firms report a current growth in workforce. None of these factors, age of the firm, time at the current site, or size of the workforce, if treated as abstract variables would be likely to account for the differences between these types of industries in the offering

¹Newly occupied sites are more likely to be suburban. Of the sites occupied prior to 1948, 31% (51) are suburban and of those occupied more recently 60% (50) are in suburban rather than urban areas ($p < .01$). Newly occupied sites tend to have smaller workforces. Thirty-one per cent (52) of firms at sites occupied since 1948 and 62% (52) of those occupied earlier have over 500 employees ($p < .01$). This may be a matter of time for growth, a contemporary tendency to establish smaller plants or mean that less labor intensive technologies are now on the increase.

of retail consumer services.¹

Organizational structures of manufacturing and service industries are similar. About a third of both have no more than four layers of authority. About a fifth have seven or more. The relative numbers in each layer might differ in the two cases. In both cases about half are publically rather than privately owned.

While differing little as formal organizations, they differ in what they are doing and with whom they are doing it, that is, in the nature of the social relationships into which they enter. Service industries tend to have individual or household clients and so likely to be more sensitive to the consumer market. Manufacturing firms tend more to sell to other industrial or governmental institutions and so more likely to offer their product at trade fairs along with rational and pertinent specifications.²

Interacting less with individual customers, manufacturing industries have more freedom in locating facilities. Manufacturing, now becoming less labor intensive, is becoming less dependent on the geography of labor pool but remains dependent on space for equipment and on transport channels for the flow of goods. These considerations together with zoning regulations which deal with land values and with disamenities imposed on populations have encouraged manufacturing concerns to locate outside of urban concentrations. As a result, manufacturing industries are less likely to be located near retail services. They are separated from the network of social activities of the urban setting.³

Manufacturing plants are also more distant than are service industries from the authorities which govern them. Workers in

¹Size of workforce, though, does not have the same meaning in both situations and this is, in part, what is intended by calling these distinct "social types." A thousand-employee insurance company may involve unskilled women at keypunch machines who work for a few years of their lives, perhaps while young and without major family responsibilities, and who are probably not serious about their role in the proletariat. In manufacturing, a thousand employees may signify male craftsmen, skilled machinists, whose lives are at the side of a machine, for whom the occupation is their source of support and who look to unions to protect their rights.

²Eighty-five percent (55) of the manufacturing firms but only 50% (51) of the service firms sell primarily to business, industry and government rather than to individuals or households. (p. 01)

³Thirty-one percent (55) of manufacturing and 75% (51) of service firms (p. 01) are located either in center city or in or near a shopping center with services within a five minute walk.

manufacturing firms are more likely unionized, that is, like management, to look to some wider community. This increases their power in dealing with management but separates them from a source of the power in the local worker community.¹ A union shop crystallizes management and labor relations in terms of opposing interests. The process of negotiation tends to convert substantive services to cash benefits.

Manufacturing firms are more likely to belong to corporations with international interests than are service firms. Consistent with this, the major market area of manufacturing firms is more likely than that of the service firms to extend beyond the Delaware Valley. Customers, as well as the directors, of manufacturing firms are removed in distance.²

The work week, in general, runs 37 or 38 hours, additional time being overtime. Manufacturing workers put in longer work weeks.³

The intellectual culture differs. Service industries have a higher proportion of college graduates. Relatively speaking, males predominate in manufacturing and females in service industry workforces. As might be expected from the nature of the work, manufacturing has more technical operatives and service industries a higher proportion of clerical workers.⁴

¹In technical terms, manufacturing organizations are more likely to be heteronomous (governed by rules established elsewhere) than to be autonomous units. Seventy-one percent (55) of the manufacturing firms and 47% (49) of the service firms are governed by a headquarters at some level above the plant site observed in the Delaware Valley ($p < .02$). Seventy-five percent (55) of the manufacturing concerns and 33% (51) of the service firms ($p < .01$) are unionized (either being a union shop or an open shop).

²Fifty-six percent (55) of the manufacturing and 29% (51) of the service firms ($p < .01$) are multi-national. Only 2% (55) of the manufacturing but 39% (51) of the service firms ($p < .01$) see the Delaware Valley as their major market area.

³In 82% (55) of the manufacturing firms and 42% (50) of service firms ($p < .01$) the work week averages 40 or more hours per worker.

⁴Defining a setting in which 30% or more of the employees hold a college degree as a relatively intellectual setting, 10% (29) of the manufacturing and 45% (20) of the service industries fit this description ($p < .001$).

In all of the industries in the sample, males hold the highest executive positions but they differ some in their proportion of males in their rank and file. Denoting an industry as predominantly a male setting if at least 80% of its employees are male, then 42% (42) of the manufacturing and 8% (35) of the service industries are male settings ($p < .001$). While there are no clearly female industries, in 7% (40) of

In sum, manufacturing firms are more likely to be controlled from another site and the workers more likely to belong to a union transcending the local plant. Their clients are more likely to be industrial groups than to be individuals and households. Manufacturing industries are dominated by male operatives of relatively modest education. Service industries are settings in which male executives monitor large numbers of female employees and, within the ranks, have a higher proportion of more educated individuals. The climate of manufacturing is one of bigness, conglomerates, multi-national companies, rationalized production and negotiated contractual relations with employees. Service industries face a local market of individuals, are locally controlled and have a more professional and white collar staff. The impersonal world of things contrasts with the smaller world of personal service. These are two socio-cultural types and services may be expected to develop in response to different exigencies and fulfill different functions in each case. They merit separate and parallel analyses. We will now continue the analysis of correlates of retail consumer goods services in manufacturing and in service industries.

The Role of Organizational Complexity

The conventional wisdom expects a firm to provide a service when it is not available to, or accessible with difficulty for, its employees. That does not turn out to be the case. Table VI-2 shows the relationship between distance of the worksite from alternative services and the likelihood of having retail consumer goods services at the workplace. (The independent variable is that of urban/suburban location discussed later in this chapter.) Both in manufacturing and service industries, firms near alternatives offer more, not fewer, services.

If accessibility is not the key factor, what is? Four classes of factors seem important in explaining the emergence of retail consumer goods services. The first class of factors reflect general social structural characteristics of the workplace organization. These will tend to be permissive of the emergence of retail consumer goods services. Two classes reflect labor force factors, one having to do with the competition between work and other roles and stability of the labor force and the second concerning the degree of involvement of workers in the firm as a society and a fourth class concerns the social environment of the plant, types of control and nature of the market.

the manufacturing and 51% (35) of the service industries, females constitute half or more of the labor force ($p < .001$).

That the service industries are dominated by office and clerical personnel is almost definitional. We find that 9% (34) of the manufacturing industries but 41% (27) of the service industries have 40% or more clerical employees ($p < .01$). Manufacturing industries are dominated by operatives. In 40% (34) of the manufacturing but only in 7% (27) of the service industries half or more of the employees are operatives ($p < .01$).

TABLE VI-2

NUMBER OF CONSUMER GOODS RETAIL SERVICES IN MANUFACTURING AND SERVICE INDUSTRIES ACCORDING TO DISTANCE TO SUCH SERVICES

	Manufacturing			Service		
	\bar{X}	s.d.	N	\bar{X}	s.d.	N
Near alternatives	1.47	.83	15	1.72	1.34	36
Distant from alternatives	.89	.82	36	1.14	.69	7
	$p < .05$			$p < .1$		

A retail consumer goods service, as a formalized institutionalized arrangement, requires the regular store or store-like facility at the worksite. To support a retail service in this sense a worksite must attain some threshold size. Were the availability of resources to provide the service, the significant factor, size of the firm as a whole or measurement by the number of employees in all its sites would be the threshold condition. The size of the firm as a whole, though, does not correlate with the complexity of this service. The significant element seems to be the size, as measured by number of employees, of a particular worksite. The number of employees at the site is not only an indicator of potential demand but affects the atmosphere and the general complexity of social activities. The median size site in the sample has just under 500 employees. This, therefore, seems to be a good dividing line between the relatively large and the relatively small sites for purposes of this analysis. In manufacturing industries, the correlation between size of workplace and diversity of retail consumer good services is not statistically significant. In service industries, however, relatively small workplaces have a mean of 1.3 (sd=1.07, N=25) while the larger have a mean of 2.3 (sd=1.38, N=26) retail consumer good services. The larger have a statistically significantly more services ($p < .001$).

An explanation is suggested by some differences in social characteristics of small and large workplaces. The small sites were occupied a bit more recently than were the larger ones.¹ Conceivably with longer occupancy, the opportunity to establish retail consumer goods activities would increase. Over time the workforce may crystallize into a "community" that might seek to obtain a retail service at the workplace. The term community is used here to refer to a focus of belongingness on the part of workers, a center around which they organize their lives, a social psychological concept. At the same time a community would be expected to have shared values, a cultural

¹Sixty-three percent (52) of the smaller and 31% (52) of the larger sites ($p < .005$) were occupied after 1965.

concept, and to be a relatively cohesive collective, a social structural concept. Thus, large sites might have more services because they are older and have a more developed community of workers.¹ What aspect of the development of the community might be important?

Since the measure of the service is based on its level of diversity, the degree of structural differentiation of the service, the correlate might well be the degree of general structural diversity of the work organization. Larger sites are likely to be more structurally diversified. This point may be established on its own. Sites were classified according to whether certain organizational functions are performed there--production, personnel, management and sales, among others. If at least one person gives full time to each of these functions, the site was considered to have a specialized structural unit for carrying out that function. The functions, then, represent, at least, nascent "departments"--the more such departments the more structurally diverse the workplace. These functions may themselves be subdivided in terms of the more specific activities which constitute them. Managerial functions, for example, include the control of financial resources, accounting, wages, administrative procedures such as filing statistics of the corporation and dealing with legal and insurance requirements. If a person gave full time to each of these, the organization could be said to have that many more differentiated structural components within each "department." The number of such structural units in each of the four broad "departments" was totalled and treated as a "score"--the degree of structural diversity of each department. Table VI-3 shows the mean diversity "score" for each of these four organizational "departments" at small and large sites. For brevity, these may be termed the "offices" within each department.

Summing the means for small and large sites indicates that the small sites have an average of 8.8 structural units or "offices," and the large sites 11.0 structural units in their four types of "departments." Reading across the table, within each "department," the large sites have more "offices" than the small in all cases but that of the sales "departments."

It is reasonable to assume that structural differentiation along these regular bureaucratic lines is paralleled by structural differentiation in the area of services.² Interestingly, the personnel

¹In principle, such hypotheses may be tested by examining the association between services and size of site according to various "ages" of the site or according to various levels of social integration of the site. In practice, however, we have too few cases for such analytic specification and so the meaning of the original association must remain conjectural. The conjecture is bolstered by parallel "two way" tables such as the one suggested in the previous note.

²Size and structural differentiation do not always accompany one another. A large number of employees may work in a simple organizational structure--or one that differentiates along other than managerial

TABLE VI-3

MEAN NUMBER OF "OFFICES" IN EACH OF FOUR "DEPARTMENTS"
AT SMALL AND LARGE SITES

Function of "Department"	Number of "Offices"				p <
	Small Sites		Large Sites		
	N=57 \bar{X}	sd	N=49 \bar{X}	sd	
Production	3.2	1.58	3.9	1.34	.01
Personnel	1.7	1.07	2.5	0.82	.001
Management	2.0	0.95	2.5	0.82	.001
Sales	1.9	1.01	2.1	0.96	.1

department grows most in complexity with increasing numbers of employees. This department is the one most likely to sponsor or monitor a retail consumer goods outlet. A highly differentiated worksite, having a variety of organizational activities, has employees with diverse educational and cultural interests. This very variety of personnel, a differentiation within the labor force paralleling that in management, is a basis for a proliferation of services. To the extent that size is a proxy for such differentiation, larger sites would be disposed toward more services in general and more retail consumer goods services in particular. This is, at least, a permissive condition.

lines--just as a single retail consumer goods service might be heavily patronized without being diversified. The lack of differentiation may occur, for instance, when the worksite itself is a subgroup of some larger group, one of a network of plants of a corporation devoted almost entirely to a single function, say, production, with little in the way of sales or personnel responsibilities.

We should like, at this point, to correlate the number of retail consumer goods services with each one of these measures of organizational structural differentiation with size of site, number of employees "held constant" within manufacturing and service industries. Clearly, we have too few cases to do this. In fact, an attempt to correlate managerial structural differentiation directly with diversity of retail services gives inconclusive results, due, very likely, to the masking effect of other factors. Structures for management functions in manufacturing are an exception. Another exception is found in the case of the facilities function (obtaining material and equipment, erecting buildings and maintenance) in service industries. In each case, scores for facilities and managerial "offices" are constructed as described above--according to the number of more specific activities to which at least one person is assigned. Table VI-4 shows the relationship between the number of facilities and managerial offices in service and

The Workplace as a Community

The extent to which workers' loyalties focus in the particular plant or transcend it and the extent to which their reciprocal obligations are contractually specified are aspects of community at the plant. A retail outlet might be expected to emerge where management and workers see themselves as part of the same community. Buying at the plant is part of having a broader role involvement and where contractual relations are not so rationalized as to convert services to benefits. The existence of a union shop is a proxy for these kinds of contractual relations. A union indicates less of an orientation to a local community and more rationalization of the contract. Thus, unionization should be negatively related to the diversity of retail consumer goods outlets.

The firms in the study were classified according to whether they had a closed shop or had union or open shops or had no union. Seventy-five percent (55) of manufacturing and 33% (51) of service industries in the sample are unionized ($p < .001$). The finding may be

manufacturing industries respectively, and the number of retail consumer goods services at the workplace.

TABLE VI-4

MEAN NUMBER OF RETAIL CONSUMER GOOD SERVICES ACCORDING TO NUMBER OF FACILITIES (IN SERVICE INDUSTRIES) AND MANAGERIAL (IN MANUFACTURING INDUSTRIES) "OFFICES"

Facilities "offices" in Service Industries	\bar{X}	sd	N	Managerial "offices" in Manufacturing Industries	\bar{X}	sd	N
0	.67	.58	(3)	0	.33	.58	(3)
1	1.14	1.46	(7)	1	.73	.70	(15)
2	2.02	1.28	(41)	2	.93	.96	(15)
				3	1.27	.88	(22)
$p < .10$				$p < .25$			

Neither relation is statistically significant though the progression of means for retail services with increasing numbers of "offices" is suggestive. The establishment of a retail shop requires the establishment of a physical facility. Service industries with more developed arrangements for this are more likely to have retail outlets. Perhaps, all manufacturing firms, by the nature of their work and personnel, have the ability to set up a store and so this variable is irrelevant there. A retail outlet requires a managerial orientation--reflected in increasing "offices" of this type in manufacturing industries but generally inherent in the work of service industries. Proliferation of retail outlets does not respond simply to structural differentiation in general but, perhaps, most specifically to diversity in personnel, facilities and management "offices."

associated, in the sense described above, with the fact that manufacturing industry has fewer retail consumer good services.

The manifest rationale for a union is to supplement the power of the workers in a specific firm to improve wages, hours and working conditions. Unionization is related to retail consumer goods services, at least, in manufacturing. In manufacturing industries, the mean number of retail consumer goods services is .83 (sd=.74, N=41) in union shops and 1.43 (sd=1.09, N=14) in non-union shops--a statistically significant difference ($p<.05$). The relationship between unionization and retail market activities, while in the same direction, is not statistically significant in service industries. We cannot attach too much importance to this last finding since only twelve of the service firms are union shops and these are not distributed evenly across the several types of service industries.

What are some differences between union and non-union social settings which may account for this? We have suggested that this finding results from that fact that union shops rationalize conditions of contract, specify the claims between labor and management and that this reduces the likelihood of services, perhaps, by converting demands to cash benefits. Unionization, it is suggested, also reflects the nature of worker community. A union means identification of labor with an interest group transcending the local workplace. The management of union shops also tends to be responsive to a wider managerial community.¹ Unionized workplaces, more likely to be divisions of a large corporation, are governed by a corporate headquarters elsewhere. Unionized workplaces are also more likely to be hierarchically subsidiary to a management located elsewhere. Unionization is also associated with a smaller proportion of highly educated employees.²

¹Manufacturing firms are more likely to be subsidiaries of larger firms (heteronomous and heterocephalous). Workplaces that are part of a wider corporate structure are more likely to be unionized. Informants were asked how many positions similar to that of the "head of this site" there are in the total organization (a response of "none" would define an autocephalous site). The mean number of parallel sites is 2.4 (sd=2.09, N=55) in union and 1.4 (sd=2.12, N=46) in non-union shops--a statistically significant difference ($p<.005$).

²A question asked about the number of layers of authority above the layers at the site (none being the response for autocephalous organizations). Unionized shops are subject to an average of .68 (sd=.469, N=57) layers whereas the non-union shops are subject to an average of .49 (sd=.505, N=46) ($p<.05$). Unionized worksites are more likely to be subsidiary. In union shops, an average of 11.6% (sd=13.2, N=22) of the employees have a college education whereas in non-union shops an average of 27.2% (sd=16.7, N=27) have so high an education ($p<.001$).

The more distant management along with the lower educational level suggests that unionization is not unconnected with a feeling of defenselessness on the part of the individual employee with respect to management, a weakening of the sense of total community at the local worksite. Local employees of conglomerates negotiate with a distant corporation, and so find some advantage in a worker's organization which transcends the local site. Further, when decisions are made elsewhere, workers identify less with the management.

Unionization is also associated with stability of a full time workforce. In non-union shops, a looser community of part time workers enters and leaves at a greater rate. Part time workers, with little leverage on their employer, may adjust their working conditions by shifting from one organization to another, a fact reflected in their voluntary separation rate. The part time worker and temporary worker, particularly females, have relatively greater responsibility for non-work roles. Retail shops at the workplace assist them in meeting these requirements and, thus, assist the employer in holding of this workforce. Thus, even in the absence of a stable community, retail consumer goods services develop in association with non-unionization in this situation as well.¹

In union shops more impersonal procedures determine workday arrangements, a further sign of rationalization. Break time and security arrangements illustrate this. Break times may be regulated by, on the one hand, a clock, a general signal or a production schedule, relatively mechanical means, or, on the other hand, be self-regulated or controlled by the decision of a supervisor, a relatively personal means. Union shops are associated with the more impersonal.²

¹Part time workers are less committed to the workplace and less likely to unionize. Full time employees constitute 38% (58) of the workforce in union workplaces and 19% (48) in non-union workplaces ($p < .05$).

The separation rate, a measure of stability of the workforce, may be related to unionization separately for salaried and non-salaried (i.e., wage) employees. (Of course, the part time workers are also non-salaried.) Among the salaried, voluntary separations average 6.8% (sd=9.07, N=27) a year of the workforce in union and an average of 13.6% (sd=14.21, N=28) in non-union shops ($p < .05$). Comparable figures for non-salaried employees are 9.7 (sd=7.09, N=26) in union and 18.8% (sd=18.47, N=21) in non-union shops ($p < .01$). A high turnover is associated with non-unionization. Unionization may increase the likelihood of hiring full time workers and reduce the turnover rate by requiring reasons for dismissal.

²The more personal ways of regulating breaks are found in 52% (56) of the unionized firms as compared with 83% (47) of the non-unionized ($p < .001$).

Union shops are more likely than non-union to have a security arrangement. Security arrangements in non-union shops are more likely to involve a guard, a personal interactive control, while union shops are more likely to have a fence, an impersonal delineation of territory, or a combination of fence and guard, the most complete security arrangement. Union shops have a greater tendency toward mechanization. This is more rationalized, in the technical sense, because it abstracts an element of control from the human act.¹

Thus, the variable of unionization covers within its compass several industrial characteristics. The unionized firm is more likely to be a manufacturing than a service industry, dealing with things more than with people, to regulate relations among their people by mechanical devices for scheduling, rather than a personal supervisory decision and to rely on an impersonal rather than personal security arrangement. Unionized firms tend to be subsidiaries of large corporations where rule setting is at a distance. The employees themselves, identify with a community transcending the local site. Thus, unionization means less localism and a more technically rationalized organization.

The impropriation of a retail consumer goods market itself is a departure from the technical rationality of direct profit maximizing, and specialization of the industrial relation restricting it to the productive relation. Industry itself involves itself with

¹Table VI-5 shows the relationship between the unionization of shop and the kinds of security arrangements.

TABLE VI-5

SECURITY ARRANGEMENTS FOR PARKING AREA IN UNION AND NON-UNION SHOPS
(In percents)

Type of Security	Union	Non-Union
No Security	22	35
Guard Only	17	38
Fence Only	10	0
Guard and Fence	51	27
	(51)	(37)

p < .001

workers in more than their work roles. Impropriation is regressive with respect to institutional specialization. The unions, for their part, may see the retail services, particularly in manufacturing, as versions of the company store, an arrangement to increase corporate control over the employee. The union shop would convert such substantive relational arrangements into a cash benefit system.

The argument that rationalization and commitment to a more transcendent community dampens the growth of services suggests other cultural and structural elements. We noted above that an auto-cephalous and autonomous site (one not ruled from another site) is less likely to be unionized than a heterocephalous and heteronomous site. The former is, for these reasons, more likely to have retail services. The form of ownership is another, perhaps more legal, indicator of the form of organizational control. The firms were classified as publically (including governmental) or privately owned. Public ownership involves the sale of stock and control by a large number of small "owners." Their policy is implemented by managers who are not necessarily among, and certainly not prominent among, the owners. In a government corporation these distant owners are the public. Private ownership, on the other hand, usually coincides with a situation in which a small number of individual owners who may be friends or kin, also manage the corporation.¹

In the manufacturing industry, publically owned corporations have a mean of 1.2 (sd=.90, N=32) retail consumer goods services while the privately owned have a mean of .7 (sd=.77, N=23). The difference is statistically significant ($p < .05$). In service industries this relation is not statistically significant. A public corporation is likely to be more rationalized and workday procedured than private. Following the previous argument, in relation to unionization, it should then have fewer services--the opposite of our finding. Likely, we have here another source of services--similar to the size or structural differentiation argument above. The public corporation, being larger and more structurally differentiated, is more likely to have a developed personnel policy. Impropriation of retail market services may be supported by the policy on rational grounds--perhaps, that it will increase workforce stability. That is, a rational reason is given for instituting a policy which itself is not, technically, rational. The power of the public corporation enables it to resist the pressure from unions to convert services to benefits. Leaders of these corporations may believe that involvement in the lives of workers

¹Some three fourths of the firms in our sample are publically owned. Eighty percent (76) of the publically owned are engaged in manufacture, transportation or communication rather than trade and finance and 44% (27) of the privately owned corporation are ($p < .001$). Publically owned firms tend, as total corporations, to be somewhat larger than the privately owned. In our sample, 75% (76) of the publically owned but only 7% (27) of the privately owned corporations have 3200 or more employees in the entire corporation ($p < .001$).

supports a greater claim on their loyalties.

Public corporations are more organizationally dynamic, as measured by splits, mergers and acquisitions, than private ones.¹ Such organizational change may often result in a more structurally complex management. In fact, management personnel may increase relative to production personnel. A growing publically owned manufacturing corporation becomes like a financial institution, a holding or management corporation--and so more like a service industry. For this reason, the public corporation may have more retail consumer goods services.

Increasing complexity at the corporate level may coincide with simplicity at the site level. Sites belonging to public corporations tend to be growing more slowly and have a more stable male labor force than sites under private ownership.² Wider corporate power allows greater impropriation of retail services at the level of the worksite.

¹Since 1960, 65% (75) of the publically owned but only 26% (27) of privately owned have experienced a split, a merger or an acquisition ($p < .001$).

²A question asked whether the labor force at the site was increasing, decreasing or remaining about the same. Index scores were developed in which a higher score reflects slower growth. Public corporations have a mean score of 2.7 ($sd=1.06$, $N=76$) while the private corporations have a mean of 2.3 ($sd=0.61$, $N=27$) on the growth index ($p < .05$). Sites of publically owned corporations are growing a bit more slowly.

The voluntary quit rate, like the involuntary, is, of course, a function of labor supply in a particular area, among certain skills, or in a given industry. It is also a function of the volume of work available in an industry, the market demand for the product requiring that skill or of that industry. Structural characteristics of the industry affect the quit rate. Rationalization of the personnel policy is central to industrial rationalization--both in terms of labor contracts, as mentioned above, and because labor turnover affects an industry's budget. That publically owned corporations are more rationalized at the site level is reflected in the fact that the male voluntary quit rate in publically owned corporations averages 12.5% ($sd=11.04$, $N=45$) and in privately owned corporations it averages 19.4% ($sd=17.79$, $N=16$) ($p < .05$).

While the demonstration here is to emphasize stability of labor force, a low voluntary separation is related to more rationally bureaucratic forms. Better than four fifths of the organizations in our sample have an organizational chart, a sign par excellence of an orientation toward rational management. The mean male voluntary separation rate is 13.0% ($sd=11.17$, $N=53$) among those with a chart and 25.3% ($sd=20.47$, $N=10$) among those lacking it ($p < .005$). The design of an organizational chart reflects concern with the definition of tasks and the manner by which the members of the organization are related. Interest in such a definition is associated with stabilizing the relation between management and employees.

The greater stability, lower labor turnover, at the worksite level aid this process by increasing the sense of community there.

The type of clientele to which a corporation caters influences the inner social life of the firm. Some sell their product to individuals or households and others sell to government, institutions or other industries. In manufacturing industry, firms selling to individuals have a mean of 1.5 (sd=.83, N=20) while those selling to other industries have a mean of .7 (sd=.79, N=35) retail consumer goods services, a statistically significant difference ($p < .005$). The association is not statistically significant in service industries. Individual clients require a consumer relations approach to marketing. The establishment of a retail consumer goods outlet at the workplace is a natural reproduction of these external relations. Where clients are other industries, the focus is more on the product or production process. They relate to customers through the negotiation of sales contracts, a situation that develops a contracting capability. The workforces in the two situations differ in that the consumer oriented may have more women who, outside of work, feel more pressure to do the family buying. That the association does not appear for the service industries is because this orientation to people and to a consumer market is institutionalized throughout most of those firms.

Continuing the analysis of the effect of work force conditions, we find that diversity of retail consumer goods services is positively associated with the female voluntary quit rate among manufacturing industries ($r = .05$). The diversity of retail consumer service is not associated with the male quit rate in manufacturing (despite the indirect association suggested above). In service industries, quit rates are unrelated to this activity.

Voluntary separation among female workers is abetted by competition from demands of other roles, particularly that involved in homemaking. Retail consumer goods service increases with the turnover. The lack of association of retail service and male separations may reflect the lower salience of the consumer role among working class males. This would also help us to understand the failure to find the association of this service and quit rate in service industries. Among their white collar employees, the sexual division of labor is not that sharp. Within service industries, however, the rate of voluntary separation specifically of non-salaried employees is associated with having retail consumer goods services ($r = .22$). This may be sex related. The non-salaried in service industries tend to be females and from working class homes where the sexual division of labor would be sharper. The association was not found for salaried employees in service industries. Perhaps, the essentially male executive class in these industries have non-working wives who attend to consumer requirements.

A retail consumer goods market is not "caused" by the existence of community but is an expression of the community of employees. The plant is a platform for the action of this community. The greater the concentration of the daily routine within the plant walls, the

greater the likelihood that these services will be available. The ability or willingness or simply the likelihood, to leave the site for lunch depends upon the organization of work, the cultural propensity of workers to eat in restaurants, the food available in the area and other activities in the area which might be pursued during lunch hour. Whatever the reasons for selecting the eating place, it is a center of informal social life. The informant in each plant estimated the proportion of the employees who leave the site and who stay at the site for lunch. Table VI-6 shows the relationship between diversity of retail consumer goods services and the likelihood of leaving the site for lunch.

TABLE VI-6

MEAN NUMBER OF RETAIL CONSUMER GOODS SERVICES ACCORDING TO PROPORTION OF WORKFORCE STAYING ON SITE FOR LUNCH IN SERVICE INDUSTRIES

Proportion Staying	Mean Number of Services		
	\bar{X}	sd	N
10% or less	.6	.53	(9)
11-40%	1.6	.93	(11)
41-60%	2.0	1.31	(8)
61-90%	3.0	1.07	(8)
91% or more	1.9	1.23	(14)

$p < .01$

Generally, plants with larger proportion of employees remaining for lunch, are more likely to offer retail consumer goods services in service industries. The only exception seems to be in the case where everybody stays in for lunch. This may simply reflect idiosyncratic factors affecting the small number of cases in this category. Another possibility is that a service industry in which almost no one leaves for lunch is likely to have an undiversified mass of workers and, in such a situation, less diversity of retail services would be no surprise. Apparently buying one's food to consume in the plant and buying items at the plant for consumption elsewhere tend to be correlated. Both express a greater involvement in the life of the plant than would be occasioned by the work alone. This relation was not statistically significant in manufacturing industries where the practice of leaving for lunch is less frequent.

The accessibility to consumer goods outside the plant, and by car is not a significant factor here. Nearness to alternatives, as shown

above, increases the likelihood of having services at the plant. The presence of outside service opportunities, or some correlate of them, generates service at the workplace, as if the community of workers developed competitive services. Workers staying for lunch strengthen their community to counter external competition for the time and interest of the employees. Impropritation is, in part, occasioned by competing attractions for the employees' interest.

The argument takes on more force when we see that location, in addition to indicating nearness of services, has a number of societal and cultural correlates in addition. Industries located in urban or urban-like clusters contrast socially with those more distantly removed from a supportive urban infrastructure. The presence of the industry itself draws its own retail infrastructure which, though, is likely to be limited to food and sundries. Location theory spells out some economic considerations involved in a decision to occupy an urban or a suburban site.¹ For some employees, the reverse commute means avoiding traffic and the drive from a housing development to an industrial park may mean that they never enter the city. A suburban location, under Delaware Valley conditions, means fewer black employees than would an urban location. Beyond these factors, however, the urban and suburban labor forces are quite similar. They differ little in age composition and workforce stability.² The organizational structures differ in the two settings.

¹Location theory has tried to explain the traditional tendency of industry toward forming relatively tight clusters, seeking to be near one another in order to concentrate supplies, labor force, markets. Hopefully, they could also be near basic raw materials. These factors are less compelling for service than for manufacturing industry. Service industry firms are less dependent on raw materials. Transportation facilities free industry to draw on wide labor pool areas and workers are freer to live at a distance from their occupation site. A parking arrangement is a distinctive characteristic of a suburban firm. Eighty-three percent (46) of the suburban firms but only 23% (57) of the urban firms offer free parking for all employees--and presumably for visitors ($p < .0001$). A quarter of the urban firms have no parking facilities at all. About a third provide restricted facilities. Dependence on the automobile also reflects an isolation from a consumer market, a detachment from individual customers. In earlier times, industries sought a distant location to spare the community the noxious externalities such as accompany a steel mill, slaughtering plant or glue factory. Today, industries themselves seek pleasant surroundings. The decision to move out of the city is also related to land costs and tax programs.

²The average age of a worker in our sample was just over 38 years ($sd=6$) with no statistically significant differences between the city and suburban workers. The yearly rate of voluntary separations is 15.0% for males and 19.6% for females and the yearly rate of new hirings of salaried employees is 12.4% for salaried employees and 19.1% for non-salaried. Suburbia may have slightly, but not statistically significantly, lower rates.

Urban sites have more structurally differentiated personnel departments and suburban sites more developed production and facilities maintenance departments.¹ An urban focus on people contrasts with a suburban concern with things.² Personnel officers at the site are available for direct appeal. The possibility for face-to-face encounter may extend the relation with employees beyond the narrow, specialized job based relation.

This basis for interaction between management and worker is complemented by a cohesiveness in the worker community. Shift arrangements affect the cohesiveness of the worker community. Single shifts are more characteristic of urban than suburban settings. The multiple shifts of a suburban setting, especially when assignment to the shifts rotates, fractionate the worker community.³ Additional

¹Table VI-7 shows the relationship between the level of diversity, number of "offices" (with, at least, one full time employee in each), in three departments in urban and suburban locations.

TABLE VI-7

MEAN NUMBER OF "OFFICES" IN MAJOR "DEPARTMENTAL" UNITS IN URBAN AND SUBURBAN LOCATIONS

Departments	Urban		Suburban		p<
	\bar{X} (N=57)	s.d.	\bar{X} (N=46)	s.d.	
Personnel	2.2	.99	1.8	1.07	.05
Production	3.2	1.55	3.8	1.45	.05
Facilities	1.6	.67	1.9	.40	.05

²The relative lack of personnel activities in suburban settings may be due to the fact that suburban plants are more likely to be subdivisions of larger corporations. Personnel activities may concentrate elsewhere in the corporation. Urban firms reported an average of .5 (sd=.51, N=55) layers of authority above the site whereas suburban firms reported an average of .7 (sd=.46, N=46) (p .01), a slight but statistically significant difference in this respect.

³A Sense of community, more personal relations among employees, is more likely in a single than in a multiple shift plant if only because workers are there as a body--and the individuals are not rotated. The single shift characterizes 56% (57) of the firms in urban settings and 37% (46) of the firms in suburban settings (p<.10). The association of a single shift with an urban setting is just below statistical significance.

indicators suggest more personal relations in urban than in suburban sites. The way break times are regulated is one of these. Suburban plants regulate breaks more mechanically. Unionization and its rationalizing of contract, an impersonalizing arrangement, is more frequent in suburbia.¹ Suburban firms are also more likely to sell their products to individual clients than to other firms and institutions, more of contract negotiation than personal persuasion. Suburban workplaces are oriented to a far flung clientele, more cosmopolitan than local, while urban firms are more likely to have a local clientele--further increasing the chance for personal interaction.²

Urban and suburban locations do not contrast so much in labor force characteristics as in the cultures of the two settings. Urban settings, despite the conventional wisdom about urbanism and anonymity, involve more of a personal tie between workers and management, among workers and between the firm and its clientele. Out of these more pervasive communal ties retail consumer goods services emerge. The response to the opening paradox that services are found at those workplaces wherethey are most accessible out of the workplace is that these services do not arise simply to meet a practical need of workers. They are, as a form of widening participation, an expression of community. The act of impropriation is an affirmation by the firm of a relationship with its employees more pervasive than that defined by the technical division of labor.

The Impropriation as a System: The Path Analysis

Manufacturing Industries

The previous pages described the relations of a number of variables, taken one at a time, to the diversity of retail consumer goods services at the workplace. The impression provided by these

¹A break determined by the supervisor or by self-regulation is a more personal way of controlling work scheduling than breaks at a general signal or according to some production schedule. Breaks are regulated by relatively more personal means in 80% (55) of urban and 52% (45) of the suburban firms ($p < .01$). Forty-seven percent (57) of urban and 65% (46) of suburban firms are unionized. This difference, just below the level of statistical significance, suggests greater unionization in suburbia.

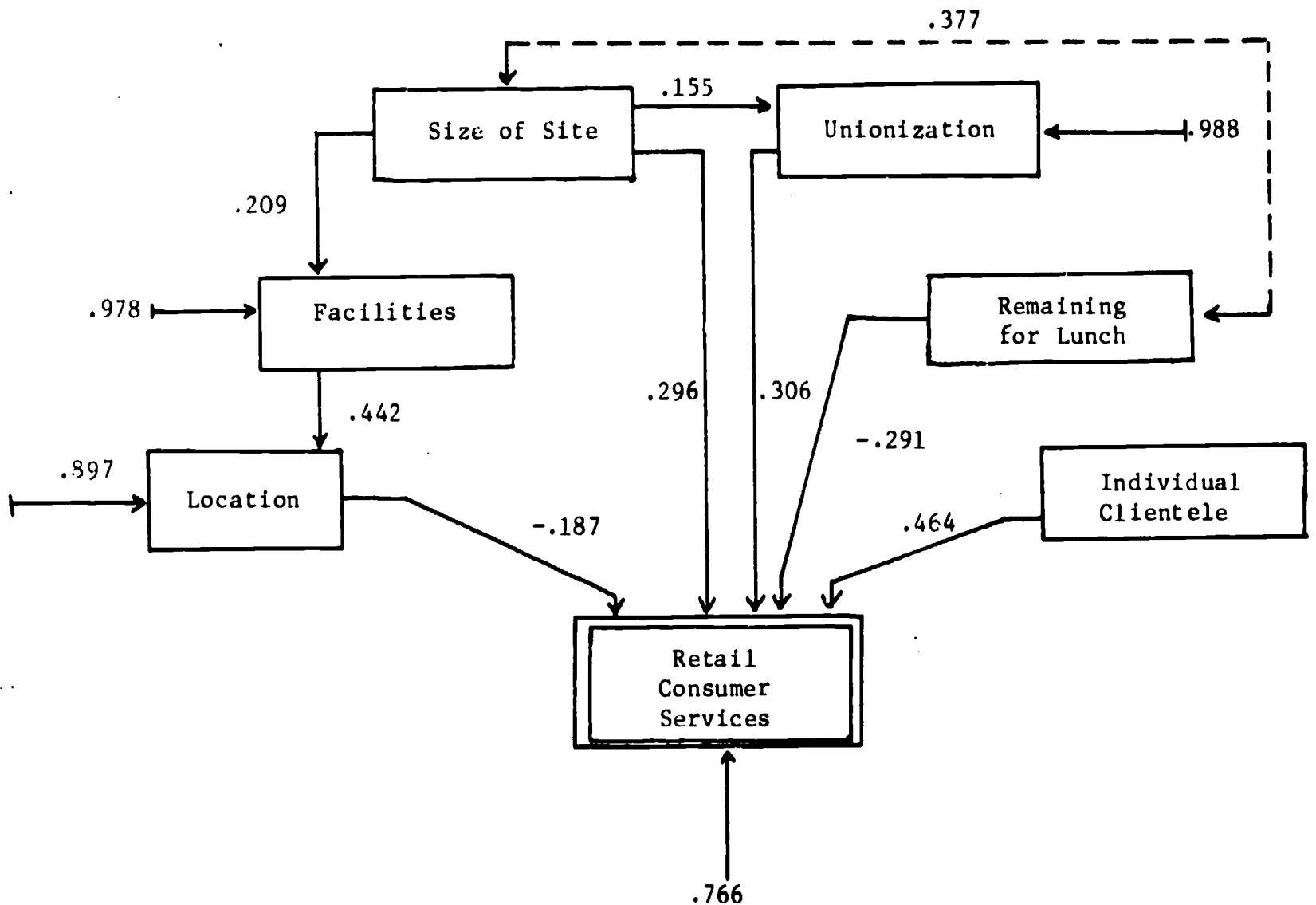
²An individual rather than an institutional clientele is enjoyed by 74% (57) of the firms in urban settings and 39% (46) of those in suburban settings ($p < .0001$). Firms producing items for direct individual consumption tend to be oriented to the satisfaction of needs, not always a rational matter, rather than to another economic enterprise, a factor which would press toward rational cost accounting. Thirty-six percent (56) of the urban and none of the suburban (46) organizations have clientele restricted, by and large, to the Delaware Valley ($p < .001$). On the reverse side, 29% (56) of the urban and 54% (46) of the suburban firms market throughout the United States and abroad as well ($p < .01$).

pair-wise associations is that retail consumer goods services develop, when the workplace is part of a larger, publically owned corporation with the power to appropriate services of other institutions as a personnel policy and when a threshold in size of workplace is attained. In addition these services develop pari passu with the complexity of organizational structure and as an expression of the workplace as a community. The latter corresponds to a worker management relation that is less narrow and rationalized than would be the case under a union contract, when there is a climate of personal face-to-face interaction, in determining, for instance, the work routine, or the greater personalization accompanying an urban rather than a suburban setting or as reflected in a propensity to remain at work for lunch. The services emerge not only in response to a need, for then their emergence precisely where alternatives are available would be paradoxical, but as a part of an expression of community. Management as itself part of the working community appropriates a service and further involves itself in relation to employees as consumers. The influence of organization complexity was more clearly predictive of retail consumer goods services in manufacturing than in service industries. The role of services as an expression of the community of workers appeared in both "social types."

Of course, in the real world, a number of factors act simultaneously, each conditioning the other. The diversity of retail consumer goods services, the dependent variable is subject to a complex of independent variables. The combined effect of such factors may be studied through multiple correlation procedures. The specific influence of each factor may be isolated from that of the others through a study of the partial correlations of the factors. The correlation coefficient refers to the dispersion of the point value of the factors around a regression line. The slope of the regression line shows the relative amount of change in the dependent variables as the independent variable changes. "Causality" may, for our purposes, be thought of in terms of this slope. The method of "path analysis" is a variant of multiple regression analysis. A set of "recursive" (no reciprocal causation) equations define the relation between the dependent variable and the independent variable taken one, two or more at a time. Each of the independent variables may be treated as exogenous (no other variable in the system accounting for it) or it may, in one or more equations, be treated as a dependent variable responsive to other exogenous variables. Since the distributions of values of these variables differ, the respective expressions for the slopes or, in the language of statisticians, the beta coefficients, are standardized. The standardized beta coefficients are called "path coefficients." The set of path coefficients resulting from the system of recursive equations, which may be represented pictorially, shows the interrelation among the "causes."

Following are two path diagrams. The first shows the relationship of five independent factors to the diversity of retail consumer services at the worksite in manufacturing industries. The second shows

PATH DIAGRAM: "CAUSES" OF RETAIL CONSUMER SERVICES TO EMPLOYEES IN MANUFACTURING FIRMS



PATH DIAGRAM VI-1

<u>Variable</u>	<u>Variance</u>	<u>Path Coefficient with Retail Consumer services</u>	<u>F</u>
Individual Clientele	.168	.464	5.90
Unionization	.286	.306	2.74
Size	.327	.296	2.30
Staying for lunch	.390	-.291	2.30
Location	.413	-.187	.98

the influence of six factors on retail services in service industries. The straight arrows from the rectangle representing the independent to that representing the dependent variables point the direction of causation. The decimals written along their side are the path coefficients. The broken lines represent zero order correlations between the two variables represented by the rectangle connected by it. The decimal along the broken line is the correlation coefficient. The arrows from outside the diagram impinging on the independent variables and on the dependent variable represent the residuals, the amount of effect still exogenous after that attributed to the factors in the diagram has been allowed for. The decimals atop these arrows represent the magnitude of the residual.¹

¹The data represented by the diagram was generated by a computer program (SPSS) for performing a stepwise regression. The first place is assigned to the variable accounting for the greatest amount of variance. The size of the path coefficient, as well as the amount of variance accounted for by a particular variable, is, in part, a function of the size of the units in which the variable is measured.

The dependent variable, retail consumer goods services, is based on a five point scale, the index of diversity described above. The variable designated as "individual clientele" was scored as a "dummy variable," scoring zero for "no individual clientele" (i.e., all clients are industrial or institutional) and one if the workplace produced items primarily for individual clientele. Thus, a positive path coefficient indicates a positive association between producing for sale to "individual clientele," and the diversity of retail consumer goods services. The variable "unionization" score for a two value--one for a union shop and two for a non-union shop. Thus, a positive path coefficient indicates a positive association between no unionization and diversity of services. The size of site, defined as the number of employees at the worksite, was scored in six categories, from smaller to larger, geometrically arranged. A positive coefficient indicates that the larger the site, the more services it tends to provide. The proportion remaining for lunch was scored in seven intervals. A positive coefficient means that the more who remain for lunch, the more services--a negative coefficient that the more who go out to lunch, the more services. Location of the site was scored in seven categories, in effect, originally nominal, but interpretable in terms of increasing distance from the center city. A positive coefficient means that with greater distance from the city, the more services offered--a negative coefficient suggests that services increase with nearness to the city, with urbanization. The variable "facilities" refers to the industry having a department specializing in maintenance of the physical facilities. This was scored according to the number of "offices." A positive coefficient between it and the location measure indicates that the more facilities maintenance "offices," the more likely is the workplace to be away from the city. No arrow is shown between "facilities" and the dependent variable because the path coefficient of the "direct effect" here is too small to be of interest or is not statistically significant. The variable "facilities" has an indirect effect, however, on the diversity of

Some factors considered in the earlier pages were entered in the original recursive equations but do not appear in this path diagram. The technical reason is that, as part of a multiple regression, they do not account for much additional variance. This may occur, for instance, when two variables are highly correlated with one another both expressing the same underlying variable. After one of them is entered in the model, the second adds very little. The table below the diagram shows the cumulative variance accounted for as each variable is added.¹ The second column lists path coefficients for the direct effects of each independent variable on the dependent variable and the third column gives the F statistic testing the statistical significance of the path coefficients. The five factors, taken together, account for about 41% of the variance. The remainder of the variance is attributable to factors outside the model. Their effect, or the residual, is given by the arrow from the outside to the dependent variable with the value .766 at its tail. (This is computed as $1-R^2$ where R is the multiple correlation coefficient.)

All of the elements in the path diagram are indicators of some underlying concept or concepts--which together constitute a partial theory of the occurrence of retail consumer goods services, itself an indicator of another underlying concept. The concept underlying the dependent variable, the service, is given by the meaning of that activity for the firm. The theoretical description considers these indicators, or more precisely, the complex of concepts to which they refer, as elements in a theoretical net.

services through its influence on location. In the same way, size of site influences the likelihood of having a facilities or maintenance department. Therefore, size of site, in addition to its direct effect on retail services, has an indirect effect on that variable through its effect on facilities. Similarly, size of site is connected to the likelihood of unionization--a larger site more likely to be unionized--and this has yet another indirect effect on services. These indirect effects are not analyzed here.

²The last factor, location of site, adds only .023 to the proportion of variance already accounted for. By adding the direct effect of the "facilities" maintenance variable (the direct effect does not appear in the path diagram, only in its direct effect on location), we add only about .005 to the proportion or .5% of variance--probably because the variable "size of site" which had already been entered is a good measure of degree of structural differentiation of the organization. By including the "yearly quit rate of non-salaried employees," we change the amount of variance accounted for only by about .001 or .1%, perhaps because the labor force stability which this reflects is already reflected in the measure of unionization and in the tendency to "stay for lunch." Of course, the variable may not be so important on its own. Recall that it was not used in the earlier analysis to account directly for retail consumer goods services but to elucidate the meaning of other variables such as type of "ownership."

Now, to interpretation of the path diagram showing the conditions under which retail consumer goods services emerge and diversify in manufacturing. Taking the variables in the order which they appear, the services arise in conjunction with a relatively direct relation to the world of consumers. With individuals rather than industries or institutions as customers, the firm has a consumer market type position. Impropropriating market behavior is natural and consistent with this experience. Further, dealing with individual consumers puts a premium on relationships, personal needs and individual attitudes. Selling of retail items to employees also extends their relations beyond the specialized work role, engaging them in the more immediate need-fulfilling relationship. Relations to industrial clients brings considerations of rational cost accounting and concern with objective criteria of product performance to the fore.

The second independent variable, unionization, shows a correspondence between non-unionization and retail consumer goods services. Unionization organizes labor and management around the question of conflict leading to a specification of benefits in a contract. This arrangement is a rationalizing one and tends to support the less formalized substantive service. The identification of labor with a group transcending the workplace, the meaning of unionization, may be inimical to a sense of local community among workers, apparently a condition for the development of services.

The negative path coefficient between location of the industry, the fifth variable in the list, and the services, shows that these retail services are more diversified in urbanized than in suburban locations. This too seems to be an affirmation of the internal community at the workplace, management establishes services to compete with those outside.

The negative path coefficient between the proportion staying for lunch and the offering of retail consumer services also suggests that more services will be offered within the plant as more leave the site for lunch. This reverses the correlation between services and staying for lunch in service industries. It may be possible that management offers the services to keep workers at the site--a competitive consideration. The more permeable the boundary between the workers and the environment, the more management establishes the services in the plant to keep an internal commitment. Thus, in one sense, retail consumer goods services are not so much substitutive for missing services as a means management uses to compete with outside attractions in manufacturing industries. Size of site, the third variable, may be taken, as in the earlier pages, as a proxy for level of structural differentiation. The more employees, the greater the departmentalization and, at the same time, the greater the diversity, or number of units, of retail consumer goods services. This is not to deny the relation of size to potential demand and, thus, to the economic viability of the impropriated market.

The overall picture is one of a tension between forces of bigness and impersonality and the movement to extend the relationship

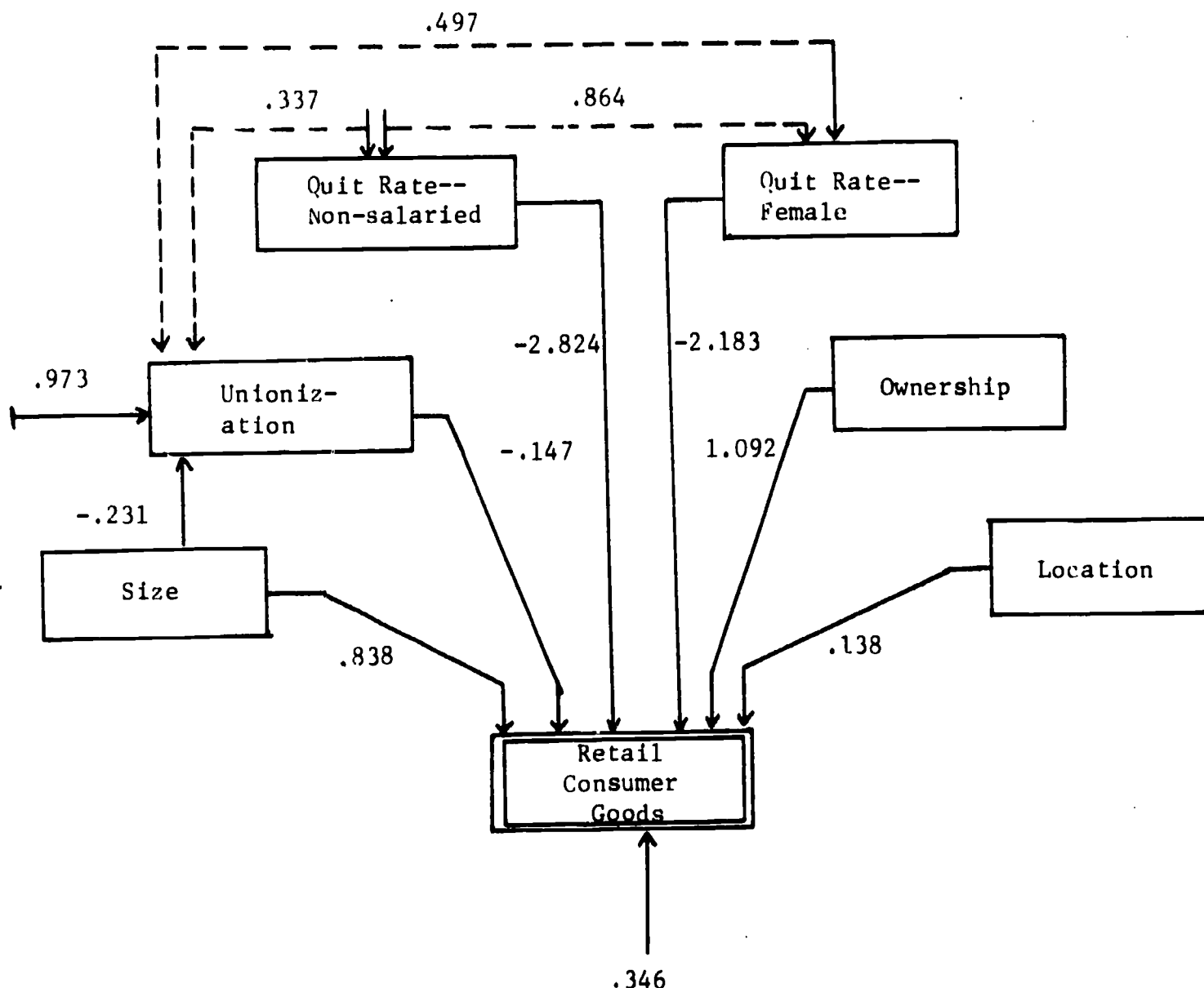
with, even to compete for the relationship of, the employee. The large plant has the power to appropriate and, if it has a market model and if it is able to resist the rationalizing effect of a transcendent worker organization, it will appropriate so as to broaden its relation to workers. This is an increase in managerial control of workers. It is also a way for workers to integrate aspects of their lives. For the industry itself, this increased involvement requires that it maintain an infrastructure not directly related to production. It trades off rational accounting for labor commitment. These five factors together leave a residual path value for the other exogenous variables of .766. Many other factors, not considered in this study, must be invoked to provide a full accounting for the proliferation of retail consumer goods services at the workplace in manufacturing industry.

Service Industries

This chapter opened with a contrast between manufacturing and service industries as different types of social organizations. Retail consumer goods services are more developed in service than in manufacturing industry. As the factors accounting for the emergence of services were introduced one by one, in the earlier discussion, they tended to predict retail consumer goods services in manufacturing industry but, except for those relating to the internal life of the worker community, were less convincing with respect to service industries. The bases for growth of this service differs in the two "social types."

In manufacturing firms, the establishment of these services rests on conditions at the boundary between the industrial community and outside institutions. In the service industries, concern with developing a committed community of workers gives way to concern with fulfilling management's commitment to them--of keeping them employed and holding down the rate of labor turnover. Simplifying their relation to their non-work roles is one way of doing this. Retail services are a facility offered to hold employees, particularly female employees, in the job. The following path diagram shows six factors accounting for 88% of the variance in the occurrence of retail consumer goods services.

PATH DIAGRAM: "CAUSES" OF RETAIL CONSUMER SERVICES TO EMPLOYEES IN SERVICE FIRMS



PATH DIAGRAM VI-2

<u>Variable</u>	<u>Variance</u>	<u>Path Coefficient with Retail Consumer Service</u>	<u>F</u>
Size	.224	.838	40.08
Non-salaried quit rate	.338	2.824	45.64
Female quit rate	.560	-2.183	33.58
Ownership	.856	1.092	23.90
Location	.867	0.138	1.21
Unionization	.880	-0.147	0.98

The residual of .346, reflecting influences not included in the paths, is very small. The model is nearly a closed one with the diversity of retail consumer goods services almost entirely accounted for by conditions internal to the industry.

Service industries almost definitionally are oriented to a face-to-face relation with a consumer market. The "clientele factor, so important in predicting services in manufacturing industry does not appear here because it does not differentiate within this class of industry. The magnitude of the path, near unity, connecting the variable size of "site" reflects available capital and the magnitude of a market for these services. It is also a proxy for differentiation of structure which, in the case of manufacturing, was found to correspond with the diversification of services as an additional structural unit. This may not be the significant meaning of size here. None of the direct measures of structural diversity (of production, managerial, personnel, etc. department) predicts retail consumer goods services in this path model. Since the next two factors refer to a labor force stability, the first one may also exert its effect in terms of numbers and aggregate demand.

The measures of quit rate, labor turnover, or stability of the labor force, seems to be strong predictors of the diversity of retail consumer goods services. A zero order correlation of .864 between the quit rates for non-salaried and for female employees reflects the fact that non-salaried employees in service industries tend to be female. The numbers of female typists and clerks that work in the processing rooms of banks, insurance companies and consulting firms. Evidence this fact that two rates can be so highly correlated and yet one have a negative and the other a positive path coefficient is particularly telling. The path coefficients are, of course, partial regression coefficients. Thus, beginning with the positive coefficient, we may reason that the higher the quit rate of the non-salaried employees, the higher the number of retail consumer goods services. Management may be responding to this high turnover by offering more and more retail services--without a noticeable effect on the non-salaried quit rate. Given this turnover rate of the non-salaried labor force, we then find a specific negative association between the quit rate of females and the establishment of retail consumer services. That is to say, by responding to the general situation of non-salaried turnover, management is influencing the turnover rate among the female employees--the more services the less turnover (though this reads the director of "causality" of the regression in reverse). Looked at as the equation is written the lower the female quit rate the more services. This supports the hypothesis suggested earlier that services are an expression of a stable employee community. Retail consumer goods services are more significant for female employees who are more likely than the males to have the market responsibility for their households, particularly for the food, drugs and perhaps some small appliances available in their company stores. The female is penalized more than the males when the working hours interfere with the consumer role. Further, organizations with a high quit rate for females include those offering part time, non-permanent, work. The

more the firm depends on temporaries, the less likely would it be to have retail consumer goods services.

The form of ownership, whether public or private, has a significant relation to more diverse retail consumer goods services. The direction is toward an association of private ownership and more services. In the earlier zero order associations we found retail services were associated with public ownership in manufacturing firms. Large corporations, it was argued, establish a personnel policy to inappropriate services. It was then pointed out that a communitarian setting at the local level is conducive to the development of these services. That second factor is relevant here. Privately owned firms are more likely to be local or regional and to be involved directly with clientele in the Delaware Valley. A management closer to the employees may have a better perception of the nature of the role strain imposed upon a female employee and thus more likely to provide retail services. Impropritation in service industries seems more related to a welfare philosophy than to one of worker commitment and control.

Location seems of minor importance. The relationship of location to services, though, reverses that found in the manufacturing firms. In manufacturing, urban location is associated with services. We interpreted this as a competitive response by industry to keep the loyalty of its employees. Here, the suburban or rural firms are more likely to offer retail services. This seems to be a response to the needs of special groups of employees.

The negative path coefficient between unionization and the offering of services indicates that the services are less likely in plants that are unionized, that is, services occur in non-unionized settings. As before, this may be explained in terms of the greater personalization in such settings and the greater localism consistent with private ownership. Thus, in service industries, retail consumer goods services are, fundamentally conditioned by the state of the workforce and, secondarily, by cultural and organizational factors which determine whether service will be converted into cash benefits.

CHAPTER VII

AGENT SERVICES

Agent services are, like food shops and drug stores, retail market services. Ordinarily, commercial agencies provide travel or theatre tickets, arrange job placement, purchase of real estate or aid in housefinding. Furniture moving is, by and large, accomplished by direct dealings with a transporter. The agency service at the workplace, in this instance, introduces a new intermediary. Similarly, arrangements for the purchase of non-company products, in contrast to a company store selling company products, introduces a mediator between the firm and the retail consumer goods market. Agent services, in contrast to other retail consumer goods market services, do not involve substantive market activity providing a good, but facilitate liaison with the market. Advertising in a company journal is an exception in that sense that the agency service is a liaison among employees, an internal market.

As shown in Table IV-6, all but six of the 106 firms have at least one of these six agent services. The sites in our sample are ranged according to the number of these services (from 0 to 6) which they offer. That number becomes an index of diversity of agent services. Table VII-1 shows the number of firms at each level of diversity.

TABLE VII-1
DISTRIBUTION OF WORKSITES WITH AGENT SERVICES

Number of Agent Services	Number of Worksites
0	6
1	24
2	20
3	26
4	7
5	18
6	5

$\bar{X} = 2.7$

N=106

s.d. = 1.65

The typical firm in our sample offers between two and three agent services to employees. Manufacturing and service industries, while differing in relation to retail consumer goods services, differ little in their commitments to agent services. For manufacturing the mean diversity of agent services is 2.6 (sd=1.60, N=55) and for service industries it is 2.9 (sd=1.70, N=51). However, analysis reveals that agent services occur for different reasons, perform different functions, in these two types of industrial organization. The first part of this chapter will seek correlates, one at a time, of agent services in the manufacturing industries and the second part will repeat this exploration for service industries. The final section will examine the systemic factors or combined influence of these in manufacturing and then in service industries.

Correlates of Impropriation

In Manufacturing Industries

Agent services seem to emerge in those manufacturing industries having a high level of organizational complexity, little internal employee organization, and plant location at some distance from retail market services. These factors suggest an advanced division of labor at the managerial level and a relatively weak position of the work force. Agent services occur along with other employee services which, rather than relating to the retail market, or the world of instrumental exchange, relate to the world of expressive activity, to family, leisure, and recreation and physical and mental care. Agent services for employees are associated with community services relating to good citizenship and civic participation.

As an indicator of organizational complexity, workplaces in our sample were classified according to the geographic "scope of operations" of their parent corporations. Corporations operating in diverse national settings are attuned to diverse rules of corporate behavior, labor force conditions and economic regulations. For dealing with these problems, organizations proliferate departmental units. This more complex structure is often reflected at the site level--especially if the site has corporate managerial responsibilities. The measure of agent services is not of magnitude of cost or frequency of use but is itself a diversity measure--reflecting the number of different kinds of agent service available. It is not unreasonable to expect this type of structural complexity to correspond with the level of structural complexity of the organizations. Corporations whose operations are confined to the United States have a mean of 1.9 (sd=1.21, N=24) agent services while multi-national corporations have a mean of 2.7 (sd=1.29, N=31) ($p < .01$). The local manufacturing sites of multi-national corporations are distinguished by the diversity of agent services offered.

A test of the influence of organizational complexity may be made directly in terms of the departmental division of labor at the site. The number of structural units or offices within various

departments reflect the diversity of functions performed at the site. The total number of departments is itself a measure. The diversification within each of these departments is measured, as noted in chapter VI, by the number of units or offices within that department to which at least one full time specialist is assigned. Sales, production, and personnel departments seem to be the ones related to agent services. Industries were also classified according to the sizes of their facilities maintenance department and managerial departments at the site but these did not correlate with agent services. The overall measure of departmental diversity was introduced by counting the number of major departmental units at the site. (This measure includes the above departmental measure, on a yes/no basis but also includes facilities and managerial departments.) Table VII-2 shows the relationship between the number of sales, production and personnel "offices" and the overall number of departmental units at the site and the services measured by diversity of agent services.

TABLE VII-2

MEAN NUMBER OF AGENT SERVICES ACCORDING TO NUMBER OF "OFFICES"
IN VARIOUS DEPARTMENTAL AREAS IN MANUFACTURING INDUSTRY

Department	Number of "Offices"						p ^a
	Low			High			
	\bar{X}	s.d.	N	\bar{X}	s.d.	N	
Sales (Low=0.1, High=2)	1.8	1.29	(18)	2.7	1.25	(37)	.05
Productive (Low=0-3, High=4,5)	1.7	1.25	(19)	3.1	1.57	(36)	.001
Personnel (Low=0.1, High=2)	1.9	1.23	(23)	2.7	1.3	(32)	.001
Total Number of Units (Low=0-4, High=5)	1.9	1.53	(18)	2.9	1.55	(37)	.01

^aThe "p" refers to the statistical significance of the differences between the mean number of agent services at sites with a low and high number of "offices" in each of the three departments and, in the last instance, between these low and high in number of departments.

An increase in the diversity within each departmental category is associated with an increase in the diversity of agent services. Since the number of organizational units is a function of the size of the plant, the diversity of agent services might be associated simply with number of employees. However, in testing we find that the number of

employees at the site is not a correlate of agent services. Thus, the interpretation in terms of the division of labor, structural differentiation is probably directly relevant. An agent service to which at least one full time employee is committed is in itself a structural unit and part of the same trend to organizational diversity.

The proliferation of departments and offices measures horizontal organizational differentiation. The height of the pyramid of authority is another measure of organizational complexity, this time a measure of vertical organizational differentiation. Table VII-3 shows the association between the number of agent services offered and the number of layers of authority recognized at the worksite.

TABLE VII-3

THE MEAN NUMBER OF AGENT SERVICES ACCORDING TO THE HEIGHT OF THE ORGANIZATION'S AUTHORITY STRUCTURE IN MANUFACTURING INDUSTRY

Number of Authority Layers	\bar{X}	s.d.	N
2-3	1.7	1.24	(19)
4-5	2.4	1.27	(23)
6,7,8	3.3	.94	(13)

$p < .005$

The more hierarchically complex organizations are probably also larger, that is, have more employees. But, as noted above, number of employees is not a direct spur to agent services. The relationship of horizontal and vertical structural complexity to the diversity of agent services is not a mysterious consequence of an internal imperative to differentiate structural units. The more differentiated the workplace, the greater the cultural diversity of workers. Hierarchical differentiation, for instance, means a greater likelihood of having executives who are moved from one corporate site to the other. They have reason to call upon housefinding and moving services and upon a placement service to help with the employment of a spouse. Also, the more differentiated, the higher the rates of white collar managerial employees to the entire staff. These are the employees who seek theatre and travel tickets.

Agent services are associated with the form of ownership, whether public or private, of manufacturing corporations. Publically owned corporations have an average of 2.7 (sd=1.20, N=32) while privately owned corporations have an average of 2.0 (sd=1.36, N=23) agent services ($p < .05$). It is not likely that the form of ownership is, literally, the factor here. Rather some correlate of these two forms is at issue.

Publically owned corporations are more diverse and complex. Thus, for the reasons advanced above, they have more diverse agent services. They are also more rationalized--have a clearer bureaucratic arrangement, with more formal relations between employees and management. Specialization itself is associated with bureaucratic rationalization. Agent services may be an alternative for substantive market services in these more rationalized settings.

If this be the case, following the argument in the last chapter, we would expect more agent services in unionized shops. We found before that non-unionized shops have more retail consumer goods services. This was explained by the lack of contractual rationalization in non-union shops. Publically owned corporations are more likely to be unionized. The factor of unionization is itself associated with agent services. Actually unionized firms have a mean of 2.20 (sd=1.35, N=41) and non-unionized an average of 2.43 (sd=1.07, N=14) agent services ($p < .1$). While this difference is not statistically significant, agent services seem to appear in the same types of places as do the more substantive and so are probably not substitutive. It is likely that the publically owned corporations have their agent service as a function of their greater complexity but not as a function of their greater bureaucratic rationality.

The association of agent services with non-unionization suggests that location may be a factor here as it was for the substantive services. An employees association is evidence of such localism. Workplaces were classified according to the presence of an employees' association. Manufacturing firms without an employees' association have an average of 1.90 (sd=1.32, N=29) while those with an employees' association have an average of 3.52 (sd=1.38, N=23) agent services ($p < .001$). This is a strikingly sharp association. The employees' association is not a bargaining agent or a grievance channel but is a social organization among employees. The social and recreational life of employees around the worksite is its commission. This is localism or the cohesion of an employee community in a special sense. The employees' association performs a familial and caring type function for employees. Agent services too have this aspect. They do not engage the corporation in a seller-buyer relation with employees but simply facilitate the satisfaction of employee needs through others.

Agent services establish liaison to these activities outside. They are not substitutive for the impropriation by the firm of the retail consumer goods and other market services--but stand alongside of such services. Agent services relate to the more expressive side of the employees' lives. This meaning is revealed in the association of agent with other employee services. Table VII-4 shows the association of agent services with family, leisure and recreation, physical and psychological health services to employees. The meanings of each of these employee services was discussed above in chapter IV.

TABLE VII-4

AVERAGE NUMBER OF AGENT SERVICES ASSOCIATED WITH VARIOUS LEVELS
OF FOUR TYPES OF INTEGRATIVE SERVICES TO EMPLOYEES IN
MANUFACTURING INDUSTRY

Employee Service	Low			High			p < ^a
	\bar{X}	s.d.	N	\bar{X}	s.d.	N	
Family (Low=0, High=1,2)	1.9	1.19	(27)	2.9	1.22	(28)	.001
Leisure and Recreation (Low=0,2, High=3,5)	1.4	1.24	(19)	2.9	.93	(36)	.001
Physical Health (Low=0,2,3, High=4,5)	1.7	.96	(25)	2.9	1.24	(24)	.001
Psychological Health (Low=0,1, High=2,3)	2.2	1.27	(39)	2.8	1.12	(16)	.05

^aSee note for Table VII-2.

A firm which provides agent services is a firm oriented to the personal side of employee welfare. Agent services are an impropriation of a market activity but the particular way in which they relate to the market is as a facilitation, associated with family, leisure and recreation and health care services which, in their way, are also tension reductive. Does this more personal relational facilitating not contradict the earlier finding associating agent services with structural complexity? On the contrary, for an organization to operate instrumentally, it must draw upon a reservoir of expressive and supportive relations among employees. The more rationalized the organization, the more its need to touch the personal substrate of employee life. The large, complex public organizations have the organizational mechanics for impropriating these highly personal spheres and they probably do it in a bureaucratic way. Medical care becomes a scheduled health plan rather than material succorance but it speaks to the same need. Agent services are bureaucratic and managerial in their form but their goal is personal need satisfaction.

Retail consumer goods services in manufacturing industry occur where alternatives are available in the nearby market. We inferred that, under such a condition, industry impropriated these services to support an internal community, perhaps, by competing with the outside market attractions. Agent services, on the other hand, occur in locations distant from market outlets. Firms in urban areas, with a retail market near at hand, have a mean of 1.75 (sd=1.48, N=16).

whereas those in more suburban and rural areas have a mean of 2.66 (sd=1.17, N=38) agent services ($p < .05$).

Access to the retail market is inhibited by distant location, and agent service can certainly facilitate this access. Access is also inhibited by long work hours particularly when markets close in the evening. Thus, firms in which the average workweek is 39 hours or less have a mean of 1.70 (sd=1.25, N=10) agent services. Where the average is 40 or more working hours a week, including overtime, the average is 2.53 (sd=1.29, N=45) ($p < .05$). Thus, the agent services compensate the employee for difficulties which working conditions, in terms of location or hours, impose on him. The arrangement has something in common with executive prerogative in which, aside from the prestige meanings, dining, travel and support staff privileges are given to executives to enable them to perform a grueling task at odd hours with minimal distortion by personal needs and minimal disruption in his family and leisure life. This further explains the emergence of agent services in association with caring-type services which inappropriate aspects of familial, leisure and health institutions.

In manufacturing industries, agent services occur in organizationally complex settings, differentiated both horizontally and vertically. The large public corporation with headquarters outside the city and which makes heavy work demands on its employees is a good candidate for agent services. They also occur where relation between labor and management is not rationalized through union contract but where an employee association tends to the needs of the employee community. The emerging picture is of the large, driving and bureaucratized organization which strives to meet the personal needs of employees. Agent services are personal privilege type services which ease the pressure of competing roles--freeing the worker for continued dedication to productive performances.

In service industries, agent services seem to occur under similar circumstances, but the case is less clear. The distinction between domestic and multi-national organizations does not affect the provision of agent services in the service industries as it did in manufacturing. Organizational complexity seems less significant. However, the location of top management with respect to management of the site is of importance. This is assessed by comparing sites not having a higher external authority, a headquarters elsewhere, with those under the control of a headquarters. The first may be termed autocephalous (headquarters at the site) and the second heterocephalous (governed from elsewhere). Autocephalous sites average 2.42 (sd=1.58, N=26) while heterocephalous worksites average 3.4 (sd=1.71, N=25) agent services ($p < .05$). Agent services emerge in worksites of corporations which are more cosmopolitan than local. This is not unlike the association of agent services with publically owned manufacturing corporations--also a question of distant management in a rather bureaucratic setting.

Scope of the market is another indicator of the cosmopolitan

firm. Firms are divided according to whether the markets are local, essentially restricted to the Delaware Valley, or regional or national or even international. Firms with a local market have an average of 2.0 (sd=1.54, N=25) while firms with a wider market have an average of 2.7 (sd=1.31, N=30) agent services ($p < .05$). Where the market is international, employees operate at a distance from the customers. Thus, a distance both from top management and from customers predisposes to a diversity of agent services in service industries. Definitionally, agent services are, themselves, activities at a distance.

Our measure of direct interaction of employees with the public is also an indicator of social distance. Workplaces are classified according to the extent of public contact by employees. Firms in which interaction is involved average 2.36 (sd=1.22, N=39) agent services. Those in which no interaction is involved average 3.36 (sd=1.03, N=11) agent services ($p < .01$). All of this adds to a backroom image of production in service industries that have agent services. In manufacturing, the removal of employees from customer contact is not unusual. In service industries, this distinguishes between the front-line face-to-face service and those vast routine, clerical operation divisions working behind the scenes in banks and insurance companies.

The unionized firm is one in which workers themselves become cosmopolitans--joining workers at other sites. Unionized worksites have a mean of 2.12 (sd=1.17, N=17) and non unionized worksites a mean of 2.79 (sd=1.23, N=34) agent services ($p < .05$). The non-union shop in the service industry is exemplified by a financial institution with white collar and executive managerial workers. Its specialty is management. It is for these workers that agent services are instituted.

Agent services in the service industries are not associated with the integrative employee services as they are in manufacturing industry. There, their function was to facilitate need satisfaction in an otherwise impersonal, bureaucratic setting. Agent services in service industry emerge in large organizations, where major policy is not established at the worksite and where clientele as well as management is distant. This is likely to be a managerially oriented non-union shop. Agent services are, in this setting, like ties to the rest of a distant world where the industry is itself a fractionated entity, this service emerges to establish ties of employees to outside entities. In manufacturing, agents were part of a welfare type activity. In service industry, an agent service is a life-line for practical use.

The Systemic Analysis

In Manufacturing Industries

An agent service facilitates employee activity in an external institution. The retail activity of agency is impropriated but the substantive activities of those other institutions are not. To some

extent, of course, the outside activities are not suitable for impropriation (such as a moving service--even the army uses private movers). Sometimes an agency is the typical way of handling the activity (e.g., travel agency). The previous analysis showed that agent services in manufacturing firms are related to organizational complexity, localism of the employee association and inhibited access to the outside market. The industry facilitates the connection as a way of easing the pressure of non-work roles. The path analysis shows that eight factors account for 51% of the variance in the diversity of agent services.

Following the path diagram VII-1, the existence of an employee association is the first factor associated with agent services. (The negative path coefficient is a function of the direction in which the variable was scored. Diversity of agent service is positively associated with the existence of an employee association.) An employees' association helps focus social and recreational life within the worker community. Agency services are often arranged through an employee association. The zero order negative correlation between employee association and number of layers of authority connects the employees associations with larger and more complex organizations. Since these associations occur, generally, in non-union shops, the implication is that agent services occur in large non-unionized sites. The positive path coefficient between unionization (i.e., a positive association with non-unionization) tends to confirm this implication.

Diversified personnel and sales departments are associated with agent services--the first because of an interest in the lives of workers and the second because of its market orientation. Personnel departments can, at times, take on "social work" type functions mediating between the client and the larger environment. Sales units present images of people on telephones making arrangements to deliver a product or to arrange a meeting, the kind of managerial approach in which the act of agency is "natural." Both personnel and sales departments proliferate in more complex organizational structures--as shown by the positive path from the box representing authority layers to the boxes representing these two types of departments. The authority structure has a small direct influence on agent services and a larger indirect influence through its effect on personnel and sales units. That is, vertical complexity acts through horizontal complexity in developing agent services. Perhaps more to the point though is the combination of a complex bureaucratic organization facilitating the non-work role of its employees using the personnel and sales departments as the mechanism for this.

As in the earlier analysis, factors inhibiting access to services encourage the development of agency. Location of the worksite away from service clusters in suburban or rural areas is associated with a diversity of agent services. When workers work long hours, and so are kept away from other activities, agent services also evolve. The corporate scope, also associated with agent services, may be another measure of complexity but may also reflect a large number of executives who need such services as travel and home finding and

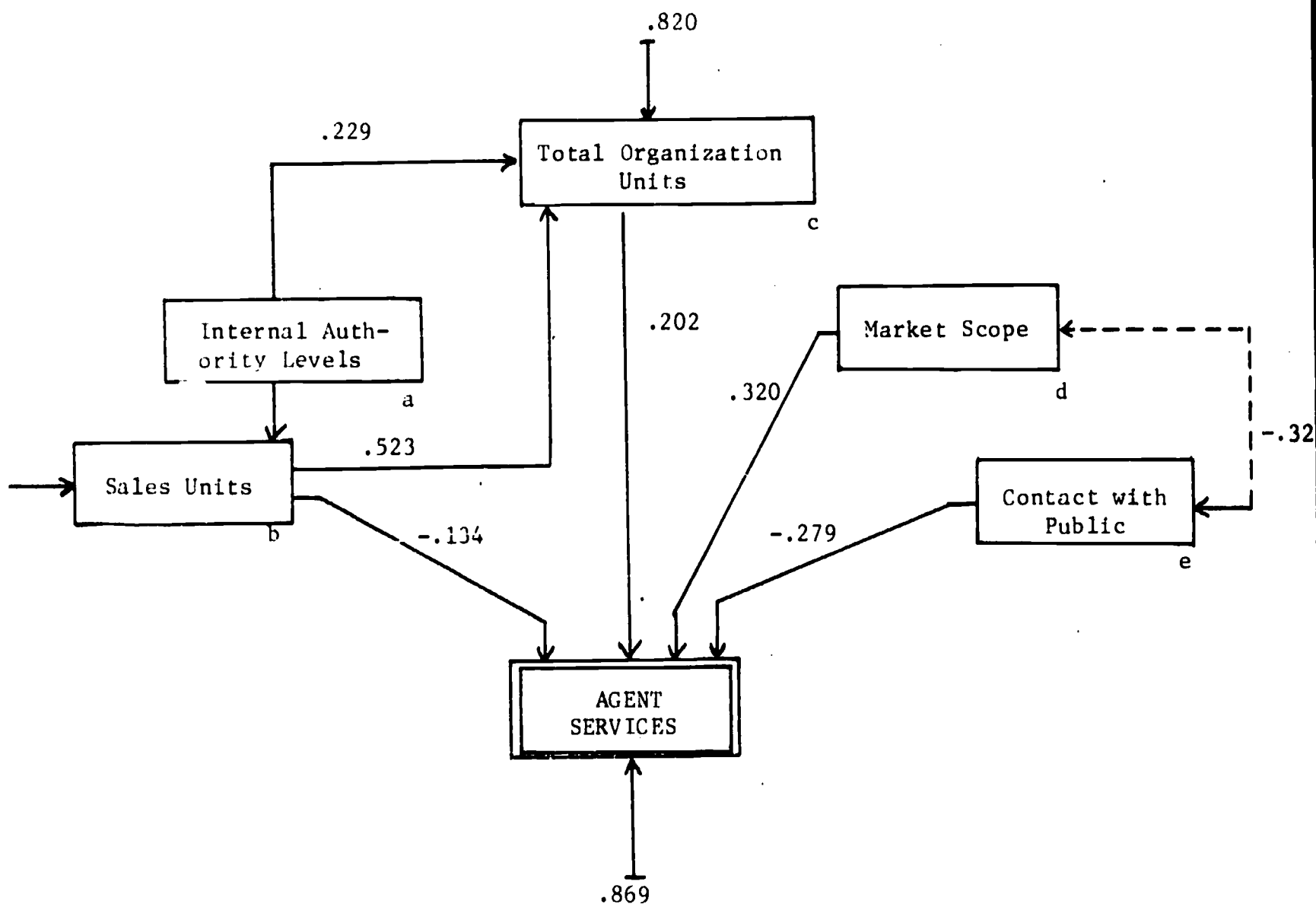
moving help or placement for themselves or relatives in another plant of the corporation. A diversity of employees in many types of departments exerts a demand for a diversified set of agent services. Thus more systemic analysis, in which the partial correlations of each of the factors are separately examined, supports the analysis based on correlates taken one at a time. Agent services are a means by which the large bureaucracy simplifies the personal lives of its employees and so frees them to contribute more efficiently to production.

In Service Industries

In service organizations, agent services to employees respond to a condition at the boundary between the organization and its environment. Isolation from clients seems to be a central ingredient. Agent services become more diverse in service industries as the scope of the industry's market widens from local industries, serving only the region, to those serving national and international markets. Serving a distant client reduces face-to-face contact as reflected in the negative zero order correlation between scope of the market and contact with the public. The last variable, contact with the public, is, in turn, negatively related to agent services--the services becoming more diverse as contact decreases. This is consistent with what was referred to above as the picture of the "backroom" production department. This is an aspect of service industry which parallels the condition of labor in manufacturing industry. Yet, this backroom labor tends to be non-union, heavily female, and to have a high turnover rate--though the latter two variables do not appear to be significant with respect to agent services. In this setting, agent services are an extension of the already present management capability in order to ease worker performance in their non-work roles.

As the management structure itself becomes more complex, as total number of organizational departments at the site increase, services proliferate. The number of departments, a horizontal structural differentiation, is itself a function of the number of layers of authority at the site, a measure of vertical structural differentiation. The direct relation of the height of the hierarchy to agent services is negligible. However, that factor operates indirectly through horizontal differentiating on the one hand, and the growth of sales departments, on the other hand. For their part, the direct effect of sales units is not statistically significant. The diversity of agent services is probably a function both of the increase of ability of complex organizations to offer agent services and the variety of demand exerted by a diverse population of employees. The residual as large as .869 suggests that a great deal of the story is not yet told. Many factors extraneous to our study affect the level of agent services. Within the limits of the findings, however, the picture emerging from this systemic analysis is consistent with that of factors taken one at a time. Agent services emerge in service industries that are both structurally complex and socially isolated from their clientele--again the image would be that of a large financial institution, insurance

"CAUSES" OF AGENT SERVICES IN SERVICE INDUSTRIES



PATH DIAGRAM VII-2

<u>Variable</u>	<u>Variance</u>	<u>Path Coeff.</u>	<u>F</u>
Market scope	.166	.320	1.55
Contact with public	.213	-.279	3.81
Total organization units	.230	.202	1.09
Sales units	.243	-.134	1.73

company or management corporation. Hierarchical structuring without horizontal structuring would not produce these services. The factor of unionization disappears--its effect probably expressed through other variables.

CHAPTER VIII

EDUCATION-INFORMATION SERVICES

Education-information services for employees include industry sponsored instruction in areas not directly related to work, opportunities for learning through a company maintained library, and facilitating information exchange among employees, or between employees and outside colleagues by sponsoring publication of a company journal and support of employee memberships in professional organizations.

Only 21 of the 106 organizations did not have at least one of these specific services. (The frequencies of each education-information service are given in Table IV-8.) Organizations were classified by a score reflecting the number of education-information services they made available. Scores ranged from "0" to "4", again a diversity measure. Table VIII-1 shows the number of worksites in the sample at each of these five levels of diversity.

TABLE VIII-1

NUMBER OF FIRMS AT EACH LEVEL OF DIVERSITY OF
EDUCATION-INFORMATION SERVICES
(N=106)

Number of Services	Number of Firms
0	21
1	32
2	27
3	24
4	2

$$\bar{X} = 1.6$$

$$sd=1.10$$

The typical firm has one or two of these services. Some meanings of education-information services, suggested in Chapter IV, related to a cultural upgrading of employees and of the cultural climate at the worksite. The question was asked whether the content of education programs within an industrial setting would not be influenced by a business outlook and whether education-information services in the community, such as adult education programs, might not have reduced

participation as a result of these impropriations by industry.

Correlates of Impropriation

In Manufacturing Industry

The meanings of these services may be further developed by noting the other employee services with which they cluster. Within manufacturing organizations, education-information services emerge along with agent services ($r=.57$) and a program of leisure and recreation services ($r=.45$). While, on the surface, these are institutionally disparate, in all of their cases the employer provides a facility enabling the employee to do something for himself. Agent services facilitate pursuit of market roles without impropriating the retail market as such. In leisure and recreation services management provides equipment, space and, perhaps, time for employees to arrange their own activities. Also, in the case of education and information services, the firm offers conditions under which employees may enhance their knowledge--if they so choose. From any other perspective, agent services also include the obtaining of travel and entertainment tickets and thus join leisure and recreation as forms of play. Avocational education also has this play aspect.

In service organizations, education and information services occur in firms that also offer physical-health services, especially psychological health services ($r=.31$) for employees and in which promotion of the social mobility of "minorities" and youth in the community ($r=.31$, $r=.32$) are community services. In service industries, education and information are associated with caring and social welfare.

These orientations to schooling are common in the field of education itself. School is a facilitator, teaching one how to learn, and a place to examine ideas without commitment--academic play. School is also the transmitter of the substance of culture and thus the healer of society.

Looking at correlates, in manufacturing industries, an impropriation of education-information services occurs in very large and complex organizations having a relatively stable labor force. In service organizations, it is associated with a non-profit status and a welfare orientation. In both types of industry, education-information services emerge where there is an employee association but in which employees are not unionized.

In manufacturing organizations, corporations as a whole employing less than 3,200 employees have a mean of 1.0 ($sd=1.12$, $N=21$) but those having over 3,200 employees have a mean of 1.8 ($sd=1.08$, $N=34$) education-information services ($p<.01$). Corporate concern with non-vocational education of its employees may derive from some broad desire to engender occupational mobility of employees. Especially in assuming executive positions in major corporations broad cultural

abilities are sought. The larger corporations also have more professionals and a greater ability to sponsor a professional publication. This is particularly marked in corporations interacting in a variety of cultural contexts. Domestic manufacturing organizations have an average of 1.2 (sd=1.17, N=24) while multi-national corporations have a mean of 1.7 (sd=1.1, N=31) educational services ($p < .05$).

A correlation of education-information service and the scope of the corporate market supports this finding. Organizations limiting their market to the U.S. have a mean of .9 (sd=1.00, N=25) whereas those with both domestic and foreign markets average 1.9 (sd=1.10, N=30) education-information services ($p < .001$). The size of the corporation and the scope of its operations are attributes transcending the sites. The scope of the market refers to the distribution of goods produced at the site. It is likely that the dispersion of the corporation as a whole puts a premium on symbolic communication--particularly as an aspect of management and that some of these education-information services company publication, are symbolic ways of binding physically separated settings.

Bigness and complexity of the site has a similar effect. Organizations with three or less authority layers average 1.1 (sd=1.08, N=19) while the more hierarchically differentiated average 1.7 (sd=1.15, N=33) education-information services ($p < .05$). Structural complexity and the tendency to multiply education-information activities may relate both to the increased managerial organization and cultural diversity of employees in the more complex organization. There is, of course, a threshold factor in the establishment of these services. Some are like mass media activities requiring a certain number of employees on a certain level of social dispersion to make them viable. Others like school programs attract a low proportion of employees and so need a large pool for viability.

The measures of size are not independent. Multi-national organizations have many layers of authority and many employees. With a more structurally differentiated firm, often, a more cosmopolitan firm, the management expands, involving more white collar employees--the prime candidates for these services. Organizations with a strong corporate growth philosophy see education as an expression, at the level of the individual employee, of this attitude.

These considerations of size and viability, the binding of socially separated segments and the growth attitude supplement, and are certainly not inconsistent with the earlier suggestion associating information-education services with the cultural development of employees and the spirit of the academic as play.

In Service Industries

In service organizations structural factors such as size of firm, the authority structure and labor force stability seem unimportant. This suggests that in these settings, the structurally

integrative function is less significant. Earlier we found that education-information services in service industries were related to other services associated with welfare, caring or, in a general sense, healing. For example, availability of company products to employees is a rather widespread practice and serves, not only as a financial incentive, but as a way of encouraging identification of employees with the company. The product may be sold to the employee at retail, at retail less 20%, at wholesale or at cost. Organizations giving but a slight discount on the retail price average 1.3 (sd=1.09, N=26) whereas those in which the product is available at a significantly reduced price average 2.0 (sd=.88, N=15) education-information services ($p < .05$). Of course, this test is relevant only where a consumer product is made. The sharing of a product of work with the employees is almost a response to the change of the alienation of labor from its product. Learning together, sharing information about one another's work and interests, is also a community building activity.

Education in community development contrasts with its role in manufacturing industry where it is associated with bigness, facing outward--the developing of personnel who could advance the firm in its world. An aspect of this solidarity within the community of workers is the tie between workers and managers in the same industry as compared with the outward orientation to fellow workers in whatever firm they work. Unionization has this latter meaning and a local employee association the former meaning. Unionized service industries average 1.3 (sd=1.11, N=17) while the non-union shops average 1.9 (sd=.98, N=34) education-information services ($p < .05$). Unionization places the workers in a wider network. This network may have its own education-information services but then would not be company sponsored. In fact, welfare activity by the union almost excludes that type of identification with the firm.

The non-union shops are patrimonies in which the employer, at his will, expresses or does not express this welfare relation. In this patrimonial context an employees' association is a focus of the community of employees. An employees association emerges, not out of a conflict of interest between management and workers, but out of an orientation to a common interest. The firm ordinarily provides a subvention for the employees' association. The relationship between the amount of funding the organization provides to an employee association and its education-information services is shown in Table VIII-2. In both types of firms, an employee association is often an instrumentality for developing an education-information program. The association is an expression of a worker community controlled by management but premised to be in concord with management.

TABLE VIII-2

MEAN NUMBERS OF EDUCATION-INFORMATION SERVICES ACCORDING TO EXISTENCE
OF EMPLOYEE ASSOCIATIONS IN MANUFACTURING AND SERVICE FIRMS

Employee Association	Manufacturing			Service		
	\bar{X}	s.d.	N	\bar{X}	s.d.	N
Do not have	1.0	.91	29	1.3	1.02	25
Have	2.1	1.13	23	2.2	.81	20
	p < .001			p < .001		

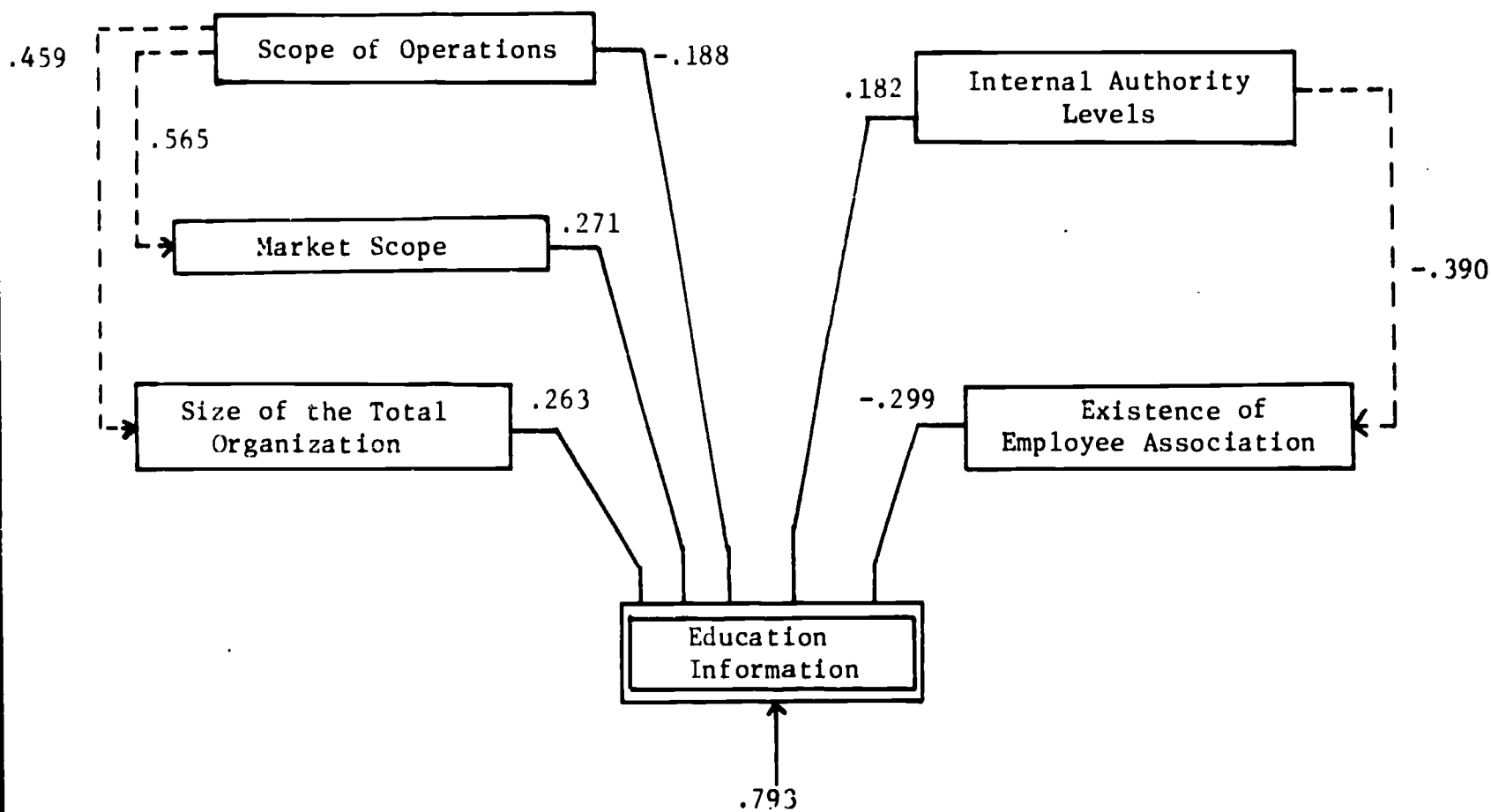
The Systemic Analysis

In Manufacturing Industries

Education-information services range from the giving of non-vocational courses, the circulation of a newspaper, employees' newsletter, maintenance of a library and the encouragement of professional publication. Diagram VIII-1 shows the systemic interaction among the "causes" of diversity in the service.

When all of the other factors are considered, the existence of an employees' association emerges as the first factor, accounting for more variance than any other, in predicting the diversity of education-information services. This factor is not, however, logically or temporally prior to the others. In fact, the broader structural conditions probably create a need for the education-information service which is then met through the mechanisms of the employees' association. The highly intercorrelated set of factors, size of total organization, scope of the market and scope of operations again shows that it is the big, diverse and widespread organizations that have this service--consistent with our earlier analysis of correlates of that service. The one change from that analysis is the negative path coefficient between the scope of operations and the employee service. This may be explained by its order in the analysis. If the underlying variables concern cultural diversity and need for linkage among the employees and client populations, the basis for proliferating education-information services is already given. If then the organization is spread about in many sites, the development of certain educational activities which require a concentrated pool of employees to reach the threshold of viability may be inhibited. Those informational activities which employ a mass media approach would not be so affected by dispersal. The hierarchical complexity of the firm also promotes this employee service probably, again, because of what it means for the diversity of employee types. A hierarchically complex firm has a greater proportion of white

"CAUSES" OF EDUCATION-INFORMATION SERVICES IN MANUFACTURING INDUSTRIES



<u>Variable</u>	PATH DIAGRAM VIII-1	<u>Variance</u>	<u>Path</u>	<u>F</u>
Evidence of employee association		.241	-.299	4.74
Size of the entire organization		.295	.263	3.84
Market scope		.326	.271	3.46
Internal authority levels		.351	.182	2.03
Scope of operations		.371	-.188	1.49

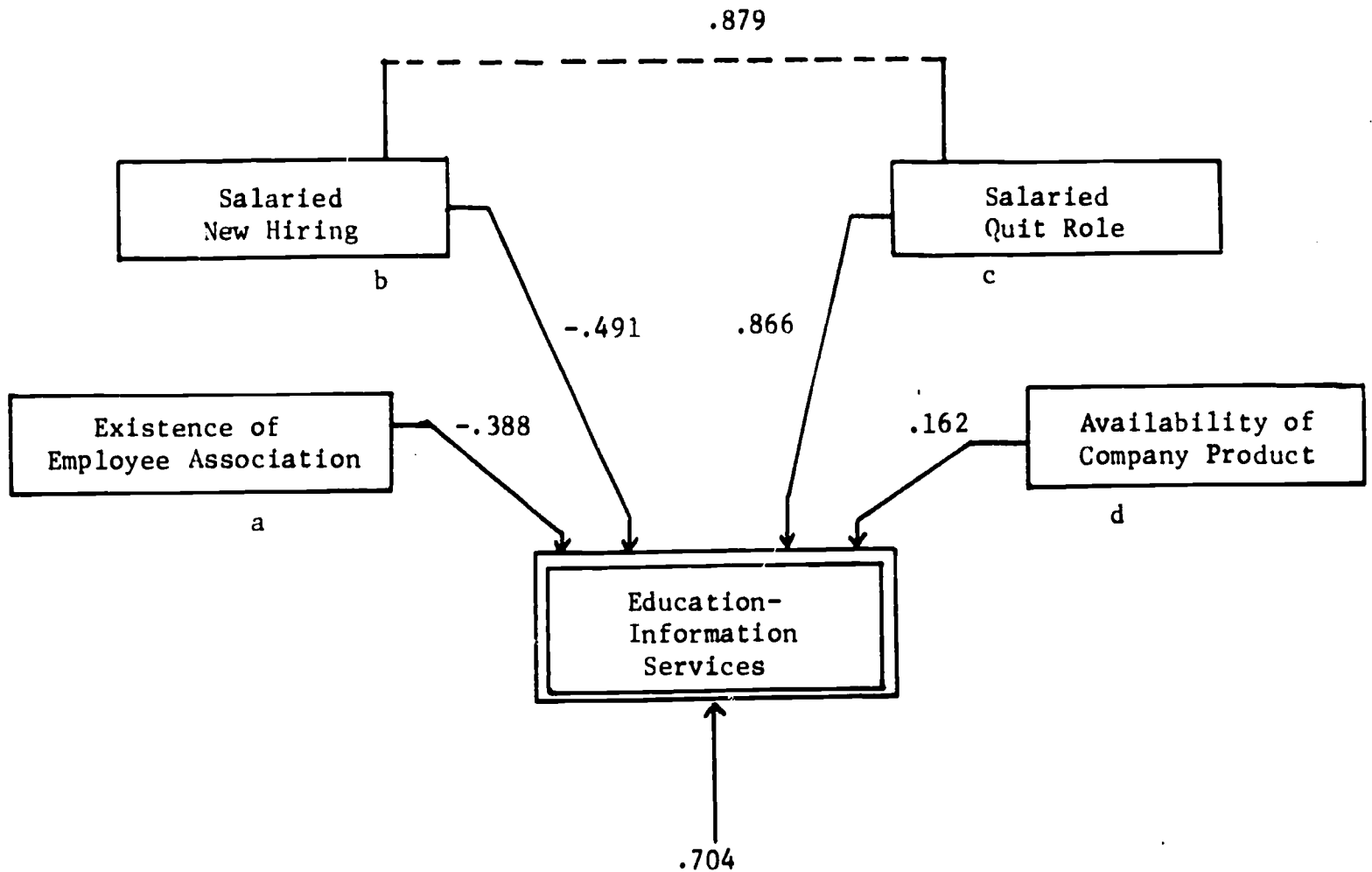
collar employees in a manufacturing setting and these are a source of demand for education-information services.

In Service Industries

Nearly half the variance in explaining the diversity of the education-information services in service industries is provided by but two factors, having an employee association and the quit rate of salaried employees. An education-information program evolves where that separation rate is high, that is, where there is a relatively non-stable salaried force. In this sense, the service does not reflect the welfare character of the earliest analysis but seems to be an attempt of an organization to cope with instability on its upper levels. The negative association with the rate of new hiring of salaried employees is a relationship obtained only when the quit rate is held constant. It may reflect specifically a level of organizational tradition. When many new faces appear the tradition of education is not institutionalized.

Education-information services in service industries are part of the internal system of an industry, responsive to conditions of the labor force more than to factors of management and organization. The employees' association makes the program possible. This is a case in which the systemic analysis has produced a meaning not inconsistent with that developed in the earlier simple correlated analysis.

"CAUSES" OF EDUCATION-INFORMATION SERVICES IN THE SERVICE FIRMS



PATH DIAGRAM VIII-2

<u>Variable</u>	<u>Variance</u>	<u>Path</u>	<u>F</u>
Salaried quit rate	.277	.866	4.72
Existence of employee association	.408	-.388	4.12
Salaried New Hiring	.483	-.491	1.62
Availability of company products	.504	.162	.71

CHAPTER IX

LEISURE AND RECREATION SERVICES

The natural place of play is in cementing particularistic relations, those of family, of ethnic or neighborhood groups. Yet, recreation is found in some formal organizations, including those committed to production--schools being the most obvious. While, in a rationalized system, work relations are viewed as quintessentially instrumental, they are constantly being extended in a more personal direction. A work team bound simply by identity of interests, without becoming a friendship group, would not perform well and, possibly, could not persist.

The work group as a recreational group has a long history. Instances of informal play at the workplace are legion. Consistent with our definition, to be considered a service to employees, leisure and recreation would be organized, institutionalized and at the workplace. The forms of recreation observed in our 106 Delaware Valley firms include athletics on the one hand and social partying on the other, six specific services in all. The frequencies of each were given in Table IV-10. For the following analysis, the measures of involvement of a firm in recreational and leisure services are based on the number ("0" to "6") of leisure and recreational activities available at that workplace on a regular basis. This again is a "diversity" index reflecting "how many" kinds rather than "how much" of a given kind. Table IX-1 shows the number of firms at each of the seven levels of involvement. All but nine firms have some recreational or leisure activity, and almost half have four or more services in this category.

Socially, recreational activities help integrate the individual personality and affirm the solidarity of specific recreational communities. Through the cultural content of recreational play, life options are examined on a tentative basis. Industrially based recreation expresses the life of that community. Recreation and leisure activities in industry are impropriations of social relations ordinarily found in more primary type groups. That they involve impropriations of some characteristic recreational technology or elements of a recreational industry is secondary. When the industrial recreational facilities duplicate those in the community, as with a workplace bowling alley, swimming pool or catering service, industry competes with marketed recreation. Recreation and leisure is, however, not classified here on the basis of where the facilities might be purchased, but on the basis of the outside social relations displaced by social relations among co-workers.

TABLE IX-1

NUMBER OF FIRMS WITH EACH NUMBER OF LEISURE AND RECREATION SERVICES
(N=106)

Number of Activities	Number of Firms
0	9
1	6
2	17
3	25
4	23
5	23
6	3
$\bar{X}=3.2$	s.d.=1.57

Correlates of Impropriation

In Manufacturing Industries

The size of the overall organization, the structure of authority, emphasis on production and existence of an employee association are relevant factors in both manufacturing and service industries though each develops recreation and leisure activities in slightly different circumstances.

In manufacturing organizations, size of the corporation as a whole is a predictor of the diversity of recreational and leisure activities. Organizations with over 3,200 employees have a mean of 3.3 (sd=1.40, N=34) while organizations with 3,200 or under employees have a mean of 2.7 (sd=1.46, N=21) recreational activities ($p<.10$). While statistically insignificant, the apparent difference suggests that large corporations arrange for more recreational and leisure services on an institutionalized basis at their worksites than do smaller corporations. A large corporation can more easily absorb the cost of these as an overhead item. However, more important than the question of whether they can better afford these services is the question of whether they need more of them.

The scope of corporate operations is another measure of bigness. It is more than that, however. It is an indicator of varying life circumstances for the employees. Manufacturing corporations which are limited to domestic operations average 2.7 (sd=1.34, N=24) while multi-national corporations average 3.4 (sd=1.47, N=31) ($p<.05$) recreation and leisure activities. The corporation with physically separated units seeks to develop a worker and worker-management community in each locale. The large multi-national corporation affects the lives of its employees in more ways than does the local private firm as it

establishes its local communities. Employees transferred from site to site, are disengaged from their local neighborhoods, ethnic groups and religious communities and become increasingly dependent on their fellow workers for social mooring. At the extreme, an American corporation abroad might create an enclave in a foreign society by appropriating social and familial recreational activities. Employees of multi-national corporations thus become socially dependent in the corporation.

A complex bureaucratic structure provides a formal net of interdependencies which bind workers together in the organization. For organizations to do their work, these interdependencies must rest on a base of mutual confidence. A common leisure activity supports the more personal ties from which subtle confidences grow. Thus, structural complexity, a measure of organizational interdependencies, of the local workplace and diversity of recreation and leisure activities become associated. Table IX-2 shows the mean numbers of recreation and leisure activities for various numbers of layers of authority.

TABLE IX-2

MEAN NUMBER OF RECREATION AND LEISURE SERVICES ACCORDING TO HEIGHT OF AUTHORITY STRUCTURE AT THE WORKSITE IN MANUFACTURING INDUSTRY

Layers of Authority	\bar{X}	s.d.	N
2,3	2.1	1.40	19
4,5	3.3	1.54	23
6,7,8	3.7	1.10	13

$p < .05$

The major increase in services is associated with arriving at some four levels of authority. The increment as succeeding levels are added is slower. This degree of differentiation of the worksite may be sufficient to carry out productive operations. The addition of a sixth layer may be associated with the installation of a small number of executive personnel as in the case of a headquarters at the site. Our basic contention is that as the hierarchical, and horizontal, relations multiply, the need for a more personal-social underpinning increases. Further, however, an increase in the levels of authority means an increase in the variety of employees, from low paid cleaning personnel through skilled production operators to highly paid executives at the site.

Recreation groups at work tend to form in two directions:

They may involve a wide range of departments and serve to support informal relations across departments or they may involve sub-groups of the firm--each drawing on a particular class of personnel. As the classes of personnel diversify, the number of different recreation and leisure services, rooted in this second type, increase.

Size of the local worksite, as measured by the number of employees is not significantly related to leisure and recreation services. This finding lends credence to the interpretation that it is the structural complexity, and the consequent diversity of employees, which is the significant factor. Some classes of employees make greater demands than others on the recreational program. Operatives, especially males, seem to be such a class. They participate in a sports program and in company parties as well. In the majority of the manufacturing industries in the sample, males tend to dominate at sites with highly diversified production departments. Production department offices deal with transport facilities, workflow control, management of quality of materials and equipment, and may have a section to study production processes and devise new equipment and processes. The larger such a department, the more male operatives and this promotes a diversity of recreation and leisure activities. Manufacturing organizations with three or fewer offices in the production department average 2.2 (sd=1.57, N=19) while organizations with four or five such offices average 3.4 (sd=1.40, N=36) leisure and recreation activities ($p<.001$). Not numbers of operatives but diversity of types of operatives seems to be the important factor. Male employees are more likely to engage in sports programs than are female employees. At the same time, they also participate, as do female employees, in parties, movies, relaxation rooms and other activities, sponsored by the employees' association. Finally, women employees are less likely to look to the worksite as a center for their recreational roles, to see their occupational community as their social recreational community. Leisure and recreation programs are but weakly related to the development of marketing and personnel departments. Perhaps the classes of personnel introduced in these units are less socially diverse.

Leisure and recreation express community. Therefore, the existence of an employees' association should be positively associated with leisure and recreation services. In manufacturing industries, organizations having an employee association have a mean of 4.2 (sd=.94, N=12) whereas those not having an employee association have a mean of 2.7 (sd=1.42, N=43) leisure and recreation services ($p<.001$). The employee association is, of course, the mechanism for instituting many of these services.

Thus, in manufacturing, leisure and recreation become important services in large industries in which the workforce is dependent for social life on that work community, in factories in which the central function of production is well developed and where there is an employee association to develop these services. These are cases of firms that, in good measure, become the social center for their workers. They are patrimonial settings in which workers are dependent on management for more than a paycheck.

In Service Industries

In service industries, leisure and recreational services are more often found along with agent services than with a consumer goods market. They are also associated with family services and a program of physical health care, that is, the community services which aid the social mobility of youth.

In service industries, leisure and recreation services do not seem responsive to structural characteristics of the corporations. Unlike manufacturing firms, these services are unrelated to the height of the authority structure. On the other hand, the internal organization of employees is important. Firms with no employee association average 2.4 (sd=1.39, N=25) and those with an employee association average 4.4 (sd=.99, N=26) leisure and recreational services ($p < .001$). This, again, is the mechanism for organizing those services.

The cultural level of the workforce seems important. Firms with relatively few (30% or less) college graduate employees average 4.4 (sd=.67, N=11) and with relatively more (30% or more) college graduates average 3.0 (sd=1.87, N=9) ($p < .01$). A more highly educated staff is less interested in a workplace recreation program. They prefer leisure away from the workplace with their own interest group outside of work. They are also more involved in community voluntary associations. They may even engage less in recreation. For the less educated, the community at work may be more socially attractive than their home community. The middle class type activities at the workplace, such as staff parties and shopping trips, are meaningful to those in whose social circle these are uncommon. Also, office parties allow socializing across ranks--an opportunity which may be sought by workers of differing ranks for differing reasons. Leisure and recreation through the work group in service industries, is especially for lower level employees, a way of entering an attractive alternative community. Higher ranking employees may see this as a way of increasing work motivation of their subordinates and, at times, finding sexual opportunities.

Stability of the worker community is a factor in developing recreation services (while the direction of the functional relation may be the reverse of this--recreation functioning to affect stability). Quit rates are a measure of work force stability. Organizations with a relatively low quit rate average 4.3 (sd=0.87, N=9) and those with a higher rate average 2.8 (sd=1.4, N=8) leisure and recreation services ($p < .01$). The stability of the lower ranks is the important one for recreational services. In manufacturing, diversity of recreational services was related to characteristics of the male labor force. Here the quit rate of the female labor force is significant. Service industries with a low female quit rate average of 4.3 (sd=.76, N=7) but those with a relatively high rate average 3.5 (sd=1.65, N=22) leisure and recreation services ($p < .1$). A stable worker community of non-salaried females of lower education is a candidate for a diversity of services--especially when assisted by an employee association.

Whereas recreation in manufacturing promotes supportive ties in a large bureaucracy, social mobility opportunities and a general desire to increase the quality of life seem more important in service industries. It is no accident that recreational services for employees accompany services which facilitate their outside roles (agent services) and occur in firms that also show an interest in social mobility in the surrounding community.

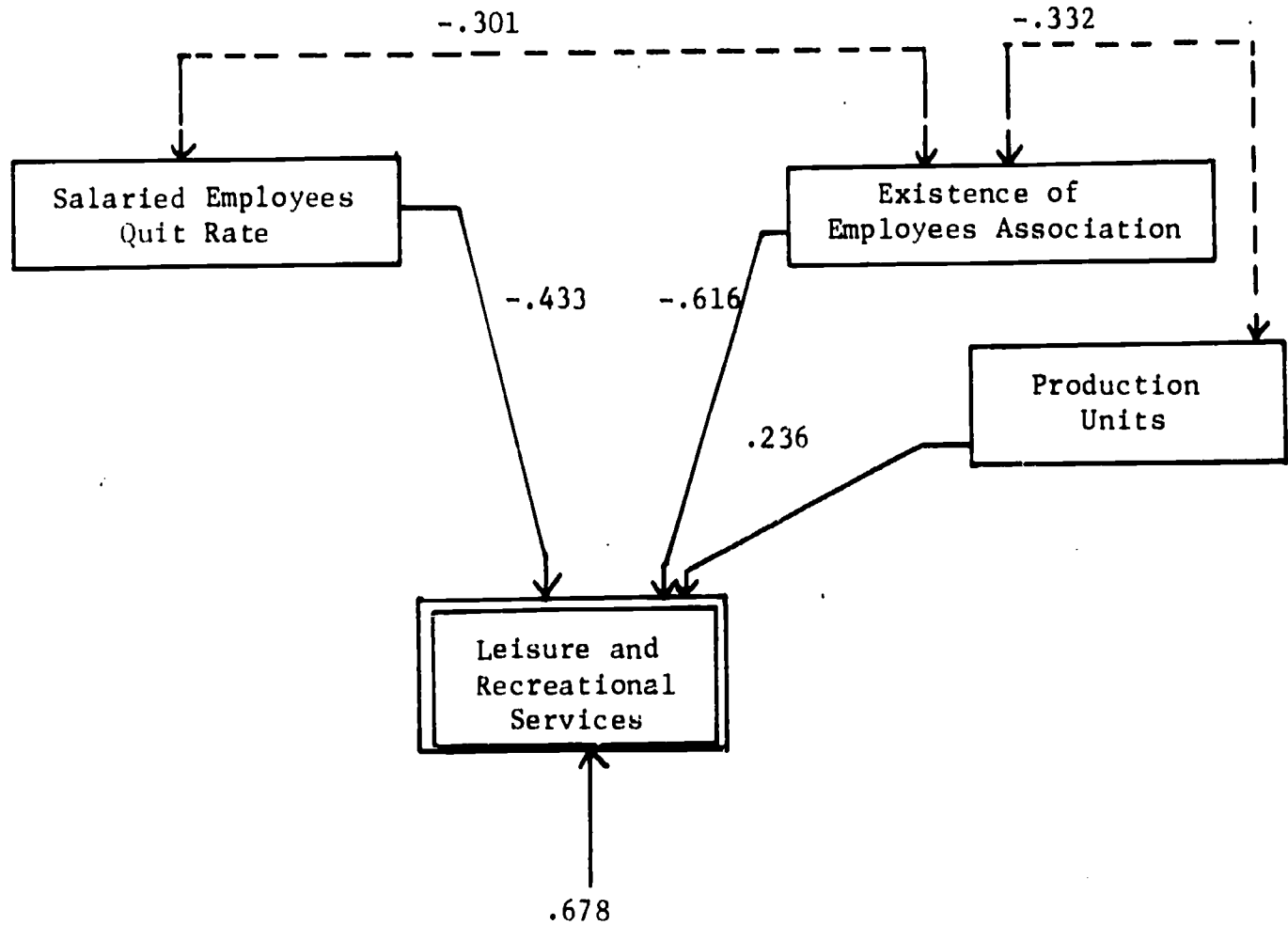
The Systemic Analysis

In Manufacturing Industries

Leisure and recreation inappropriate to the worksite some of the personal social life of employees. The community of workers becomes the social recreational community, supplementing that of ethnic group, family and neighborhood and possibly replacing that of lodge and local club. Diagram IX-1 shows the path analysis of "causes" of diversity in leisure and recreation services in manufacturing.

The existence of an employees' association is the first factor related to a diversity of leisure and recreation services and by itself accounts for 31% of the variance. (The negative path is due to the direction of scoring. The association is positive.) An employees' association arranges recreational life. The very founding of one indicates a propensity toward social life at the workplace. Such an association is premised on a community of interest between labor and management and identification with the local workers in contrast to a union which premises a conflict of interest and develops a sense of worker identity transcending the workplace. The existence of an employees' association is positively related (the zero order coefficient is negative for the reason given above) to the voluntary separation rate of salaried employees--that is, having such an association means a higher quit rate at the salaried level cannot be caused by an employees' association. More likely both are "caused" by a third variable. Perhaps, non-union manufacturing shops, those having an employees association instead of a union, having less clearly defined stipulations governing work leave the question of job tenure of the higher levels to the vagaries of the market--reflected in a shifting around in response to opportunities. An employees association is also positively associated (again with a negative coefficient) with the number of production units at the site. A greater complexity of production organization probably puts a premium on some integrating structure in the employee community--transcending those separate units. It also means that a good number of employees are operatives--a category that uses recreational services. The positive path between the number of production units and services probably reflects both the influence of general structural differentiation and the role of the male labor force. The quit rate of salaried employees is negatively associated with recreational services--a finding consistent with the notion that services are an expression of a work community.

"CAUSES" OF LEISURE AND RECREATIONAL SERVICES IN
MANUFACTURING INDUSTRIES
(N=55)



PATH DIAGRAM IX-1

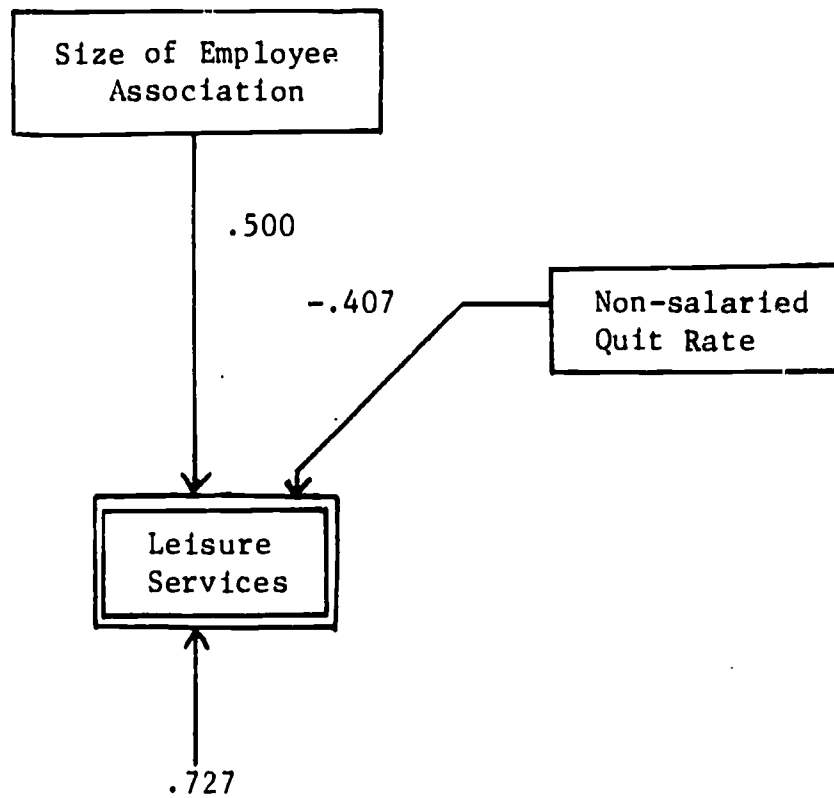
<u>Variable</u>	<u>Variance</u>	<u>Path Coeff.</u>	<u>F</u>
Existence of employee association	.312	-.616	15.1
Salaried quit rate	.486	-.433	8.5
Production Units	.538	.236	2.4

The path analysis seems to show but one side of the picture which seemed to emerge in the earlier set of one-at-a-time correlations. The factors reflecting the insularity of the workplace do not appear. Their effect may be represented by internal variables. The measure of the number of offices in the production department may stand for all of the structural complexity measures noted above--the scope of operations and layers of authority. Together, these factors account for 54% of the variance leaving an overall residual of .678.

In Service Industries

Organizational factors were not found to be central to the establishment of leisure and recreation services in service oriented industries in the earlier analyses. In fact, leisure and recreation seemed to diversity when there was an employees association and a low ranking female labor force--leading to a suggestion that the issue is social mobility through recreation. In the accompanying path diagram, the role of the employees' association comes to the fore. Here the measure is the proportion of employees who are members of the association so a positive path indicates that recreational activities are a function of the extent of participation in such an association. Then these services respond negatively to the separation rate of non-salaried employees--services being more likely when there is stability in the low ranks. (The relation, though, is not statistically significant.) The social and cultural mobility factors do not come out in the path analysis. Conceivably, the membership in an employees' association is a proxy for them. The most active in such an association may be the less educated and non-salaried.

"CAUSES" OF LEISURE SERVICES IN SERVICE FIRMS
(N=51)



<u>Variable</u>	<u>Variance</u>	<u>Path Coeff.</u>	<u>F</u>
Size of employee association	.437	.500	2.70
Non-salaried quit rate	.464	-.407	.53

CHAPTER X

PHYSICAL HEALTH SERVICES

Industry has a practical interest in the health of the worker if only to minimize absenteeism and maximize competent performance. Yet, industrial medicine emerged not around problems of general health but of industrial safety. Workmen's compensation legislation defined the responsibility of industry for health. That responsibility has two aspects, industry is expected to practice preventative medicine, to eliminate unhealthy working conditions and it is expected to provide on-the-job medical treatment facilities in the event that a worker is injured or becomes ill. Medical facilities at the workplace are also used in personnel selection, job assignment and even for general treatment.

The use of industrial medical facilities for general diagnosis and treatment of the employee is a service at the workplace in the narrowest meaning of the term. However, occupational health and safety measures may be considered services. They are not associated with production by reason of the exigencies of the technology or because of the objective risk inherent in performing a craft. General social norms regarding responsibility for worker health and safety introduce medical care to the plant. These norms arise out of relations external to production. That production would not take place without medical services because, in that event, workers might be unwilling to work, is logically not too different from the pressure to introduce food service when the plant is distant from eating places. These services are production relevant though not inherent to the production process. Information was recorded about specific physical health services. These include first aid, blood bank, yearly medical examinations, a dispensary providing general care and prescription services. The frequencies of each specific service in our sample are summarized in Table IV-11. First-aid is the first and almost ubiquitous--being required by law. All but five of the firms report having a first-aid kit available. Industries are classified according to the number of specific physical health services they offer. The resulting distribution is shown in Table X-1.

Each of these activities is impropriated from the physical health institution--the community clinic, hospital or doctor's office. The presence of each service at the workplace is a tie to the medical institution as it exists outside. The number available at each work-site (from 0 to 6) reflects the diversity or range of types of medical

TABLE X-1

NUMBER OF INDUSTRIES WITH EACH NUMBER OF
PHYSICAL HEALTH SERVICES FOR EMPLOYEES
(N=106)

Number of Services	Number of Firms
0	2
1	2
2	17
3	37
4	35
5	11
6	2

$\bar{X} = 3.3$ s.d. = 1.10

services impropriated by the firm, measuring the diversity of the ties of industry to the medical institution. This measure does not give the magnitude of involvement in any one or all of these services. A firm offering only a nurse supervised dispensary along with a first-aid arrangement, having a score of "2", might invest more funds, allocate more space and service more employees than another firm with five different medical services. The diversity index tells the extent of "structural differentiation" of employee services in the physical health category. All but 21 of the firms have three or more medical services so that in most plants emergency care, and a bit more, can be provided.

Correlates of Impropriation

Employee safety is more an issue in manufacturing than in service industries and work dangers vary considerably among manufacturing industries. Nevertheless, in general, manufacturing industries have an average of 3.5 and service industries an average of 3.4 physical health services--no significant difference. Thus, the objective level of danger, while it may determine some specific protective measure, is not compelling with respect to an overall medical program. The causes of differences in medical protection must be sought in the social organization of the industries. The development of medical services responds to the size and complexity of the organization, personnel policy, in which medical facilities have a role between personnel recruitment and retention, the cohesiveness

of the industrial community as well as to legal requirements and the firm's conception of social responsibility.

One bit of evidence that the roots of this service are social is that the diversity of services varies with the time at which the firm occupied its present site. The objective danger due to technological conditions would not change much over the time period but the experience with those conditions and the response to them would change. The relationship is not a direct and linear one, however. Sites with the longest occupancies tend to have more medical services but so do the more recently occupied. Table X-2 shows the mean number of physical health services currently available in service industries at sites occupied at various times.

TABLE X-2

NUMBER OF PHYSICAL HEALTH SERVICES IN SERVICE INDUSTRIES ACCORDING TO DATE AT WHICH THE PRESENT SITE WAS OCCUPIED

Date	\bar{X}	s.d.	N
Before 1941	3.9	1.29	23
1941-48	2.3	.58	3
1949-56	2.6	.98	7
1957-64	2.2	1.30	5
1965-72	2.8	.98	11

$P < .05$

This table shows the number of services currently existing. Whether these services were initiated at the time the site was occupied or developed subsequently, and the number of services which have been discontinued cannot be determined from this data. We also cannot be certain whether the effects are traceable to length of time at the site or if they are due to conditions existing at the time the sites were occupied, a cohort effect. The major shift, though, is between corporations that occupied their sites before and since the Second World War. The greater diversity of health services among those in early occupied sites may reflect the culture of those times. Perhaps, these firms now thirty or more years at the same site were or are more paternalistic and perhaps one effect of the war on industry was to eliminate this paternalistic orientation. Also, these, the surviving firms of those sited decades ago, are today the larger firms. The size of the corporation as a whole and the size of its site influence the diversity of health services. Perhaps, too the availability of

health services is a factor in organizational survival--not necessarily in a causal sense but in that organizations of the type that establish health services may also be the more likely to continue in production.

If health services tend to accumulate, then the older sites, now with an average of 3.9 health services, may have begun with one or two. Following this reasoning, the average of 2.8 services of the most recently established sites may be a rather high starting point. Given their survival for the next 30 or 40 years, they might exceed the number found at pre-Second World War sites.

On the unlikely assumption that these figures are static projections of the condition at the time the sites were occupied, then with the exception of 1957-64, services have been increasing slightly since the end of the Second World War. Conceivably, prior to the Second World War, the enforcement of workmen's compensation legislation encouraged medical services at the workplace. As plant safety increased and the rate of industrial accidents decreased in most manufacturing plants in the period following the Second World War, less attention was given to medical protection. More recently, however, new legislation such as the Occupational Health and Safety Act may be encouraging innovation in this area. As the proportion of white collar employees in industry has increased, medical services, partly as a personnel policy, may tend to increase.

This study is not, however, designed to be conclusive about these general environmental influences. Our data reveals more about conditions of industrial organization which might account for services. The availability of corporate resources to support services is one such condition. Resources, in turn, vary with the size of the organization. The population of organizations is roughly divided into equal parts at the level of 3,200 employees. We find a reversal in the direction of the relation of corporate size to physical health services in manufacturing and is the reverse of that in service industries. In service industries, number of employees is negatively related ($r=-.31$) while in manufacturing industries this variable is positively related ($r=.37$) to the diversity of medical services. This may also be seen in the comparison of means in Table X-3.

TABLE X-3

NUMBER OF PHYSICAL HEALTH SERVICES ACCORDING TO NUMBER OF
EMPLOYEES IN ENTIRE CORPORATION IN SERVICE AND
MANUFACTURING INDUSTRIES

Number of Employees	Service \bar{X}	s.d.	Type of Industry			
			Service		Manufacturing	
			N	\bar{X}	s.d.	N
To 3200	3.6	1.33	(26)	3.1	1.16	(21)
3,200 or more	2.8	1.14	(25)	3.7	.58	(34)

$p < .001$

$p < .05$

The number of employees in the entire corporation reflects labor intensiveness and the number of sites occupied. Only 15 out of the 106 workplaces belong to corporations having a single site. In fact, in 63 cases the corporation has sites which belong to different industries linked in conglomerate fashion. Thus, the larger number of employees in the corporation is, by and large, a proxy for a larger number of sites.

The reverse association of these two variables in service and in manufacturing industry may be explained in terms of the roles of a local site in each case. In a service organization, such as, say, an insurance company, a local office is likely to be established as a new subdivision of a large on-going operation. It may be a new office designed to serve a new territory. As new establishments, they might not yet have physical health services. Further, the other sites might provide the service for the personnel as, for instance, in the case where the site is a branch of a bank or department store with a number of other branches in the vicinity. Thus, in very large service industries, health facilities are less likely to be available on site than with smaller ones. In manufacturing, the local site is more likely to have been an independent corporation acquired by a large holding company, the acquisition being part of the diversification of the corporation. Such local sites may already have had some physical health arrangements before being acquired. The acquiring conglomerate, deriving its practice from a number of situations, imposes a demand for more diverse services on the site and has the resources to support them.

The size of the local site itself, the number of employees, is a correlate of medical services. In both service and manufacturing organizations, as larger numbers of employees are assembled, health facilities become increasingly imperative ($r=.37$ in service and $r=.29$ in manufacturing).

In both types of industry, the larger concentrations of employees enjoy more complex medical service. That the smaller manufacturing organizations have more diverse health facilities than do the smaller service companies may be due to more involvement with worker safety. Service companies increase their medical facilities more rapidly with growth in size than do manufacturing industries. This finding may also be expressed in terms of a comparison of the mean number of services available in small and large industries as shown in Table X-4.

More employees do not, however, necessarily require more diverse health services. The corporation might simply enlarge its dispensary. However, as discussed earlier, larger numbers often mean a more complex organizational structure as well. The complexity of health services might parallel the organizational complexity.

TABLE X-4

NUMBER OF PHYSICAL HEALTH SERVICES ACCORDING TO
NUMBER OF EMPLOYEES AT THE WORKSITE IN
SERVICE AND MANUFACTURING INDUSTRIES

Number of Employees	Service			Manufacturing		
	\bar{X}	s.d.	N	\bar{X}	s.d.	N
To 499 employees	2.7	1.21	(25)	3.2	.75	(32)
500 or over	3.7	1.19	(26)	3.8	1.00	(23)
	$p < .01$			$p < .02$		

The relation between structural complexity of the organization and the diversity of physical health services may be examined directly using our measure of the height of the authority pyramid. The diversity of physical health services to the height of the authority pyramid is positive but barely statistically significant for service organizations. For the manufacturing organizations, the association is impressive, as shown in Table X-5.

TABLE X-5

NUMBER OF PHYSICAL HEALTH SERVICES ACCORDING TO NUMBER OF LAYERS
OF AUTHORITY AT THE WORKSITE IN MANUFACTURING INDUSTRIES

Layers of Authority	\bar{X}	s.d.	N
3	3.1	.85	(19)
4	3.3	1.18	(13)
5	3.6	.52	(10)
6 or more	4.0	.60	(13)

$p < .05$

An increase from just over three health services with three layers of authority to four with six or more layers proceeds quite uniformly. Few layers of authority, a low pyramid, could occur in a relatively small plant or in a specialized subdivision of some larger organization. With each additional layer of

authority, especially in a manufacturing organization, the proportion engaged in administration grows. At the same time, in these industries, the absolute number of operatives must increase with greater vertical differentiation. Insofar as health services are a response to worker safety, they would increase with the number of operatives exposed to work-related accidents. The variety of types of employees in the more stratified organizations is what accounts for the more diverse health services. Health services are not simply a function of safety but are also a result of a personnel policy which, in turn, reflects labor force conditions. The diversity of health services is positively related to the quit rates of males ($r=.63$) and of females ($r=.52$). In part, in-house health facilities are used for recruitment and screening examinations so that a faster turnover may require more services. A proliferation of these services may also be a response by the firm to labor force instability. Health services as a way of stabilizing the labor force may apply especially to upper level employees in service organizations. This is suggested by positive association of health services with the quit rate for the salaried employees ($r=.46$) in service industries, an association which is not statistically significant in relation to non-salaried employees. The most likely explanation, however, is that both high quit rate and diverse health services occur in response to a common underlying factor. Both occur in situations in which a large number of low level employees carry a variable work load. Under these comings and goings, management, faced with unfamiliarity and uncertainty respecting its employees, "plays it safe" by instituting health services.

Health services are more likely to be offered where the work site is relatively socially self-contained. The proportion remaining at the site for lunch is an indication of the extent to which the workplace encompasses the life of the employee. This may be a function of location, the isolation of the workplace from a supportive infra-structure of restaurants and other errand running facilities or, following our earlier finding, a function of the cohesiveness of the workplace community. A good cafeteria, worker attitudes and company policy encourage workers to remain. In service industries, the more who remain at the site for lunch, the greater the complexity of the health services available ($r=.58$). This relation is positive but not statistically significant for manufacturing industries.

Table X-6, step-by-step, compares the mean numbers of physical health services at various levels of lunching at the site in service industries. (The sizes of the categories under "proportion staying" are set in the light of the distribution of firms. Thus, in 9 firms 0-10% remained and in 8 firms 61-90% remained).

The largest step increase in health services corresponds to passing a threshold at which somewhere around half of the employees stay--thus characterizing the practice of the plane one way or another. Staying at the site throughout the entire working day, not even leaving for lunch, is, in general, associated with having more

TABLE X-6

NUMBER OF PHYSICAL HEALTH SERVICES ACCORDING TO PROPORTION OF
EMPLOYEES WHO STAY ON THE SITE FOR LUNCH IN SERVICE FIRMS

Proportion Staying	\bar{X}	s.d.	N
Under 10%	2.4	.73	9
11-40%	2.5	1.27	11
41-60%	2.9	.64	8
61-90%	3.9	1.35	8
91% or more	3.9	1.38	14

$p < .05$

of one's roles met at the site, the health role among them. These nearly closed settings almost demand the provision of care by the company. From the company's perspective the provision of eating facilities and the provision of health care facilities are two ways of involving the firm in the fundamental needs of the workforce and of bidding for labor force commitment.

The above discussion suggests that diversity of medical care facilities does not simply follow from an accessibility or risk factor, but is a matter of organizational structure and attitudinal perspective when the organization relates in a caring role to the worker, the instrumental focus around which employment is explicitly organized is modified. This supposition, too, may be tested more directly.

Generally, American business is conceived as motivated by self-interest built around a chance for profits, the ground of the instrumental relation between management and worker. Non-profit organizations are, definitionally, committed to the betterment of the client as is the teacher or the physician on an individual level. Attitudes toward employees may not be independent of those toward clients. In a profit making corporation the employee justifies his employment in the light of his contribution to the profit account. In a non-profit setting his self justification is framed in terms of service to the client. A comparison may be made between profit and non-profit firms in service industries. (This contrast is not possible for manufacturing industries since they are, almost without exception, profit making.) Profit making service organizations average 2.7 (sd=1.08, N=39) while the non-profit average 4.3 (sd=1.30, N=12) physical health services ($p < .001$). The non-profit service organization is, in some cases, a hospital which makes its complex of medical facilities available to employees. Others are

schools having arrangements available for students. The philosophy of non-profit companies is that of social responsibility and tends to be paternalistic. Organized to relate paternalistically, both attitudes may extend to care for employees.

By and large, the difference between manufacturing and service industries as "social types" has not meant that much in predicting the diversity of health services. Yet, the role of health service differs in these two settings. In manufacturing industry, health care becomes diversified as types of employees, or the organization itself, diversifies. In service industries, organizational complexity is less significant than labor force stability, the pervasiveness of employee roles encompassed by the plant and the welfare attitude of the company. In the former, health care must take on a formal cast--as part of bureaucratic procedures. In the latter case, it is part of the net of relations and cultural attitude--selected on the grounds of its substantive meaning.

The Systemic Analysis

In Manufacturing Industries

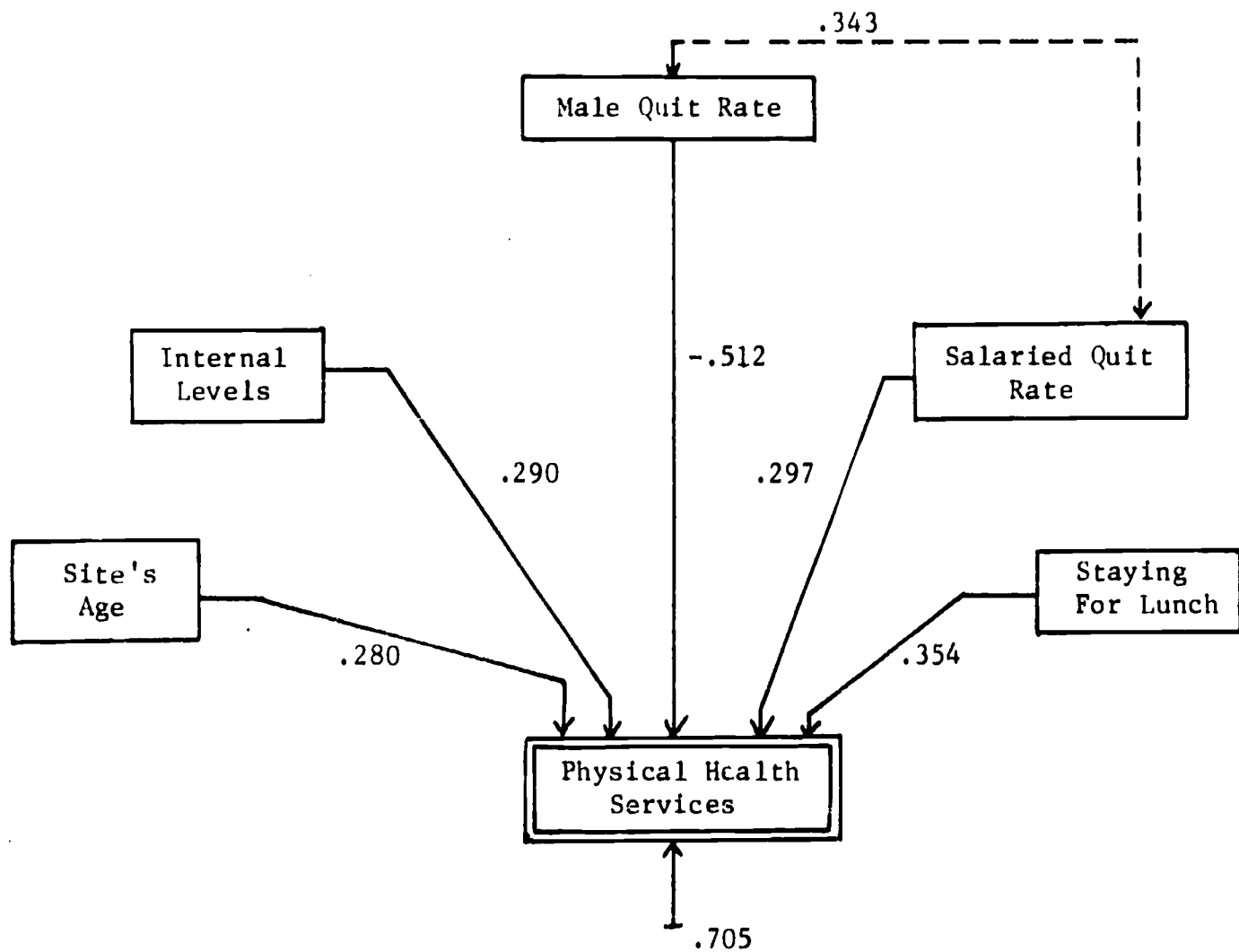
The offering of physical health services both represents a sense of responsibility on the part of management for employee health and serves the interest of management in the maintenance of employee competence and reducing absentee rates. These services could, of course, be offered on contract with a nearby medical facility. When they are impropriated, the worksite itself engages in the physical caring act, allocating space and retaining special personnel for this purpose.

Diagram X-1 shows five factors systemically associated with increasing diversity of physical health services at manufacturing work sites.

In manufacturing industries, while the tendency to multiply physical health service is encouraged by legislation and union concern with worker safety, as well as other factors external to the industrial site, the regression analysis indicates that the structure of the organization and its workforce go far in accounting for the phenomenon. The positive path between the number of layers of authority and the diversity of physical health services shows a parallel between structural differentiation of the company and of health services. A complex bureaucracy is an impersonal one. Physical health services respond by providing a formal, well bounded, way of expressing caring, a personal expression within impersonal rules--the soft core in a hard shell.

The positive path coefficient between the proportion remaining for lunch and the diversity of services is an expression of the internal social community associated with health service. Medical

"CAUSES" OF PHYSICAL HEALTH SERVICES IN MANUFACTURING INDUSTRY



PATH DIAGRAM X-1

<u>Variable</u>	<u>Variance</u>	<u>Path Coeff.</u>	<u>F</u>
Internal authority levels	.177	.290	3.53
Staying for lunch	.270	.354	5.20
Male quit rate	.380	-.513	9.23
Site's age	.438	.280	3.24
Salaried quit rate	.503	.297	3.03

caring and eating are expressive activities introduced into the instrumental work situation. Given these factors, the quit rate of males reflects stability of the main production line labor force. A lower quit rate or greater stability is rather strongly associated with diversity of services. Medical services do not reduce the quit rate that is affected by labor market, job market and working conditions. Rather, following the direction of the path, a stable worker community is a context for the growth of health services. That it is the male, rather than the female, quit rate which is important characterizes manufacturing. A number of manufacturing sites have many female employees. Nevertheless it is the condition of the male labor force which influences company policy here.

The more recent the occupation of the site the more physical health services are established suggests that, when all the previous factors are set aside, the process of establishing health services may be catalyzed by recent events, perhaps the legislation of the past few years and worker insurance requirements, and by recent union demands for these services. It is also possible that the newer site, dealing with a strange labor force may be adapting to uncertainty by installing something as concrete as physical health services. This suggestion is buttressed by the positive association of the quit rate among the executives, the voluntary separation rate of the salaried employees, and physical health services. Of course, these services are used in personnel selection. At the same time, they offer a way of caring, which, paradoxically, is impersonal, but deals with uncertainties in relation to this population. Another possibility is that a high quit rate, or a turnover rate, among executives may be a mechanism by which a new culture of physical health services is diffused among firms. New executives arrive and instigate interest in a health program. (The zero order correlation between the salaried and male employee quit rate, shows that males predominate among the salaried employees.)

The finding seems again, to be that diversification of health services accompanies the general process of organizational differentiation. These caring type services are most likely to emerge in manufacturing organizations with an orientation to a work community--in which workers eat together usually and where that community is little affected by turnover in its major component.

Half of the variance is accounted for by these five factors. Each one of them contributes significantly in incrementing the variance. A residual of .705, however, suggests that some unexplored, probably exogenous, variables have not yet been considered.

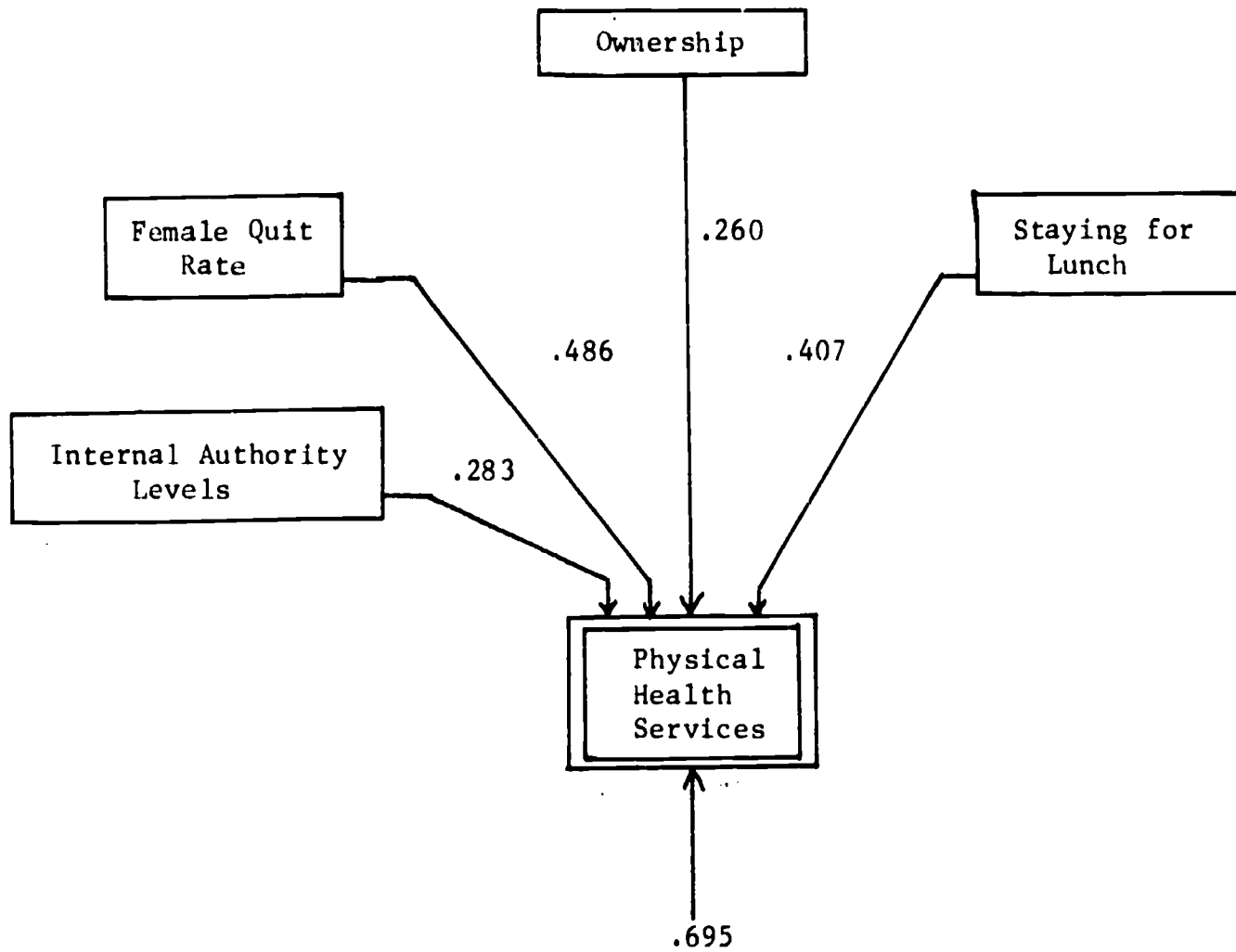
In Service Industries

The factor of worker safety, so significant in the establishment of physical health services in manufacturing industry is less pressing in the service industry. The policy for physical health services is responsive to the condition of a female labor force tied

to the workplace during their working day. This is shown in the path Diagram X-2.

The path coefficient between the diversity of health services and the tendency of the workers to remain at the site for lunch shows again the basic affinity of these services, both reflecting a worker community. A significant path coefficient connects physical health services and the rate of voluntary separation of females. This is hardly a causal relation. It shows that service industries with large numbers of temporary female help are the ones that diversify health care. These are likely to be insurance companies, banks, hospitals or social agencies. The presence of a general health care dispensary, in addition to first-aid, would be necessary where there are large numbers of female employees who do not leave the site. Again, it may be that with so many low ranking female employees coming and going, that the firm introduces physical health care as a precautionary measure. The complex of the bureaucracy is again a source of diversification. Perhaps a larger variety of employees requires a greater variety of services. Also, a high authority pyramid also means special services, such as medical examinations on a yearly basis, for the higher executives. The positive path coefficient between services and form of ownership indicates an increasing diversity of services with private rather than public ownership. The privately owned firms tend to be a bit smaller and it is likely that management, more on a face-to-face level, is more likely to concern itself with the personal caring role of health services. Thus, again, in service firms the organizational factors are secondary. Primary determinants of a health service are the labor force characteristics. The systemic analysis is consistent with the analysis of correlates. The difference between health services in manufacturing and service industries is a matter of their role--in one case more formal and procedural and in the other more substantive and relational.

"CAUSES" OF PHYSICAL HEALTH SERVICES IN SERVICE INDUSTRY



PATH DIAGRAM X-2

<u>Variable</u>	<u>Variance</u>	<u>Path Coeff.</u>	<u>F</u>
Staying for Lunch	.250	.407	5.68
Female quit rate	.370	.486	3.66
Internal authority levels	.447	.283	3.07
Ownership (Public/Private)	.498	.260	2.12

THE ECONOMIC ANALYSIS

Robert H. Edelstein

CHAPTER XI

ECONOMIC MODELS FOR THE ANALYSIS OF SERVICES PROVIDED THROUGH THE WORKPLACE: THE THEORETICAL AND EMPIRICAL FRAMEWORK

Robert H. Edelstein

This chapter will discuss the theory and the empirical models for the economic analysis of the provision of services through the workplace. The traditional economic theory for deriving the microeconomic labor supply and demand functions is inadequate for this analysis. Therefore, a modified theory of labor supply and demand will be developed that explicitly incorporates the decision variables of employees and employers: the quit rate, the level and type of services provided through the workplace, and wages. This modified theory then will be operationalized for empirical hypothesis testing through a series of multivariate statistical models.

The Theory

The Traditional Economic Approach

The orthodox economic theory of labor supply analyzes the worker in terms of his demand for leisure as a consumption good (for example, see Henderson and Quandt (1971), 28-31, 128-9, or Fleisher (1970), particularly chapters 2, 3). In its simplest form, this theory assumes a two commodity world--leisure (time) goods and wage goods. Each worker, facing a given market price for leisure (i.e., his real wage rate) and possessing a given real property (i.e., non-wage) income, will allocate his total income between leisure pursuits and wage goods in such a way as to maximize his utility. In this theory, his demand function for leisure (or conversely his labor supply function) has the familiar properties; the substitution effect for an increase in the real wage is a reduction in the consumption of leisure (increased hours of work supplied), and the income effect of a rise in the real wage rate or in real property income is an increased rate of consumption of leisure (reduced supply of hours of labor) if leisure is a "normal" good. Market or group demand functions for leisure will also exhibit these properties, though they may, also, depend upon the distribution of tastes, real wage rates, and real property income.

More sophisticated versions of this theory analyze leisure-consumption decisions over the lifetime of the worker, or discuss net income by explicitly considering "maintenance" expenditures by the worker on goods and services. However, the essence of these more intricate theories are captured in the above simple presentation. Even the most elegant forms of these theories will not be usable for the analysis of services provided through the workplace. There are several

reasons why this is so.

The primary and basic objection to many of the conventional theories of the labor market relates to their treatment of temporal variables. Time is the fundamental scarce resource, in short supply in both the short and long run. Even with an infinite per capita output, problems of scheduling consumption and allocating time would remain. A recent book by Linder (1970) attempts to demonstrate the importance of time in terms of a theoretical framework which is consistent with contemporary empirical fact. An interesting quote will set the stage:

It would be inconceivable, for reasons of time, that a modern young lady should require her presumptive lover--as she did in a Noh play I once had the pleasure of seeing--to appear for one hundred evenings and wait outside her door, to be admitted on the hundred-and-first. The smooth character parodied in the well known film "The Knack" is described as requiring only 'two minutes from start to finish' (p. 85).

Put somewhat differently, Linder connects this type of observation to what he believes has been happening to patterns of time use, or life style, with advancing productivity. Wage rates have reached such levels, he suggests, that even the average earner in a rich country lives under the pressure of time. The result is an increased consumption of goods purchased for leisure time use with increases in the wage rate. "(The typical consumer) may find himself sipping a French cognac, reading The New York Times, listening to a Brandenburg concerto and entertaining his Swedish wife--all at the same time, with varying degrees of success" (p. 79). All this leads one to look for an analytic framework that explicitly permits efficiency in time allocation through such innovations as services provided through the workplace.

Moreover, traditional approaches do not explain why working hours tend to be bunched rather than spread out over the "waking" hours of the day. Do alternating sequences of business and pleasure tend to spoil both? This can not be entirely true because many factory workers do have rest periods, office workers have coffee breaks, business managers have their long lunch "hour," and so forth. Does the job type or status affect the leisure-work mixture? For instance, are there more leisure-work mixtures for salaried employees or self-employed because their work does not require a fixed schedule that is coordinated with other employees, say, on an assembly line?

Another objection to the traditional economic theory has to do with the concomitants of the consumption of leisure. The conventional view has a pseudo-spatial setting that presumes work activities are done at the workplace, and that leisure activities are conducted elsewhere. Analytically, the existence of services provided for employees through the workplace subsumes that leisure activities exist at the workplace. (That is, leisure is those worker activities that are not directly subserving the productive process.) In particular, the value

of leisure to the individual may differ according to where it is consumed--at home or at work--and when it is consumed--the time of day. That is, leisure time may not be homogeneous. Moreover, the alternation of "at home" leisure with "at work" work may tend to be expensive for workers because of the travel involved.

The tendency to mix little leisure with work and the tendency to consume leisure at home may be explained as the result of the preference for "at home" leisure over "at work" leisure and the minimizing of the travel costs involved in consuming leisure away from one's place of work. Furthermore, one would expect differences in the relative preferences of workers for "at home" leisure over "at work" leisure according to the amenities offered in workplaces for the consumption of leisure. In this context, it is not surprising that professors, for example, tend to consume more leisure time in their university surroundings than coal miners do at the mines.

Perhaps a more fundamental objection to the orthodox theoretical description emerges from the apparent dichotomy between work activity and leisure activity. The underlying economic concept suggests that work per se reduces utility (i.e., disutility of work activity) and leisure increases utility. In fact, for some people, work may augment their utility. Also, it is possible that attributes of working at certain jobs are perceived by individuals as a close substitute for leisure. For example, a salesman who enjoys selling customers by wining and dining them may prefer this part of his job to wining and dining as a strictly leisure activity. At the very least, the attributes of goods and time consumed in either work or leisure are highly related.

Finally, the traditional theory outlined above is static equilibrium analysis, and therefore assumes that all changes in demand or supply will induce wage (or price) adjustments to reestablish market equilibrium without explicitly stating the market dynamics. Casual empiricism leads the most novice of economists to refute these notions. The real market does not reach equilibrium rapidly (or sometimes not at all). An important ingredient for explaining the real world market operation is the existence of imperfect information. In the labor market, the collection and processing of information about potential opportunities for employer and employee is costly. No one has as much information as he would wish (at a zero cost) about all of the possible opportunities that may be available to him. Of course, information can be purchased at a cost (in terms of time and/or money). An economic analysis of the labor market must incorporate the cost of information in decision-making by the participants in the market. The study of the labor market must explain how the efficient acquisition of information will take place. Put differently, if information has a cost, what economically efficient methods of search will be used in the labor market?

A Modified Theory for the Labor Market

To combat these and other theoretical shortcomings, a relatively non-traditional theoretical approach will be delineated that paral-

lels and synthesizes the works of Alchian (1970), Becker (1965), Lancaster (1966), Linder (1970) and Stigler (1962). It has been shown that the conventional theory emphasizes that activity is a function of the goods, services and leisure time consumed; instead, it will be assumed that utility is determined by the underlying properties or characteristics of the goods and leisure from which utility is derived. That is, consumption is an activity in which goods and leisure are inputs, and in which the output is a collection of characteristics. The utility orderings are assumed to be a function of the rankings made by individuals of the collection of characteristics produced by the various bundles of goods and services experienced by these individuals. For example, this permits leisure at different times in the day or at different locations to attain different combinations of characteristics--and therefore different utilities. As before, the worker maximizes his utility level by choosing the best leisure and wage goods combination. Note that the levels of leisure and wage goods do not directly enter the utility function; rather, it is the characteristics they engender that yield satisfaction. Therefore, utility maximization is constrained by market data in terms of the real wage rate, as before, and a technical relationship between goods and/or leisure and the types of characteristics they produce. This theory permits work and leisure to have similar as well as dissimilar underlying characteristics. Moreover, leisure or maintenance activities provided at the workplace may be perceived to have different characteristics than if they were obtained in their "natural" settings.

More formally, utility is a function of the attributes or characteristics of the goods and services one consumes. Note that it is not the goods or services themselves that yield satisfaction. For simplicity, assume that the characteristics derived from each good can be objectively determined. That is, goods yield objective quantities of attributes; but these attributes may be evaluated differently by consumers in terms of yielding satisfaction. In general, a good will possess more than one characteristic, and many characteristics will be shared by more than one good. Moreover, there may be a synergistic effect where goods consumed in combination may possess characteristics different from those obtained from goods consumed separately.

Consider an individual making a job choice. Each job offer yields I , a vector of non-services income, and S , a vector of services provided through the workplace. I may be a vector, because it includes fringe benefits, deferred income, as well as the direct dollar payments for the worker. S is an n dimensional vector for the n services provided through the workplace. $J(I,S) \in J^*$ is the set of feasible job opportunities facing a potential worker. For each element of $J(I,S) \in J^*$, one needs to convert the job offer into utility yielding attributes α . However, each job offer constrains the worker, for example, in the amount of leisure time he can have, or the daily work schedule he will follow. Therefore, the mapping of $(I,S) \in J_i$ (where J_i is the i th element of $J \in J^*$) into α will probably be different for each $J \in J^*$. Conceptually, the transformation mapping can be done in two steps. First, for a specific job opportunity J_i the corresponding I and S are converted into the goods and services one con-

sumes; and then the bundle of goods and services are converted into their attribute values. Therefore, if X is the bundle of goods and services consumed,

$$X = A \cdot I + B \cdot S$$

Where $(I, S) \in J_1(I, S) \in J \in J^*$

$$A = A(I, S); B = B(I, S)$$

I is a $m \times 1$ vector of non-services income

S is a $n \times 1$ vector of services provided through the workplace

A is a $g \times m$ matrix for transforming I to X

B is a $g \times n$ matrix for transforming S to X

X is a $g \times 1$ vector of goods and services consumed.

Each term of X yields characteristics that are assumed to be objectively determined (i.e., measurable). Using an $h \times g$ transformation matrix, C , where h is the number of utility relevant attributes, one can discover the attributes content, α . α will be an $h \times 1$ vector:

$$\alpha = CX$$

$U(\alpha)$ is the utility metric for attributes.

The model can be mathematically summarized as:

$$\begin{array}{ll} \text{Max} & U(\alpha) \text{ S.t. } \alpha = CX \\ J_1 \in J & \\ & X = AI + BS \\ & (I, S) \in J_1(I, S) \in J \in J^* \\ & A = A(I, S), B = B(I, S). \end{array}$$

The last constraints on A and B are meant to remind the reader that A and B themselves may be complicated functions of I and S . Also, it is possible to incorporate both leisure time constraints and income-budget expenditure constraints. For example, one of attributes itself may be leisure time consumption, which is fixed in potential total supply. It is important to note that the model is a basic change from the traditional approach because utility is derived from attributes, not the goods themselves. Lancaster (1966) develops the properties for such a model in greater detail than will be done here.

The Labor Supply Function

An "economically rational worker" will seek to maximize his expected real income (i.e., the implicit or indirect utility function maximization), including services provided through his workplace, in a world where real wage dispersions for workers of comparable skills exist. Real wage dispersions, in both pecuniary and non-pecuniary terms, exist and may continue to exist because of limited information about wages at different jobs, and because job transfer costs sometimes make higher real wages uninteresting. The real wage (W) may be divided into two components, (S) the value to the worker of services provided through

the workplace and (I) the value of all other employment remuneration including nominal wages and fringe benefits. Therefore, $W = S + I$.¹ The worker considering this formula, must decide how much job search is worthwhile. Since, for each unit of search, the cost and returns to further search will be influenced by offers already received, the total amount of search cannot be specified in advance, but will be determined sequentially.² The worker must decide whether incremental expected returns exceed incremental expected costs if he is to undertake what is for him the optimal amount of search activity.

In determining the benefits accruing to him through search, a worker confronts the probability that he receives any offer (i.e., the probability that firms are not hiring) and a distribution of possible real wage offers, conditional upon any hiring offers. The expected benefits $E(B)$ from job search are

$$E(B) = P(J) \cdot E(G/J)$$

where $P(J)$ = probability of any job offer, and

$E(G/J)$ = expected real wage gain conditional on a job offer.

The expected real wage gain relates to the current real wage of the worker (W_0) and the distribution of wage offers (\tilde{W}) such that

$$E(G/J) = \int_{W_0}^{\infty} (\tilde{W} - W_0) f(\tilde{W}) d\tilde{W}$$

where $f(\tilde{W})$ is the real wage offer probability density function. Obviously, real wage offers below the current real wage (W_0) have no economic value to the worker. Recall that real wage offers can be in the form of pecuniary or non-pecuniary rewards, such as services provided through the workplace, and are reflected in the value of $W = S + I$. The rational worker considers the "bundle" in his economic decision to accept or reject employment.

Job search is costly, and the marginal expected benefits probably decrease as a function of the amount of previous job search. How does an employee choose the optimal amount of job search he should undertake? If the searcher knows the wage probability distribution from which he will make independent searches (i.e., random drawings), it is simple to derive an explicit optimal job search procedure. Again, W_0 is his current real wage rate and C will be the marginal search cost

¹Note that S and I , in this section of the paper, are monetarized utility equivalences. This is in contrast to the discussion above where S and I are vectors. In essence, the use of S and I here represents an indirect or implicit utility function transformation from attribute-utility space to monetary equivalence space. As will be discussed below in the empirical models, this approach is implicitly a hedonic index approach; see Griliches (1961), "Hedonic Price Indexes for Automobiles."

²Compare Stigler (1962), "Information in the Labor Market," with DeGroot (1970), Optimal Statistical Decisions, Chapter 13.

for each job search in the market place. As noted above, the optimal search procedure requires the specification of a gain function such that the searcher will be able to maximize expected gains. If it is assumed that the job searcher can obtain the highest observed job offer of those found through trial t (including staying at his current job), denote this offer as W_1 . Let \tilde{W} be a random variable giving the outcome of trial $t + 1$. The problem requires that the searcher decide whether to stop after t trials or search one more time. He can then make this decision, sequentially after such additional search. In this case, if he receives a job offer (with probability $P(J)$), his gain will be

$$G(\tilde{W}) = \begin{cases} \tilde{W} - W_0 - C & \text{if } \tilde{W} > W_1 \geq W_0 \\ W_1 - W_0 - C & \text{if } W_1 < \tilde{W} < W_0 \end{cases} \quad (1)$$

Note that the employee who receives $W_1 < W_0$ or no offer, can always stay at his current job with wage W_0 . The expected gain for undertaking job search in trial $t + 1$ (after t trials have already been undertaken) is

$$E(G/t+1) = P(J) \int_{W_0}^{W_1} (W_1 - W_0 - C) f(\tilde{W}) d\tilde{W} + P(J) \int_{W_1}^{\infty} (\tilde{W} - W_1 - C) f(\tilde{W}) d\tilde{W} + P(J) \int_0^{W_0} -C f(\tilde{W}) d\tilde{W} - (1 - P(J))C \quad (2)$$

The expected gain function can be conveniently rearranged to yield

$$E(G/t+1) = -C + P(J) \cdot K(W_1) + P(J) \cdot H(\tilde{W})$$

where

$$K(W_1) = (W_1 - W_0) \int_{W_0}^{W_1} f(\tilde{W}) d\tilde{W}, \quad \text{the contribution to expected gain for } \tilde{W} \text{ in trial } t + 1 \text{ when } \tilde{W} \text{ is between } W_1 - W_0, \text{ conditional upon a job offer.}$$

$$H(\tilde{W}) = \int_{W_1}^{\infty} (\tilde{W} - W_1) f(\tilde{W}) d\tilde{W}, \quad \text{The contribution to expected gain for } \tilde{W} \text{ in trial } t + 1 \text{ when } \tilde{W} \text{ is above } W_1, \text{ the current highest offer, conditional upon a job offer.}$$

The gain after trial t , is $W_1 - W_0 \geq 0$ since one can always remain at his current employment if $W_1 < W_0$. Therefore, the optimal stopping rule--i.e., should one collect job search information by undertaking trial $t + 1$ --will be of the form

$$\begin{aligned} G(W) \leq E(G/J) &\longrightarrow \text{continue to search} \\ G(W) \geq E(G/J) &\longrightarrow \text{stop search} \end{aligned} \quad (3)$$

Utilizing the optimal job search rule implied in (3) to compare (1) with (2) yields (4):

$$W_1 \leq W_0 + P(J) \cdot K(W_1) + P(J) \cdot H(W) \rightarrow \text{Continue} \quad (4)$$

$$W_1 > W_0 + P(J) \cdot K(W_1) + P(J) \cdot H(\tilde{W}) \rightarrow \text{Stop}$$

It follows that there is some $W_1 = W^*$ for the equality condition in (4), which is the critical value. For W_1 above W^* , the employee stops search and accepts the highest offer W_1 (which might be the current employment for $W_1 = W_0$); for W_1 less than W^* the employee will continue to search at least one more time for job offers.

It should be noted that, under this optimal job search rule, it is irrelevant whether or not the searcher must accept or reject only the current wage rate offer without the possibility of return to a previously drawn wage rate. Once an observation (job offer) falls in the acceptable range above W^* , search stops, so that the wage accepted is always the largest offer up to and including the current job trial. Also, since the job searcher is reputed to know the wage probability distribution, the observed wage rates per se are not informative. This need not be the case. DeGroot (1970), Chapter 13, demonstrates how to derive optimal stopping rules when the exact form of the distribution is unknown, and the trials can be used as a learning device about the probability distribution.

Of course the worker who believes the search for another job is "profitable" is confronted with a choice of search techniques, some of which may differ from the suggestive optimal stopping procedures above. For example, he may quit as soon as he is convinced search is useful; or he may remain employed (as in the above model), searching in his spare time. The strategy employed will be, among other things, related to perceived labor conditions for workers. This is mentioned to bring into focus and emphasize that from the labor supply side in a world with information costs-search costs, the real wage structure, including the services provided through the workplace is interrelated with worker quit rates.³

The Demand for Labor

The problem of the profit maximizing firm is for the employer to balance the advantages of operating at low turnover rates against

³ The quit rate may reflect, in part, a process by which workers obtain knowledge about the terms and characteristics of alternative employment. In a world where information costs are non-zero, the taking on a job for a "trial" period may be the optimum method for an individual to discover whether the employment suits him.

the cost of higher real wages that maintain labor force stability.⁴ By altering the real wages offered to workers, the employer generates incentives for current workers to quit and/or search for other jobs, and induces prospective employees to accept or reject his offers. Employer changes in the services provided through the workplace may have effects comparable to changes in pecuniary wages or fringe benefits. Of course, it is the quit rate of workers with specific training that is particularly relevant to the employer's calculation.

The efficient level at which the labor force operates depends upon the efficiency of each worker and, also, upon the efficiency with which the employees coordinate their productive activities. While all forms of turnover (quits) are not equally damaging in their effects on the working efficiency of the firms, conceptually there exists an optimal quit rate for a profit maximizing firm. This optimum is, at the margin, attained when the harmful effects of turnovers on productivity are just matched by the costs of changing the wages, including services, hiring and training costs associated with that turnover rate.

These concepts can be represented in the following simplified mathematical model. Consider a firm that attempts to maximize profits (π) and uses labor (L) and capital (K) as its only inputs. (Labor inputs are measured in "effective units" rather than number of employees per se.) By changing the money wages (I), the firm affects both the quit rate (q) and the level of the labor force (L) willing to work. Similarly, changes in S , the cost of services per employee provided through the workplace, will affect q and L . The firm is assumed to be a price-taker, renting capital at R dollars per unit per period. As explained above, the production function (X) is assumed to be a function of q , L , as well as K . The objective function of the firm is

$$\pi = P \cdot X [L(I,S), q(I,S), K] - I \cdot L(I,S) - S \cdot L(I,S) - R \cdot K$$

where (P) is the price of its output per unit. The marginal conditions for profit maximization are

$$\frac{\partial \pi}{\partial I} = 0 = P \frac{\partial X}{\partial L} \left(\frac{\partial L}{\partial I} \right) + P \frac{\partial X}{\partial q} \left(\frac{\partial q}{\partial I} \right) - \frac{\partial (I \cdot L)}{\partial I} - S \cdot \frac{\partial L}{\partial I}$$

$$\frac{\partial \pi}{\partial S} = 0 = P \frac{\partial X}{\partial L} \left(\frac{\partial L}{\partial S} \right) + P \frac{\partial X}{\partial q} \left(\frac{\partial q}{\partial S} \right) - I \cdot \frac{\partial L}{\partial S} - \frac{\partial (S \cdot L)}{\partial S}$$

$$\frac{\partial \pi}{\partial K} = 0 = P \frac{\partial X}{\partial K} - R$$

⁴Of course, for firms with significant seasonality elements in their business, it may be economical to operate with very high turnover rates.

Each of these marginal conditions equates the value of the marginal product created by a change in one of the employer "control" variables with the marginal cost of that change. The first marginal condition represents the change in labor costs and the value of the marginal product created by changing the money wage structure. The second marginal condition relates the change in the value of the marginal product and labor costs generated by a change in the level of services provided through the workplace. Both of these marginal conditions contain changes in marginal productivity caused by changes in the effective size of the labor force and the quit rate. Conceptually, in the first two marginal conditions, the change in the value of the marginal product is analytically related to the quit rate because of two underlying elements: the part caused by productivity changes because the quit rate has engendered an alteration in the experience level of labor force and the part caused by productivity changes because the quit rate has altered the total labor force (at every experience level). The third marginal condition is the traditional balancing of the value of the marginal product of capital with its cost. Of course, the firm will balance its last dollar expended on services, money wages, or capital such that the ratio of the marginal product to the marginal cost will be equal for each factor of production. It is assumed that

$$\frac{\partial X}{\partial q} < 0, \frac{\partial q}{\partial I} < 0, \frac{\partial X}{\partial L} > 0, \frac{\partial L}{\partial I} > 0, \frac{\partial q}{\partial S} < 0, \frac{\partial L}{\partial S} > 0, \text{ and } \frac{\partial X}{\partial K} > 0.$$

This model, therefore, indicates the relationship between marginal profits, the money wage rate, the costs of providing services, the capital stock, the quit rate, and the size of the total labor force. In equilibrium, there will in general be a positive quit rate that is optimal. This is particularly true if a firm is operating in a world of uncertainty as discussed above under optimal job search. That is, the firm will maximize its expected profits when there is some employee job search, (and eventual employee quits).

Labor Market Equilibrium

Labor market equilibrium can be consistent with continued job search activity. The difficulty is that continued job search (or advertising and employment agencies as information centers) appears to lead toward a unique labor market price (including implicit services received, etc.) for each skill level rather than a distribution of prices. Stubbornly low-paying employers will lose employees over time and perhaps find themselves facing a shortage of appropriately skilled workers; and high-paying employers will become swamped with applications for employment by excellently qualified workers. In both cases, it must be expected that economic behavior would lead to "corrective" price offers. As these corrections take place, the gains from search (and advertising) should dwindle. Therefore, at first blush, the processes seem to be self-limiting, consistent with transition toward (but not achievement of) equilibrium.

Conditions of supply and demand are to a major extent exogenous to the labor market and ever changing. These alterations through time maintain wage dispersions and the rationale for job search. This can be construed as saying that the market is always in transit to, never at, equilibrium. On the other hand, if the exogenous changes affecting the labor market are regarded as "drawing" from a fixed probability distribution, the economic system may converge toward a statistical equilibrium containing price dispersions with job search. These notions are consistent with results derived by Green (1971) and Rothchild (1973).

There are endogenous factors that tend to preserve real wage dispersions. Employees and employers have certain types of mobility which may create dispersions. Locational changes of firms and employees do enhance the need to search out the market, and tend to alter wage offers over time and between locales. In the case of employees, one can consider another type of job mobility (i.e., in-out of labor market behavior) that affects wage dispersions: that of an intergenerational life-cycle model, which will provide a continuing demand for job search information. Finally, for job search within the labor market, there exists a re-establishment procedure for job search. Someone searching for employment may recheck previous job offers. This is analytically similar to "forgetting," and acts as if prior information from job search decays. That is, job search information decays supposedly as a function of time from the original collection, and requires constant updating.

In the realm of the total bundle of wages, services provided to employees through the workplace, and fringe benefits--i.e., the real wage offer--job search uncertainty is intrinsically more difficult than a problem created by simple wage-price uncertainty. The real wage, which affects the workers "quality of life," may be (a la Lancaster (1966) multi-dimensional and unquantifiable in some respects, containing irreducible subjective elements. Moreover, negotiating with employers, the employee may find that the job offer is not what he expected after he commences work.

Empirical Implementation

Introduction

The economic theory of the labor market, as developed above, suggests that the real wage "bundle" should be a key decision variable for both firm and worker behavior. The objective in this section is to outline the empirical approach to measuring the relationships between services provided through the workplace, the money wage rates and quit rates. Put differently, the research objective is, in part, to measure the worker response to "various packages" of real wage bundles, consisting of services, other non-pecuniary benefits and direct pecuniary benefits. The aim of the empirical work is to determine which (if any) services provided through the work place are revealed to be preferred by workers.

Ideally, one would have socio-economic data for all firms and employees. However, this analysis will focus upon strictly economic data for 83 specific business sites.⁵ Note that the economic analysis

⁵There were 106 firms interviewed in this study. Unfortunately only 83 of these provided sufficient data to permit economic analysis.

examine the specific business site, not the firm as a whole. Although the data is only on a business site level, the interactions of workers and firms will be captured in the analysis through the observed quit rates, wage rates and workplace services. That is, this framework directly examines services provided at the work site as part of economic behavior of the firm and worker.

However, because of certain data limitations discussed in the next chapter, the analysis for all services provided through the workplace can not be studied in terms of the structural-causal economic model of the labor market. In these instances, the analysis will examine the empirical but not necessarily structural-causal relationships between specific services provided through the workplace and the economic variables for the workplace. The non-structural empirical analysis will focus on variate correlations, and may be useful for predictive purposes. Hence, the multivariate empirical results will be of two major types:

1) Predictive Non-Structural Models. Predictive models do not necessarily attempt to discover the underlying economic structural relationships in the labor market; instead this type of analysis examines the characteristics of firms that are likely to provide services at the workplace. For the economic analysis, it is inappropriate to differentiate qualitative intensities in the non-structural model. Therefore, each service or groupings of services will be measured as a qualitative variable (i.e., 1 if the service is provided to any extent through the workplace; 0 otherwise).

2) Economic Structural Models. Structural models do attempt to find the economic determinants for providing specific services through the workplace, explicitly studying the relationship between wage rates, services, and quit rates. It should be noted that the appropriate economic measure of service "intensity" in a structural model will necessarily be dollar value. While the dollar measure for services does treat a dollar spent on all services as equivalent, in theory the economically "rational" firm will be equalizing the net marginal benefits it receives for expenditures on all services or anything else. Diversity of services will occur (in the economic model) when it is consistent with profit-maximization of the firm and utility maximization for the employee. Therefore, the last dollar spent on any workplace service is yielding the same marginal return to the firm. Moreover, this will only be true if workers are satisfied at the margin with the bundle of services offered.

The Multivariate Statistical Model for Prediction of Services Provided Through the Workplace

Part of the analytic task is to identify the characteristics of work sites that are associated with the provision of particular types of services. To accomplish this aim, a multivariate predictive statistical model has been designed and utilized. In this analysis

the dependent variable, S_{ij} (the i^{th} service provided at the j^{th} work site), resembles a dummy variable because it is qualitative.⁶ In other words, the intensity measure for workplace services used in this portion of the study is a simple binary (provide-do not provide) variable.⁷

$$S_{ij} = \begin{cases} 1, & \text{if service } i \text{ is provided through workplace } j \\ 0, & \text{if service } i \text{ is not provided through workplace } j \end{cases}$$

Using ordinary least squares, the model will be for an n-firm sample, for each service i :

$$S_{ij} = \hat{\alpha} + \sum_{k=1}^m \hat{\beta}_k X_{kj} + e_j \quad j = 1, \dots, n$$

where $\hat{\alpha}$ and $\hat{\beta}_k$ ($k = 1, \dots, m$) are the least square estimates, X_{kj} ($k = 1, \dots, m$), is the value of predictive variable k for firm j , e_j is the regression residual term.

For each work site-firm, $E(S_{ij})$, for the given set of X_{kj} ($k = 1, \dots, m$), is the conditional probability of S_{ij} . That is, the "calculated" S_{ij} will be the conditional probability that a particular firm j with given characteristics will provide a particular workplace service S_i .

However, the above model is not totally satisfactory. First, the calculated values of S_{ij} may fall outside the $[0,1]$ interval, which makes a probability interpretation unappealing. This is acceptable, however, if the S_{ij} calculation is interpreted as a likelihood "index" for providing services at the workplace, resembling a probability measure. Higher calculated values of S_{ij} represent higher expected probabilities that a service will be provided.

Second, the least squares procedure assumes that the variance is homoscedastic, which is clearly untrue. Therefore, the estimates of the

⁶The service i may be a specific service or a class of services provided through the workplace. Note that even when the service i is a class of services provided through the workplace, it is a qualitative variable. Recall that the sociological analysis used the number of services within the class as the intensity measure for study.

⁷The analysis can be extended for intensities of services provision by a two phase analysis. The first phase of the study will apply the analysis as above. The second stage would be for the groups of firms providing each service only ($S_i = 1, i = 1, \dots, z$), with a new dependent variable, the intensity of services provided (e.g., expenditures per worker). Then this information is regressed to yield an expected intensity measure. For an example of this approach, see Fisher (1962), "An Analysis of Consumer Goods Expenditures in 1957."

coefficients will not be efficient. By examining the least square estimates, it is clear that it is heteroscedastic. Let X_j be the row of predetermined economic variables for the j^{th} worksite. The row vector X_j consists of (X_{1j}, \dots, X_{mj}) . As before, S_{ij} is 0-1 dichotomous. Therefore, if e_j is the residual with the "classical" assumption that $E(e_j) = 0$, the distribution of e_j must be

<u>Value of e_j</u>	<u>Probability of e_j</u>
$-X_j B'$	$1 - X_j B'$
$1 - X_j B'$	$X_j B'$

where $B = (\hat{B}_1, \dots, \hat{B}_m)$

the variance is

$$E(e_j^2) = [E(S_{ij})] [1 - E(S_{ij})]$$

since $E(S_{ij}) = X_j B'$.

Therefore, the variance will differ according to the value of X_j . That is, the disturbance is heteroscedastic, varying systematically with $E(S_{ij})$ and, hence with X_j .

This analysis has adopted Goldberger's suggested method⁸ for resolving this problem of heteroscedasticity. The method, a modified form of generalized least squares, adjust for the heteroscedastic disturbances by assuming that the diagonal of the second moment matrix generated from residuals of the original, unconstrained regression using the sample data is a "good" estimator for the population variances. Utilizing these variance estimates, the original data is adjusted to make the model homoscedastic. This will yield efficient estimates for the least squares coefficients.

The Multivariate Statistical Model for Structural Analysis

The statistical model will identify and quantify the economic determinants for providing services through the workplace. The theoretical exposition suggests that the value of services provided for the worker, the pecuniary wage, and the quit rate are interdependent

⁸ Goldberger (1964), Econometric Theory, 232-237, 248-251.

from both the supply and demand sides of the labor market.⁹ The extent of this interdependence is an empirical issue.

To explain this analytic approach, it is simpler to consider a theoretical example. In the survey of the firms in the Delaware Valley used for this study the total costs for providing all major services at the workplace were ascertained. Using the cost per worker for providing these major services as the dependent variable, it would be interesting to find out if there are any systematic determinants of this variable. From the theory, it can be hypothesized that

$$S_{ijk} = f(q_j, \frac{I_j}{I_k}, C_j, M_k) \quad (1)$$

where

S_{ijk} is the cost of major service i provided through the workplace per worker for firm j of industry k .

q_j is the quit rate found in firm j .

$\frac{I_j}{I_k}$ is the ratio of wage paid by firm j to the wage rate paid by industry k as a whole.

C_j is a vector of firm-related characteristics, such as size of site, location of site, etc.

M_k is a vector of general market conditions for industry k , such as general employment conditions, and so forth.

Equation (1) is intended to be an example of a structural model that will yield an empirically estimatable analogue for the theory developed above. To accomplish this, the appropriate empirical methodology must be used to estimate the underlying relationship. First, in the parlance of econometrics, S , W , and Q are simultaneously determined.

⁹Recall that the theory relates attributes to utility maximization. However, the direct empirical identification of the attributes and the quantity of each attribute associated with a particular service provided through the workplace is difficult, if not impossible. Therefore, the empirical analysis employs a hedonic index approach, similar to Griliches (1961), "Hedonic Price Indexes," and Dhrymes (1967), "On the Price and Quality Changes in Some Consumer Capital Goods," which relates the cost of services to the firm and observable, objectively measurable economic characteristics of the firm. It should be clear that these economic variables do not necessarily represent the full complexity of workplace attributes. However, if the world is "economic," there should be observed trade-offs.

The use of ordinary least squares to estimate this relationship would yield statistically inconsistent estimators. Therefore, two stage least squares (or some other simultaneous equation method) should be employed to estimate the model.¹⁰

Second, the use of $\frac{I_j}{I_k}$ may be an appropriate wage rate variable because it incorporates the $\frac{I_j}{I_k}$ notion of comparative worker job alternatives. Also, it is postulated that the greater the ratio, the fewer services a firm has to provide to hold a worker and vice versa. Therefore, it is expected that the sign of this coefficient should be non-positive. Obviously, it is to be expected that characteristics of the worksite, such as the size of the labor force employed or the worksite location (e.g., urban vs. suburban) may affect the level of services provided at the workplace. General market conditions or historical peculiarities for the k^{th} industry may affect the provision of services (i.e., this is an "inertial" force hypothesis). Finally, the quit rate should be negatively related to the level of services provided as outlined in the economic theory of the labor market.

The empirical analysis, in general, depends upon the labor market operating according to economic theory. That is, in order to achieve profit maximization, the employer is assumed to alter the wage rate paid and/or the services offered the worker through the workplace. Supposedly, the choice of wage rates and services will affect labor efficiency and turnover (quit) rates, thereby ultimately affecting profits. The market equilibrium combination of services and wage rates depends upon the technical relationships between productivity and quit rates as well as the supply of labor.

More formally, the empirical counterpart of this theory can be mathematically represented as a partial simultaneous equations system:¹¹

$$q = F(I, S, \dots) \quad (2)$$

$$W = G(S, q, \dots) \quad (3)$$

$$S = H(q, I, \dots) \quad (4)$$

¹⁰ See Johnston (1972), Econometric Methods, Chapter 12 and 13, for a complete discussion of simultaneity bias and the techniques for overcoming it. As will be explained later, the two stage least squares analysis could not be applied to the analysis of all the firms in the sample in a uniformly acceptable way.

¹¹ In theory, there are supply and demand equations for each worker and employer, respectively. Therefore, this system is an aggregated simultaneous sub-system of the original micro-relationships. Hence, the coefficients of the empirical model will be a combination of supply and demand factors, and will require careful interpretation. In general, it is assumed that the model is in equilibrium, and therefore, the coefficients represent an equilibrium measure.

where q = a vector of the quit rates by employee type

I = a vector of the wage rates by employee type

S = a vector of the services provided at the workplace.

This system will simultaneously yield equilibrium values for the quit rate, wage rate and level of services.¹² The dependent variables in equations (2), (3), and (4) are simultaneously determined. The choice of the independent variables in these functions depends upon one's a priori microeconomic model of the labor market. Many previous studies have been content to list certain obvious correlations of, for example, wages and estimate the resulting regressions by ordinary least squares. But correlation does not imply causation, and the latter is of analytic interest for public policy determination. Moreover, while one may quarrel about which variables should be included or excluded from the model, it is clear that simultaneity will be a major empirical problem.

Using field survey data from interviewed firms, the thrust of the economic structural analysis is to measure the value of services provided through the workplace by estimating equation (4). If it is assumed that there is sufficiently perfect information and mobility in the labor market, wage rates offered by each firm adjust according to the services provided. In other words, firms that offer relatively attractive services will have, ceteris paribus low turnover rates and/or lower wage rates.¹³

¹²As already mentioned, this may present several technical econometric estimation problems such as simultaneity bias. However, consistent estimates can be achieved by two stage least squares--assuming identifiability. This approach is similar to that suggested by Pencavel (1970), An Analysis of the Quit Rate in American Manufacturing Industry; also, see Johnston (1972), Econometric Methods, chapters 12, 13

¹³ Empirically, therefore, it is expected that

$$\frac{\partial H}{\partial q} < 0 \quad \frac{\partial H}{\partial I} < 0.$$

Theoretically, one could use these derived estimates to measure the social value of services in terms of how wage differentials affect workers and/or firms profitability differentials. Ultimately, these comparisons can be utilized to evaluate the socio-economic merits of various types of services at several kinds of work settings. This eventually could be one of the basic inputs into a benefit-cost analysis for the workplace services.

CHAPTER XII

EMPIRICAL RESULTS: THE ECONOMICS OF WAGES, QUIT RATES, AND THE SERVICES PROVIDED THROUGH THE WORKPLACE

Robert H. Edelstein

This chapter will attempt to assess the empirical validity of several economic hypotheses, as outlined in Chapter XI above, about the provision of services through the workplace. The primary analytic focus will be the empirical relationships between services provided at the workplace, voluntary labor quit rates, money wages and business site characteristics.¹ This investigation assumes that the cross-sectional survey data collected from firms in the Delaware Valley can be utilized to test the economic theory through the multivariate statistical models developed in Chapter XI. Therefore, if a particular implication of the theory is not statistically borne out by the data, it will be considered (with some statistical confidence level) to be false.

Of course, the approach subsumes that the data itself is sufficiently reliable and appropriate to do the analysis. Therefore, it is important at the outset to delineate several general caveats that may affect the significance of the economic implications derived from the empirical findings. First, these findings are to be interpreted as suggestive rather than definitive and exhaustive. In part, this will be true because the data is not precisely appropriate for testing the economic theory. Hypothetically, the data should be strictly micro-economic, including individual worker characteristics (e.g., family composition, home location relative to work site, individual wage rates, etc.); however, the unit of analysis used in this study is the worksite and the data are usually "average" economic data for all employees or large sub-groups of employees at that worksite. Second, the survey data may contain non-random components because of an uncontrollable firm interview selection bias. (Unfortunately, hypotheses about sampling bias of this type are untestable.) Third, the data are not always accurate. For example, firms were not accustomed to thinking in terms of the total costs for providing certain types of services. The survey interviewers in many cases had to "educate" the firm to calculate all costs, "hidden" or otherwise, associated with providing services. To some extent, it

¹This analysis will estimate equations for services provided through the workplace, and not wage rate and quit rate functions. The latter two variables are endogenous to the economic structure as discussed in Chapter XII, and, in theory, could be estimated using some simultaneous equation method in a similar fashion in the workplace services equations.

is unlikely that all costs were recorded in the data; therefore, the cost data is to be considered relatively crude, varying (perhaps) according to the type of service and the expertise of interviewer and interviewee. Fourth, the sample of firms in this study represents a "high" wage subgroup of all U.S. firms. Therefore, the conclusions drawn from this study may not be universally transferable to the entire labor market. Finally, the analysis, as in almost all economic empirical studies, assumes market equilibrium. It is clear that this assumption is not strictly correct because the labor market is always in flux or adjusting to exogenous changes, never achieving equilibrium. Therefore, this study assumes that a market equilibrium framework is a sufficiently accurate approximation of reality to conduct meaningful analysis.

These caveats should not be interpreted too severely; they are intended to point up the risks of over-interpretation. What should not be lost sight of is the fact that, despite limitations, this study represents a step forward when compared to many earlier research approaches for the labor market. First, the investigation uses individual firm data to evaluate the effects of the workers' socio-economic environment as measured by the level of services provided through the workplace on labor market behavior. While many earlier economics researchers have voiced theoretical concern that various aspects of the working conditions affect labor decisions, apparently none has attempted to empirically account for these effects. Second, many studies of wage rates-quit rates focus on inter-industry effects, not the individual firm.¹ This, of course, often reflects the availability of data; but may necessarily miss significant micro intra-industry or inter-firm differences. Third, while there are studies that have explored the microeconomics of the labor supply function, typically they utilize individual socio-economic household data, but do not have data relating to the environment of the workplace.² In this light, the current study should be considered a first step at microanalysis that accounts for the working environment as a determinant of labor market behavior.

The analysis will be presented in the following four sections:

- 1) Economic data.
- 2) Predictive models for employee and community services provided through the workplace.
- 3) Structural models for the analysis of the costs of services provided through the workplace.
- 4) Conclusions.

¹For examples, see Burton and Parker (1969), "Interindustry Variations in Voluntary Labor Mobility," or Parsons (1973), "Quit Rates Over Time: A Search and Information Approach."

²For examples, see Blinder (1973), "Wage Discrimination: Reduced Form and Structural Estimates," or Cohen, Lerman, and Rea (1971), "Area Employment Conditions and Labor Force Participation: A Microstudy."

Economic DataThe Data Categories

During this study, 106 individual business sites of large firms (i.e., 200 or more employees) in the Delaware Valley were interviewed to create the data base. Unfortunately, and for varying reasons, the economic data collected from these firms were not uniformly acceptable; therefore, after screening, the economic analysis could utilize survey information from only 83 business sites (44 manufacturing and 39 non-manufacturing) for compiling its data base. For conceptual convenience, the principal data incorporated in the economic analysis can be subdivided into four general categories:

1. Qualitative Dependent Variables for Services. These variables were binary variates, specifying whether a class of services was provided, regardless of degree or intensity, through the workplace or not. The classes of services analyzed extensively overlapped those of the sociological analysis in earlier chapters.¹ The economic analysis employs strictly binary measures for services. The economic analysis, paralleling the sociological approach, divides the universe of classes of services into two general nomenclatures: employee services provided through the workplace and community-oriented services provided through the workplace.

2. Quantitative Dependent Variables for Services. As has been indicated earlier, cost data for providing services through the workplace frequently cannot take into account all factors hidden within the administrative-structural interstices of a large business organization. This analysis, therefore, attempted to study only the cost data for services or groupings of services which were considered reliable. The "usable" cost data consisted of two general phyla: the costs of providing five specific employee-oriented services and aggregate expenditures by the firm for providing all major services. In general, the aggregate expenditure data for the business site could be further subdivided into costs associated with the provision of all principal employee services and costs associated with the provision of all principal community-oriented services.

3. Pure Economic Explanatory Variables. There are seven primary economic variables collected through the firm interviews that will be used to explain the level of services provided through each worksite. They are: 1) the average hourly wage rate received by non-exempt employees; 2) average weekly wages received by salaried employees; 3) percentage of the work-force that is male; 4) percentage of the work-force

¹The specific employee and community services included in the broad categories follow the listing in Appendix E of Volume II beginning Card III, 38/. For the sociological analysis in the previous pages, these specific services were recorded in terms of social functions. Therefore, the numbers in the various categories differ in these two analyses.

that is considered full-time salaried employees; 5) voluntary female separation rate per year per one hundred female employees; 6) voluntary male separation rate per year per one hundred male employees; and 7) percentage of employees that are less than thirty years old. Of course, the actual analysis uses various transformations for these basic data.

4. Business Site Related Explanatory Variables. In addition to the "pure" economic variables, three quasi-economic variables, related to work site characteristics, are utilized as control factors for explaining the level of services provided for each workplace. These are: 1) the size of the worksite, measured in terms of the number of full-time equivalent employees; 2) the location of the worksite (i.e., urban/suburban); and 3) the nature of the economic activity conducted at the workplace (i.e., manufacturing/non-manufacturing).

This separation of dependent and explanatory variables does not correspond to a dichotomy between endogenous and exogenous sets of variables. While one could doubtlessly quibble on some detail about the correct categorization, or, worse, argue that everything affects everything--therefore, all variables are endogenous--this study will consider only quit rates, wage rates, and costs of services as endogenous in the structural analysis for costs of services.

The Nature of the Explanatory Variables

It will be useful to begin the analysis by acquiring a feeling for the explanatory variables that will be used. Table XII-1 presents a correlation matrix for a set of basic explanatory variables used in the economic analysis. (The definition of these variables can be found in Table XII-2.) Of special note is that the percentage of male employees at a worksite (PCTMAL) is highly correlated with manufacturing workplaces (DSIC), and manufacturing activity is negatively correlated with suburban locations for worksites (DLOC). For the sample of 83 firms, the annual female quit rate per one hundred employees (FSEP) is about one quarter more than that of the male voluntary separation rate (MSEP)--i.e., 19.8 versus 15.1--and virtually uncorrelated with it. FSEP, on the other hand, is positively related to the number of employees at a work setting (LGEMP). Note that there is only a mild negative correlation between MSEP and LGEMP. Also, relatively high female quit rates occur in work settings where women are a relatively small percentage of the labor force (i.e., PCTMAL is high).

The possibility of multicollinearity in the explanatory variables may affect the multivariate analysis. The correlation matrix suggests that multicollinearity problems may exist for PCTMAL and DSIC, DLOC and DSIC, wage variables, such as HOURAV or LGHRAV, and DSIC, and between various forms of the wage variables. Fortunately, following the suggested methodology of Farrar and Glauber (1967), multicollinearity in the basic explanatory variables is not important when the statistical models for services at the workplace are appropriately specified.

TABLE XII-1
CORRELATION MATRIX: EXPLANATORY VARIABLES USED IN MULTIVARIATE ANALYSIS

	LGEMP	PCTYNG	MSEP	FSEP	HOURAV	AVEWGE	LGHRAV	LGWAGE	PCTSAL	PCTMAL	DLOC	DSIC
LGEMP	1.0											
PCTYNG	-.19	1.0										
MSEP	-.15	.15	1.0									
FSEP	.26	-.13	-.06	1.0								
HOURAV	.13	-.13	-.03	.24	1.0							
AVEWGE	.09	.08	.13	.21	.70	1.0						
LGHRAV	.08	-.11	.02	.18	.98	.71	1.0					
LGWAGE	.10	-.15	.14	.18	.76	.93	.79	1.0				
PCTSAL	-.12	.22	.15	-.06	.11	.17	.13	.12	1.0			
PCTMAL	-.17	.02	-.06	.24	.34	.14	.27	.15	.02	1.0		
DLOC	-.07	.06	.07	-.07	-.24	-.12	-.24	-.12	.06	-.26	1.0	
DSIC	.17	-.05	-.12	.20	.44	.13	.37	.16	-.05	.45	-.37	1.0

TABLE XII-2

DEFINITIONS OF VARIABLES USED IN THE ECONOMIC ANALYSIS

Basic Explanatory Variables

LGEMP	=	Natural log of the number of full-time equivalent employees at the worksite.
PCTYNG	=	Percentage of young employees (i.e., less than 30 years old).
MSEP	=	Voluntary male employee separations per year per 100 male employees.
FSEP	=	Voluntary female employee separations per year per 100 female employees.
HOURAV	=	Average hourly wage rate received by non-exempt employees.
DLOC	=	A dummy variable for worksite location: 1 if worksite is in a non-urban location; 0 otherwise.
DSIC	=	A dummy variable for manufacturing SIC code for worksite: 1 if worksite is manufacturing; 0 otherwise.
PCTSAL	=	Percentage of work force that are full-time salaried employees.
PCTMAL	=	Percentage of workforce that is male.
AVEWGE	=	Average weekly wage for salaried employees.
LGWAGE	=	Natural logarithm of (AVEWGE + 1).
LGHRAV	=	Natural logarithm of (HOURAV + 1).
RATIOHM	=	Ratio of HOURAV for the worksite to HOURAV for the corresponding manufacturing industry multiplied by 100.
RATIOLHM	=	Natural logarithm of (RATIOHM + 1) multiplied by 100.
RATIOHNM	=	Ratio of firm's HOURAV to that of average HOURAV of all non-manufacturing firms in survey sample multiplied by 100.
RATIOLHNM	=	Natural logarithm of (RATIOHNM + 1) multiplied by 100.
RATIOH	=	Ratio of HOURAV for the worksite to the average HOURAV for the survey sample of 83 firms multiplied by 100.

TABLE XII-2--Continued

Variables for Selected Employee Services Provided Through the Workplace:
Qualitative Analogue of Sociological Analysis for Employee Services

DRETL	=	A dummy variable: 1 if firm provides employee services relating to retail trade, such as drug store, food shopping, concessionaire, etc.; 0 otherwise.
DMED	=	A dummy variable: 1 if firm provides health services for its employees, such as yearly medical exams, dental clinic, on-the-job first aid, etc.; 0 otherwise.
DCLER	=	A dummy variable: 1 if firm provides employees with clerical services; 0 otherwise.
DCRAFT	=	A dummy variable: 1 if firm provides employee with services of a craft nature, such as Barber, computer programming, etc.; 0 otherwise.
DAGENT	=	A dummy variable: 1 if firm provides agent services for the employees, such as ticket services, purchasing of company products, etc.; 0 otherwise.
DEDUINF	=	A dummy variable: 1 if firm provides educational-informational services to its employees, such as non-work related school programs, library facilities, etc.; 0 otherwise.
DTRANS	=	A dummy variable: 1 if firm provides transportation-oriented services for its employees, such as use of company vehicles for personal use, parking, shuttle bus service, etc.; 0 otherwise.
DSECTY	=	A dummy variable: 1 if firm provides security-protection services for employees at the workplace; 0 otherwise.

Variables for Selected Community Services Provided Through the Workplace:
Qualitative Analogue of Sociological Analysis for Community Services

DCA	=	A dummy variable: 1 if firm provides services relating to general community affairs services, such as community relations committees, social services agencies, and community development; 0 otherwise.
DCONS	=	A dummy variable: 1 if firm provides consumer oriented programs, such as credit information, consumer education; 0 otherwise.

TABLE XII-2--Continued

DMIN	=	A dummy variable: 1 if firm provides services for minority enterprises, including advisory and counseling services, or minority employment opportunities; 0 otherwise.
DESTH	=	A dummy variable: 1 if firm provides services for theatre groups performing in the community, music appreciation programs, or cultural awareness programs; 0 otherwise.
DCOMFAM	=	A dummy variable: 1 if firm provides community services for child care-oriented centers; 0 otherwise.
DENVIRON	=	A dummy variable: 1 if firm provides community services for improving the physical environment (e.g., pollution control, recycling, etc.) or housing improvements (i.e., community environment).
DCOMHEAL	=	A dummy variable: 1 if firm provides community services for drug programs, general health, or counseling; 0 otherwise.

Dependent Variables for Five Specific Employee-Oriented Services

ASSOC	=	Total expenditures by the firm for employee association.
ASOEMP	=	Company expenditures per worker for employee association.
DASSOC	=	Dummy variable: 1 if company provides any funds for employee association at the workplace; 0 otherwise.
CAF	=	Total expenditures by the firm for employee cafeteria.
CAFEMP	=	Company expenditures per worker for cafeteria services provided at the work site.
DCAF	=	Dummy variable: 1 if company provides cafeteria services for the employees at the worksite; 0 otherwise.
HEALTH	=	Total expenditures by the firm for employee health services provided at the work site.
HTEMP	=	Company expenditures per worker for health services provided at the worksite.
DHEALTH	=	Dummy variable: 1 if company provided any health services for employees through the worksite; 0 otherwise.

TABLE XII-2--Continued

PARK	=	Total expenditures by the firm for employees parking near the worksite.
PKEMP	=	Company expenditures per worker for parking near the worksite.
DPARK	=	Dummy variable: 1 if company provided any parking services near the workplace; 0 otherwise.
SUBVEN	=	Total expenditures by the firm for subrental services provided for employees at the worksite.
SVEMP	=	Company expenditures per worker for subrental services provided through the worksite.
DSUBVEN	=	Dummy variable: 1 if company provides any subrental services for the workplace; 0 otherwise.

Dependent Variables Used in Economic Cost Structure Analysis
for All Major Services Provided Through the Workplace

VALSER ^a	=	The total cost to the firm of all major services provided through the workplace; measured in thousands \$.
VALCS	=	The total cost to the firm of major community oriented services provided through the workplace; measured in thousands \$.
VALES	=	The total cost to the firm of major employee services provided through the workplace; measured in thousands \$.
SEREMP	=	The cost per employee for all major services provided through the workplace.
CSEMP	=	The cost per employee for major community services provided through the workplace.
ESEMP	=	The cost per employee for major employee services provided through the workplace.

^aBy definition, for each worksite, VALSER = VALCS + VALES.

First, the "raw" wage data is not always used directly; instead, wage data appear frequently in the model as a ratio-variate, which reduces collinearity. Second, each equation that uses wage data as an explanatory variable employs only one wage variable. Third, by splitting much of the multivariate analysis using the DSIC variable into two separate subgroupings for manufacturing and non-manufacturing worksites, a significant portion of the potential multicollinearity will be avoided. In addition, for certain types of qualitative (binary) services and dollar cost measures of services, employing the statistical tests suggested by Goldfeld and Quandt (1965), the regression residuals were found to be heteroscedastic. The splitting of the worksites into manufacturing and non-manufacturing activities apparently resolves the problems of multicollinearity as well as heteroscedasticity for the multivariate regression analysis.¹

As has been noted already, the economic analysis will utilize two quit rates, FSEP and MSEP. Clearly, since these rates are virtually uncorrelated, each probably contains separate effects that might be lost by using a single labor force quit rate. For the purposes of this study, quits are defined as terminations of employment initiated by the employee for any reason, except transfers to another workplace of the same firm, the Armed Forces, or retirements. This is, of course, related to but different from a gross turnover rate of the labor force at a specific worksite, which is affected by, among other things, the layoffs of workers, rate of "fired" employees, and internal transfers of employees between different tasks at the same firm location (or the same task at different locations).

It is important to understand that the "ideal" wage variable for the worksite as the unit of analysis would be the ratio of the wage received for a particular type of work at the worksite to the "average" wage received at similar worksites for similar types of work. Such a ratio represents the relative attractiveness of the money wage offered at the workplace and a surrogate for job alternatives (opportunity costs) for the employee. Unfortunately, the survey data could not be used to create a meaningful subdivision of the labor force wage rates by skill levels. However, data were available for the manufacturing workplaces for constructing the ratio of the average wage rate offered to the workplace to the average rate for that manufacturing industry. The average wage rate for the non-manufacturing firms in the sample was used as the denominator of the ratio.

This study, consisting of a cross-sectional data base for firms in the Delaware Valley, did not use general economic conditions variables, such as general unemployment rates as explanatory variables. While these types of variables are likely to be important in a time-series study of the labor market, it is unlikely that in the short run

¹All multivariate analyses below have been examined for the possibility of heteroscedasticity; unless otherwise reported, heteroscedasticity was not statistically important.

they affect these empirical results for a cross-section of firms in the same locale, each of which ostensibly is facing the same general economic conditions. The accession rate (the rates of new hirings) and the layoff rates were assumed to be excluded from the services equations. This was done because the rate of new hirings (accessions) is considered to be an exogenous variate, to a large extent, determined by general industrial growth, and the layoff rate is, also, considered to be a response by the firm to exogenously created conditions.¹ However, the quit rate, while itself probably related to layoffs and accessions rates, is an employee-employer control variable that has been hypothesized to be a key to explaining the services offered through the workplace.

It is also important to list several variables that were not used in the analysis. First, the analysis did not find variables for educational levels of the labor force (i.e., a measure of labor force skill levels) and the rate of absenteeism for the worksite to be important empirical determinants of services provided through the workplace. In part, this may be a spurious result because these data were probably not reliable. Second, the stability of the labor force, measured by the percentage of employees with specified years of employment tenure with the firm, did not seem to affect the level of services offered. Third, the degree of unionism did not appear to affect the level of services offered. This, in part, may be explained by the fact that the large non-unionized firms interviewed for this study have the resources to try to anticipate union demands for services in order to avert the possibility of unionization. Therefore, though union and non-union worksites can not be distinguished empirically in terms of services offered, it may well be unions that indirectly affect the level of services provided through the workplace. Fourth, it is unclear that the data that was collected contains or omits seasonality effects. This is probably true even though data was supposed to be collected on an annualized basis. Fifth, though variables relating the participation rates by sub-strata of the labor force at the workplace for various services were fitted empirically, it is suspected that the data did not yield a significant empirical relationship because it was not sufficiently refined to capture true employee subgroup participation rates. Sixth, the economic theory intimates that job transfer costs may be important in determining the voluntary quit rate and, *ceteris paribus*, thereby the level of services provided at each type of workplace. However, there were no meaningful measures that could be used to measure employee transfer costs incurred through job changes and this factor has been omitted from the analysis. Seventh, while the data collected did not contain a direct vacancy rate variable for each workplace, supposedly the combined effects of quits, layoffs, and a new hires (accessions) will reflect the vacancy rate. Further, since the data is cross-sectional, the omission of a vacancy rate will be expected to have a lesser effect on validity of

¹Therefore, the male and female layoff rates and the male and female accession rates will be used as excluded exogenous variables in two stage least squares analysis for "identifying" the estimated services equations.

this analysis than if it were a time-series study of worksites. Eighth, this investigation does not have information about the extent of employee fringe benefits on a worksite basis. It is, therefore, omitted from the analysis. Of course, fringe benefits affect the real wage bundle and, therefore, labor market behavior; but to the extent that comparable skills in the survey workplaces receive relatively equal packages of fringe benefits, the results below would be unaffected.

The Definitions of Variables

Table XII-2, created for the convenience of the reader, contains a comprehensive listing of definitions of the variables used in the analysis. The list has been subdivided into groups of variables corresponding to their order of presentation in the text below.

Predictive Models for Employee and Community Services Provided Through the Workplace

The Predictive Model for Employee Services

There are eight classes of employee services provided through the workplace that will be analyzed in this subsection. They represent a diverse range of economic activities, serving a multitude of social functions. For example, while each class of employee services is provided through the workplace, it is not necessarily consumed at the workplace. The transportation category of employee services frequently stops and starts just outside the gates of the worksite, never consumed at the workplace itself. Similarly, when the company acts as an agent by the purchasing of tickets, etc. for the employee, it provides a service that typically facilitates the consumption of something away from the worksite. On the other hand, medical employee services, such as emergency aid at the worksite, are rarely consumed at all; but when needed they typically are provided and consumed (usually by very few employees) at the workplace. Further, medical emergency employee services can be contrasted with security-protection services, which implicitly are being consumed by all workers at the worksite at all times. These examples are mentioned to emphasize the range and diversity of the eight classes of employee services that will be examined. Moreover, a priori, one might expect that a model using only economic explanatory variables will possess limited capabilities for explaining such a diverse range of services, particularly if their existence is justified in terms of social rather than economic functions.

Each service is defined as a binary variable--i.e., provide--do not provide the service--and corresponds to a class of employee services analyzed in the sociological analysis above (except in this section of the analysis these variables are strictly binary-qualitative). It is interesting to note that most firms offer some class of employee services through the workplace. Table XII-3 shows the percentage of the 83 firms considered in the economic analysis offering (at any level)

each of eight sub-classes of employee services through the workplace. Though the number of firms within the survey sample offering each of these employee services is relatively large, the pairwise correlation for offering these services is relatively small.

TABLE XII-3

SELECTED EMPLOYEE SERVICES PROVIDED THROUGH THE WORKPLACE: PERCENTAGE OF FIRMS PROVIDING EACH SERVICE

Type of Service	Percentage of Firms
Retail	39
Clerical	72
Medical	96
Craft	12
Agent	93
Education- Information	86
Transportation	85
Security	93

Using the binary definitions for seven employee services as the dependent variable, the predictive econometric model (described in Chapter XI) has been empirically tested. Table XII-4 shows the empirical relationship between these seven employee services and economic characteristics of the worksite for the 44 manufacturing firms in this study. It is clear that the total fit (\bar{R}^2) is not extremely high for any of the employee services. Put differently, the ability to predict which manufacturing workplace will offer a specific class of employee services is not very good. However, though little of the total variation is explained, there are several explanatory variables that are statistically significant predictors of employee service activities. First, urbanized work settings are more likely to provide employee services. Second, in Table XII-4 wage variables are significant explanatory variables for three of the seven employee services offered at manufacturing workplaces. However, the wage variates have differing effects for different types of employee services. Similarly, separation rates and the age of the work force appear to be significant predictors for three of the seven services, but not in a uniform fashion for each of the employee services. It is noteworthy that this size of labor force (LGEMP) does not affect, statistically speaking,

TABLE XII-4

PREDICTIVE MULTIVARIATE ANALYSIS: SELECTED EMPLOYEE SERVICES PROVIDED
THROUGH THE WORKPLACE: 44 MANUFACTURING FIRMS ONLY^{a,b}

Dependent Variables	Independent Variables								R ²
	LGEMP	PCTYNG	MSEP	FSEP	HOURAV	LGHRAV	DLOC	Constant	
DRETL	.053 (.901)	-.003 (1.72*)	-.005 (1.84*)	-.003 (.908)		.023 (1.51)	-.194 (1.62)	.775 -	.204
DMED	-.061 (.735)	-.006 (2.26**)				.107 (1.75*)	-.006 (.366)	.473 -	.185
DCLER	.066 (.868)	.003 (1.03)			.005 (1.61)		.328 (2.12**)	.201 -	.186
DCRAFT	.032 (1.42)				-.006 (1.74*)		-.084 (1.69)	.956	.178
DEDUINF	-.023 (.718)	-.003 (1.94*)	.003 (1.71*)				-.293 (3.47***)	.937 -	.262
DTRANS	-.073 (.869)			.005 (1.81*)	.020 (1.93**)		.187 (1.10)	.694 -	.148
DSECTY	.063 (1.45)		.003 (1.28)			-.011 (.722)	-.011 (2.31**)	.579	.147

^aDAGENT equation is omitted because it had a very poor fit: $\bar{R}^2 = .032$ with no significant coefficients.

^bFigures in parentheses are t-ratios for coefficients:

* indicates that t-ratio is significant at 10% level.

** indicates that t-ratio is significant at 5% level.

*** indicates that t-ratio is significant at 1% level.

These symbols for significance will be used throughout the analysis.

TABLE XII-5

PREDICTIVE MULTIVARIATE ANALYSIS: SELECTED EMPLOYEE SERVICES PROVIDED
THROUGH THE WORKPLACE: 39 NON-MANUFACTURING FIRMS ONLY^a

Dependent Variables	Independent Variables										Constant	\bar{R}^2
	LGEMP	PCTYNG	MSEP	FSEP	HOURAV	LGHRAV	DLOC	PCTSAL				
DRETL		-.004 (1.69*)	.008 (1.70*)		.086 (1.82*)	-.179 (1.82*)		.003 (1.41)		.785	.266	
BCLER	.004 (.765)		.007 (1.49)	.002 (.795)	.016 (1.73*)			.002 (1.06)		.422	.237	
DAGENT	-.123 (1.61)	.004 (1.70*)	.004 (.734)							.789	.143	
DEDUINF	-.004 (.632)					0.82 (1.52)		.002 (2.39**)		.735	.258	
DTRANS	.191 (2.09**)	.007 (1.91*)					.071 (1.10)			-.466	.244	
DSECTY	-.015 (.831)			-.005 (1.60)		-.079 (.963)		.002 (1.46)		1.03	.181	

^aDMED and DCRAFT equations are omitted because they had very poor fits (i.e., \bar{R}^2 of .07 and .05, respectively) with no significant coefficients.

the probability of offering a specific class of services, indicating that there are no scale effects for the qualitative analysis of employee services offered through manufacturing workplaces.

Table XII-6 examines the predictive regression results for six employee services for the 39 non-manufacturing firms in the study. Again, the total fit of the model is not exceptionally good, but there are coefficients for explanatory variables that are statistically significant predictors of employee services provided through the worksite. For non-manufacturing firms, the age composition of the labor force (PCTYNG) appears to be an important explanatory variable. The location of the worksite (DLOC) does not seem to be an important predictor variable for types of employee services offered at non-manufacturing worksites; this is in contrast with the results for manufacturing firms.

Although the results in these two tables (measured by total fit of regressions) may seem unimpressive, it should be noted that the variables that explain non-manufacturing firm behavior do not relate well to those explaining manufacturing firm behavior. Statistically, using a test for sets of regression coefficients suggested by Chow (1960),¹ It can be shown that the behavior of manufacturing and non-manufacturing firms in terms of providing employee services is different.²

The Predictive Model for Community Services

There are seven community-oriented classes of services provided through the workplace that will be considered in this analysis. Each class of community-related services is defined as a binary-qualitative variable, paralleling the sociological analysis above. They are listed in Table XII-6 by the percentage of firms offering each class of community services. It is also clear that the range in the classes of community services provided through the workplace is large. Virtually

¹The estimates of regressions generated for each class of services for the two groups of firms (manufacturing and non-manufacturing) can be tested using the approach of Chow (1960), "Test of Equality Between Sets of Coefficients in Two Linear Regressions." The null hypothesis is that the two regressions are drawn from the same structural system (population). The ratio of the differences between 1) the sum of the squared residuals for a regression of the pooled data for the two groups, and 2) the sums of squared residuals from the two separate regression (all regressions corrected for degrees of freedom) is F-distributed. Using the test for the six services listed in Table XI-5, the null hypothesis for each is rejected at the 10% level or better. These results suggest that it is likely that the economic structure for providing services at manufacturing and non-manufacturing firms is different.

²Also, the 83 firms were split in this part of the analysis to avoid heteroscedasticity problems, as discussed above.

all firms provide minority-oriented community services; the other community services provided through the workplace exist to a much lesser extent. As has been found in the analysis of the employee services provided through the workplace, the community services, with the exceptions of minority and general community affairs services and consumer-oriented programs services, are not highly inter-correlated.

TABLE XII-6
PERCENTAGE OF FIRMS PROVIDING SPECIFIC TYPES OF
COMMUNITY-ORIENTED SERVICES

Type of Service	Percentage of Firms Providing This Service
General Community Affairs	78
Consumer Program	36
Minority-Oriented	93
Esthetic	7
Child Care	5
Environmental	24
Community Health	12

The empirical results of the predictive model are shown in Table XII-7. The model is a relatively good overall predictor for only two community-oriented services, general community affairs (DCA) and consumer programs (DCONS). (Moreover, in general, the predictive model fits employee services better than community services.) Since, in the cases of DESTH and DMIN virtually all worksites offer some degree of these services, it should be expected that the predictive model, using economic characteristics of the workplace as explanatory variates, is unlikely to be a good overall predictive tool (i.e., in terms of \bar{R}^2). Also, manufacturing firms are indistinguishable from non-manufacturing firms in terms of DMIN and DESTH, which is consistent with the poor overall predictive power of the statistical model for these community services.

On the other hand, there are interesting results in terms of the significance of the coefficients for several explanatory variables. First, manufacturing firms are less likely to offer several community services (DCA, DCOMFAM, DCOMHEAL).¹ Second, manufacturing firms are more likely to provide consumer services, such as credit information or

¹Using the statistical tests suggested by Goldfeld and Quandt

consumer education. Of course, this may be interpreted as an indicator that manufacturing firms are relatively aggressive in the developing of their own product markets. That is, there is a strong private market incentive rather than a community orientation for providing this service. Worksites that have a relatively young labor force are more likely to offer minority community services, and are less likely to provide community services for consumer programs or esthetic programs. Finally, urban firms (DLOC = 0) have higher conditional probabilities of providing most community-oriented services. This result appears to be consistent with one's intuition that urban firms, because of their proximity to urban communities, should have relatively strong economic incentives for providing community-oriented services.

In summary, the predictive models for employee and community services, though not robust overall predictive tools, indicate that there may be basic differences in the propensities of manufacturing and non-manufacturing firms for providing services through the workplace. While there does not appear to be a significant worksite scale effect (measured in terms of the regression coefficients for the logarithm of the number of employees) for the provision of services through the workplace, urban location, various forms of the money wage rate, the age composition of the labor force, and quit rates for males and females do appear to affect the likelihood that certain classes of services will be provided through the workplace. However, the effects of these variables on the provision of services is not uniform. Finally, on the whole, the predictive models for employee services have a superior overall fit than those for community services. This is not surprising because, according to the theory of the labor market promulgated above, employee services are part of the direct economic determinants of labor market behavior; on the other hand, community services are less directly related to the labor market decision process, and, therefore, are less likely to be explained by pure economic variables.

(1965), "Some Tests for Homoscedasticity," the residuals from the regressions for all firms for community services were not found to be heteroscedastic. Therefore, the data for this analysis have not been split into manufacturing and non-manufacturing sub-populations.

TABLE XII-7
 MULTIVARIATE PREDICTIVE ANALYSIS: COMMUNITY SERVICES PROVIDED THROUGH THE WORKPLACE

Dependent Variable	Independent Variables										R ²
	LGEMP	PCTYNG	PCITMAL	MSEP	FSEP	HOURAV	DLOC	DSIC	CONSTANT		
DCA	.062 (1.39)			.004 (1.77*)			-.399 (3.95***)	-.458 (3.88***)	.714	-.	.301
DCONS		-.003 (1.71*)	.002 (1.51)		-.005 (1.42)		.152 (1.63)	.472 (4.33***)	.321	-.	.273
DMIN		.002 (1.74*)				-.003 (1.67)	-.087 (1.96**)		.975	-.	.107
DEATH		-.002 (1.75*)				-.003 (1.58)	-.047 (1.77*)		1.02	-.	.113
DCOMFAM	.066 (1.36)	.002 (1.11)			-.006 (1.56)	.012 (1.58)	-.172 (1.44)	-.286 (2.06**)	.259	-.	.151
DENVIRON	.071 (1.31)	.003 (1.64)		.003 (1.06)				.153 (1.27)	.314	-.	.129
DCOMHEAL	-.063 (1.32)						-.106 (1.08)	-.341 (2.97***)	.679	-.	.194

Structural Models for the Analysis of the Costs of Services
Provided Through the Workplace

This section of the paper will analyze the economic structure of the costs for providing services through the workplace. The basic type of structural relationship that will be examined consists of a service cost variate as the dependent variable and economic data about the labor force and the worksite as the explanatory variables. In accordance with the economic theory of the labor market developed in Chapter XI, the male and female quit rates and the wage rate variables, though predictor variables for the economic cost structure of services, are endogenously determined. Therefore, two stage least squares will be used to generate consistent statistical estimates for the coefficients for the multi-variate regressions. The analysis will be conducted in two subsections: the cost analysis of five specific employee-oriented services, and the cost analysis for principal services provided through the workplace.

The Cost Analysis of Five Specific Employee-Oriented Services

Most cost data on a worksite basis for specific micro-classifications of services provided through the workplace were virtually impossible to obtain. This is true because the basis for firm accounting records do not coincide with many of the classes of services of interest to this study; and there are many indirect, almost gossamer, hidden costs that are very difficult to ferret out and relate to specific services. Fortunately, there were five specific classes of expenditures for services that appeared to be fairly accurate on a worksite basis, and merited economic analysis. Note that these expenditure categories do not correspond to the employee services previously analyzed above in this chapter or the sociological analysis. All of the five categories of services are employee-oriented services provided through the workplace. These services are measures for the firm's expenditures on 1) the employee association activities provided through the workplace, 2) the employee cafeteria, 3) employee health services provided through the workplace, 4) employee parking facilities, and 5) all subvented employee services. The last of these, subvention expenditures, is probably the most reliable because it is a readily retrievable accounting datum for most firms. Table XII-8 shows the number of worksites and the average annual expenditures by worksites for providing each of these services. Cafeteria and health dominate the five services in terms of frequency and costs of provision.

The data for these five specific classes of employee-oriented services can be used to compare the relative statistical powers of the predictive model approach and the structural cost model. Table XII-9 shows the econometric results for the predictive model, using a binary variate (i.e., provide-do not provide the service) for these five expenditures categories for employee-oriented services. The empirical results are apparently consistent with those obtained earlier for employee and community services in terms of the relatively weak overall explanatory fit (\bar{R}^2) for the sample firm variation.

TABLE XII-8^a

AVERAGE EXPENDITURES BY FIRMS ON SELECTED SERVICES
PROVIDED BY THE WORKPLACE

Service	Number of Firms Providing the Service	Average Annual Expenditure
Associations	36	\$ 6,300
Cafeteria	42	102,300
Health	57	62,400
Parking	20	6,800
Subvention	32	10,500

^aThis table is based on the cases of firms for which data is available on both expenditures and services.

Unlike the earlier findings for employee and community services provided through the workplace, the size of the workplace (measured by the logarithm of the number of full-time employees at the site) appears to have a statistically significant effect on the likelihood of the existence for four out of five services. For the provision of health, cafeteria, and parking, the larger the worksite, the higher the probability for the existence of these services. Interestingly, for the larger worksites, it is slightly less likely to have funds set aside by the firm for employee association activities. Other variables that are statistically significant for predicting which worksites will provide these five services are the age composition of the work force (PCTYNG), percentage of the work force that is male (PCTMAL), female quit rate (FSEP), the wage rate (HOURAV), location of worksite (DLOC), the type of economic activity conducted at the worksite (DSIC), and the percentage of the work force that is full-time salaried employees (PCTSAL). However, each of these variables affects no more than two of the services. This, too, appears to be consistent with the above empirical findings for the employee and community service.

Tables XII-10 and XII-11 contain the multivariate regressions derived from the estimation of structural cost models. The data base for these two tables is the firms that provided each of the five specific services (not all 83 firms). Table XII-10 examines the total costs of providing each of the five services through the workplace. Table XII-11 examines the costs per worker for each of the five services provided through the workplace. The results recorded in each table are the second stage regressions derived by using two stage least squares. In general, these tables indicate that the sample variations explained for either cost specification for each service by the economic structural

TABLE XII-9
 PREDICTIVE MODEL FOR SELECTED SERVICES OFFERED THROUGH THE WORKPLACE

Dependent Variables	Independent Variables										CONSTANT	\bar{R}^2	
	LGEMP	PCTYNG	PCTMAL	MSEP	FSEP	HOURAV	DLOC	DSIC	FCTSAL				
DSUBVEN	.093 (1.49)	.003 (1.44)	.003 (1.82*)				-.123 (1.80*)	-.174 (1.26)				-.076 -	.095
DHEALTH	.136 (2.66***)	.004 (2.40**)	.003 (1.46)		-.004 (1.70*)	.004 (1.18)		.328 (2.91**)	-.003 (1.70*)			-.201 -	.340
DCAF	.148 (2.38**)	.004 (1.70*)		.005 (1.45)	-.005 (1.07)		.149 (1.26)					-.077 -	.247
DPARK	.119 (2.16**)											-.359 -	.112
DASSOC	-.009 (1.72*)				-.005 (1.03)	.013 (1.68*)	-.153 (1.29)					.391	.120

TABLE XII-10
TOTAL COSTS FOR FIRMS PROVIDING SELECTED SERVICES THROUGH THE WORKPLACE^a

Dependent Variables	Independent Variables										CONSTANT	R ²
	LGEMP	PCTYNG	PCTMAL	MSEP	FSEP	RATIOH	DSIC	PCTSAL				
SUBVEN	.968 (.520)	.096 (1.09)		.108 (.604)	.406 (3.67***)	-.578 (1.81*)	11.5 (1.88*)	.162 (1.69*)			-7.12	.510
HEALTH	1.65 (.093)			-1.05 (.939)	1.97 (1.45)	3.00 (1.41)	-79.2 (1.72*)	1.05 (1.68*)			27.5	.184
CAF	44.6 (1.80*)	1.19 (1.06)		- .141 (.079)	-1.49 (.316)	-5.56 (1.73*)	-101. (1.47)				-101.	.291
PARK	5.67 (2.29**)		.009 (1.41)	.008 (.635)	-.134 (.694)						- 33.6	.464
ASSOC	3.41 (2.05**)			-.037 (.635)	-.053 (.338)	-.175 (1.10)	- 3.11 (1.07)				- 3.86	.265

^aMethod of estimation is TSLS; excluded exogenous variables used in the first stage and, therefore, omitted from the list of independent variables for the second stage above are male accession rate, female accession rate, male layoff rate, and female layoff rate.

TABLE XII-11

COST PER EMPLOYEE FOR FIRMS FOR SELECTED SERVICES PROVIDED THROUGH THE WORKPLACE^a

Dependent Variables	Independent Variables										CONSTANT	\bar{R}^2
	LGEMP	PCTYNG	PCTMAL	MSEP	FSEP	RATIOH	DLOC	DSIC				
SVEMP	-199 (2.75**)	5.76 (1.74*)		-5.40 (.760)	2.38 (.339)	-5.87 (1.67)					701	.565
HTEMP ^b	-340 (3.92***)	6.45 (2.03**)		-8.40 (1.83*)	3.98 (.524)	-23.1 (1.93*)		-391 (1.82*)			1260	.454
CAFEMP	-722 (1.41)		48.3 (1.71*)	-19.9 (.738)	-42.7 (.603)	-63.0 (.870)	1558 (1.45)	-2394 (1.74*)			2072	.368
PKEMP	-21.8 (.780)			.557 (.351)	-.156 (.070)	-.826 (.325)		74.5 (1.47)			91.0	.193
ASOEMP	-59.0 (1.71*)		-.854 (1.10)	-1.32 (1.84*)	-1.42 (1.13)	-1.38 (.681)					424	.173

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^aMethod of estimation is TSLS; excluded exogenous variables used in the first stage and, therefore, omitted from list of independent variables for the second stage above are male accession rate, female accession rate, male layoff rate, and female layoff rate.

^bDependent variable is in hundreds of dollars.

model is superior to the predictive model. This should not be surprising because the explanatory variables are economic data, which should explain economic phenomena such as expenditures (costs) for services.

Tables XII-10 and XII-11 represent two slightly differential view points for behavior in the labor market and the provision of services through the workplace. Table XII-10 relates to the total cost of providing the services at the workplace. As such, the independent variables affect the level of costs to the firm as a whole. Therefore, the focus of this table is firm-oriented, emphasizing the inter-relationship between total costs, wage rates and quit rates (controlling for other workplace characteristics). Table XII-11, on the other hand, is employee-oriented, because it examines the inter-relationship between expenditures per employee for each service (i.e., a crude surrogate for the employee benefits received from the provision of the service), money wage rates, and the quit rates.

Table XII-10 indicates that the total cost model best explains the total variation expenditures across worksites for subvention and parking. The coefficient of the wage rate variable, RATIOH, as expected, is negative for four of the five service categories and statistically significant for three of them. This is quite a potent result given that the wage data for the worksites to some extent are a measure of workplace skill mixes and wage scales as well as relative attractiveness of the worksite. Further, the wage ratio is not necessarily an ideal surrogate for its theoretical counterpart: a measure for the wage rate alternatives available to employees at other jobs. The quit rates coefficients are not statistically significant, except for one (of the ten) case where it is of the "wrong" sign. Not surprisingly, the size of the workplace (LGEMP) is positively related to the expenditure level for all services and statistically significant for three of the services. However, since LGEMP is a logarithmic transform for the number of employees, there is reason to believe that there are economies of scale for providing certain services through the workplace. The coefficients of PCTSAL and DSIC significantly affect the level of expenditures for health and subvention.

Table XII-11, using costs per worker for each of the services as the dependent variable, shows that the structural model best explains the total cost variation among worksites for subvention, health, and cafeteria. The coefficients of the quit rates are negatively related to the five services for seven of the ten cases; they are statistically significant only twice (both for MSEP and both coefficients are negative). The coefficients of wage rate ratio are negative for all five services, though statistically significant only once. Ceteris paribus, the larger the workplace, the lower the expenditure per worker on each service. This may indicate, as surmised from the total cost regressions, that there exist economies of scale in providing the five types of services through the workplace.

The total expenditure and per employee expenditure analysis for these five service categories is, to a large extent, consistent with

the theoretical statement for the relationship between costs to the firm, wage rates and quit rates. The coefficients of the wage rate variables appear to conform to the theoretical expectations better than the coefficients of the quit rates. Also, coefficients for FSEP and MSEP appear to behave for many service categories in opposite ways. These latter results are consistent with, as is frequently assumed, the hypothesis that male and female labor market prospects and/or decision-making criteria differ.

The Cost-Analysis for All Principal Services Provided Through the Workplace

According to the ultra-economic model, a firm will allocate expenditures between productive inputs such that the marginal returns on the last dollar spent for each expenditure category are equal. If firms behave in this fashion, one might examine the aggregate costs for large categories of services provided through the workplace, treating them as productive inputs, and their relationship to quit rates and money wage rates. This section pursues this aggregative approach by dividing the cost of principal services into three categories: 1) the cost of providing all principal services through the workplace, 2) the cost of providing all principal employee services through the workplace, and 3) the cost of providing all principal community-oriented services through the workplace. In this investigation, it has been found that the aggregate worksite expenditure data is substantially more reliable than micro-services cost data. This is primarily a function of the accounting records kept on a worksite basis.

The analysis will attempt to explain total expenditures and per worker expenditures at worksites for these three service categories. However, heteroscedasticity problems made it necessary to split the worksites into manufacturing and non-manufacturing sub-groups. Tables XII-12 and XII-13 show the empirical findings, using two stage least squares, for the economic structural model for the costs of services. The first of these tables examines the results for manufacturing workplaces; the latter for the non-manufacturing workplaces. Note that in Tables XII-12 and XII-13, all sets of coefficients that are not individually statistically significant possess joint significance (using an F-test at the ten percent confidence level).

In both tables, the coefficients for the quit rate variables are negative for nineteen of the twenty-four possibilities. The coefficients are significant only three times, all for the cost per worker analysis for the manufacturing workplace--once with a positive coefficient. As above, the quit rates are not systematically or significantly related to the costs of providing services through the workplace. However, close examination of the quit rates suggests male quit rates coefficients in the costs of employee services and all services equations (the latter containing the former), on a total or per employee basis, are more consistent with the economic theory than those of the female quit rates. There are at least two tentative explanations for this phenomenon. First, employee services and all principal services (in so far as they contain

TABLE XII-12

ECONOMIC STRUCTURAL ANALYSIS OF SERVICES PROVIDED THROUGH THE WORKPLACE: 44 MANUFACTURING FIRMS^a

Dependent Variable	Independent Variables										CONSTANT	\bar{R}^2
	LGEMP	PCTMAL	MSEP	FSEP	RATIOHM	RATIOIHM	DLOC	PCTSAL				
VALSER	138.1 (4.63***)	.771 (1.62)	-1.00 (.943)	.980 (1.01)	2.11 (1.32)		97.1 (1.46)				-535.6 -	.419
VALCS	52.5 (2.14**)		1.06 (.820)	-1.07 (1.22)	2.86 (1.41)						-267.1 -	.192
VALES	92.1 (6.28***)		-.966 (1.07)	1.13 (1.42)		-6.40 (.591)	43.6 (1.51)	.889 (1.93**)			-303.7 -	.618
SEREMP	226 (1.19)		-.001 (2.77**)	-.001 (1.33)		-.135 (1.67)	.661 (1.66)				1.185 -	.306
CSEMP	.065 (.812)		.001 (2.28**)	-.003 (.647)	.074 (.733)						-.180 -	.166
ESEMP	-.239 (1.63)		-.018 (1.86*)	.002 (1.13)		-.126 (1.83*)	.706 (1.91*)				.001 -	.313

^aTechnique of estimation is TSLS; the exogenous excluded variables used in the first stage, and, therefore, not listed as independent variables for the second stage results above, are the male accession rate, the female accession rate, the male layoff rate and the female layoff rate.

TABLE XII-13

ECONOMIC STRUCTURAL ANALYSIS OF SERVICES PROVIDED THROUGH THE WORK 39 NON-MANUFACTURING FIRMS^a

Dependent Variable	Independent Variables										\bar{R}^2
	LGEMP	PCTYNG	PCTMAL	MSEP	FSEP	RATIOHNM	RATIOHNM	DLOC	PCTSAL	CONSTANT	
VALSER	38.3 (.584)	8.07 (3.0***)	-7.42 (2.75***)	-9.31 (1.10)	-12.4 (.963)	-90.8 (2.07**)	206.1 (1.67)			-384.9	.448
VALCS	-16.9 (.327)	3.68 (1.85*)		-8.2 (.997)	-13.7 (.914)	-2.31 (1.33)	185.3 (1.96*)			-71.7	.276
VALES	56.3 (1.03)	4.52 (2.15**)		-10.2 (1.41)	-11.6 (.981)			2.86 (1.54)		-266.0	.323
SEREMP	154.2 (4.80***)	3.19 (2.59***)		-211 (1.41)	-1.36 (1.20)					447.5	.652
CSEMP	96.5 (4.78***)	2.00 (2.58**)		-117 (1.20)	.977 (1.14)	4.43 (1.59)	50.0 (1.36)			278.7	.651
ESEMP	57.8 (4.82***)	1.20 (2.60***)		-391 (1.67)	-1.98 (1.31)	-2.47 (1.78*)	29.3 (1.33)			168.8	.653

^aTechnique of estimation is TSLS; the exogenous excluded variables used in the first stage, and, therefore, not listed as independent variables for the second stage results above, are the male accession rate, the female accession rate, the male layoff rate and the female layoff rate.

the former) are provided through the workplace because supposedly they yield fairly direct benefits to the worker, which should engender an empirically observable effect on labor supply decisions. On the other hand, firms offer community services through the workplace, in part, to create an environment that builds worker's pride or social commitment to the firm. However, the more plausible motivation behind a firm's providing community services is related to the development of its own products market. As such, the community-oriented services should be statistically less related to the observed economic behavior of the labor market than are employee-oriented services. Second, the rationale for the female and male labor supply function may differ because of several basic market factors. It is well-known, for example, that the supply of female workers is much more responsive to cyclical economic activity than the supply of male workers. Similarly, it is possible that female employee incentives for job search or the value of services provided through the workplace differ for those of male employees in a systematic way. This may reflect perceived market alternatives, which historically have been significantly inferior for women.

The coefficients for the wage rate variables for employee services equations exhibit the theoretically anticipated sign, and are statistically significant in all but one case. The results are non-uniform for the coefficients of the wage rate variables in the community services equations; and those in the all service equations are a composite of the community and employee services effects. Again, this can be explained by the fact that workers respond economically to the services that affect them most directly--employee services.

The \bar{R}^2 for the principal employee services equations for total and per worker expenditures, and for manufacturing and non-manufacturing workplaces, is higher than for the comparable all principal services or principal community services equations. This, too, is consistent with the notion that the employee services equations reflect economic behavior in the labor market, and can best be explained by economic data about the labor market. Finally, an inspection of the various coefficients for variables in Tables XII-12 and XII-13 will yield the tentative hypothesis that the provision of services through manufacturing workplaces is in some systematic economic-structural way different from non-manufacturing workplaces.¹

¹Using modified statistical tests similar to those suggested by Chow (1960), "Tests of Equality Between Sets of Coefficients in Two Linear Regressions," the hypothesis that there are structural differences in the provision of services between manufacturing and non-manufacturing worksites has been tested. The null hypothesis is that the coefficients for the structural cost equations are generated from the same underlying types of populations. The null hypothesis is rejected at the five percent confidence level for the econometric estimates for the costs of all principal services and principal employee services; the hypothesis can not be rejected, even at the ten percent level, for the principal community services costs estimators. Therefore, it appears that the level of employee-oriented services provided through the workplace varies in a systematic way between manufacturing and non-manufacturing workplaces.

Conclusions

The conclusions to be drawn from the economic analysis are tentative, and are subject to the limitations delineated in the text. However, the analysis does yield several interesting results, which should be the basis for future refinement in research. The econometric models created and tested in this chapter indicate, as would be expected from the economic theory, that there exists a relatively strong negative relationship between the level of expenditures for employee-oriented services provided through the workplace and the money wage rate. The relationships between quit rates and employee-oriented services are less certain. In particular, the male employee quit rates and the level of expenditures for employee services are frequently negatively related; while the female quit rates typically do not follow the theoretical expectations. This may be explained, in part, by the nature of the male and female sub-markets for employment, and, in any case, needs further analysis for clarification. The expenditure patterns for providing employee services at manufacturing and non-manufacturing worksites appear to differ in a systematic fashion. This, too, should be an issue for future study. Finally, the expenditures on community-services provided through the workplace are not well related to economic variables for the labor force or worksite. To a large extent, this should be expected because the employee does not frequently derive benefits very directly from community-oriented services and the employer's gain from the community services may be supra-worksites in terms of consumer product market penetration. There is tentative statistical evidence that there exist economies of scale for certain services provided through the workplace. Finally, the economic structural cost models appear to be systematically superior to the predictive models for services.

This study does not attempt to assess the economic value to society of services provided through the workplace. It should be clear, however, that a sufficiently refined analysis of labor market behavior, similar in approach to the one presented above, could be utilized to measure the societal benefits and costs of providing services through the workplace. Using wage differential and differential firm profitability, the economic trade-offs between wages, quit rates, and services could be evaluated for various types of services provided through several kinds of work settings. Such an analysis would use economic structural models to show "revealed" socioeconomic preferences in terms of dollar trade-offs. These trade-offs could be used as direct inputs for a benefit-cost analysis that examines the social desirability of specific workplace services.

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A PRACTICAL VIEW OF THE NEEDS OF
THE MANAGER AND THE WORK FORCE

William Gomberg

CHAPTER XIII

DAY CARE CENTERS: THE NEED OF THE FUTURE

Services throughout American enterprise will reflect a wide variety of influences. There will be those services that are provided which are indigenous to the operation of a plant. For example, if a plant is located in a rural area and depends upon the transportation of its work force from home to plant then, quite clearly, it expects each of the workers to furnish himself with automobile transportation either by group riding or by individual riding. The provision of a parking space for employees' automobiles is not a benefit but it is indigenous to the operation of the plant.

By the same token, employees of Center City enterprises find that if they are to use an individual motor car then, nine times out of ten, they must assume financial responsibility for paying for the parking. It is assumed that the public transportation available to the downtown area is part of the urban infrastructure and the enterprise, therefore, need not concern itself with transporting the workforce from where they live to the downtown area.

Experiments are taking place in certain newly reclaimed downtown areas like Los Angeles where the Atlantic Richfield Company has just built a huge complex. The twin towers topping the development which are occupied by ARCO and by the Bank of America are the hub of a huge shopping area and general downtown area which it is hoped will go far to reclaim what was a deteriorating center city slum.

The Atlantic Richfield Company, despite the fact that it is in the business of providing fuels for automobiles, has decided that bringing individual cars to the downtown area makes no sense. It therefore conducted a survey of its entire workforce to find out where they were domiciled and arranged with the public transportation system of Los Angeles for special commuter buses non-stop from these residential areas to the entrance to the ARCO complex in the morning, and then, at 4 or 5 o'clock the same buses appear and take the workers back to where they came from. ARCO, thereby, is able to avoid providing a huge parking area on land that is extremely valuable.

On the other hand, a manufacturing plant in the rural areas surrounding the city would be perfectly satisfied to set aside a good part of the land for parking area inasmuch as the square foot rent does

not begin to approach the price of square footage downtown. The remaining problem then becomes, what happens when this rural area begins to increase its population. It sees its property value increased indefinitely and it finds that the management resents more and more setting aside this valuable area for just parking. The problem can perhaps best be understood by looking at the problem of these huge shopping malls in outlying areas. Quite obviously, once the complex is created, the rental revenue that these enterprises can command will tempt the owners to encroach more and more upon the parking space of the customers they are seeking to bring to their complex. At what point will they resist the temptation to increase rental revenue by encroaching upon the parking area lest they create the same problem in the outlying areas that now bedevils the downtown area?

Services such as parking, however, are indigenous to the work performed. Our interest is in auxiliary services, independent of the work, that are designed to increase the living effectiveness of the work force.

By and large, the American worker has preferred to take his earnings in cash and purchase those services he required in the open market. In those cases where the worker has aimed to direct his rewards to specific services, his union has negotiated a fringe cash package for these benefits. The problem of administering these benefits is worked out in collective bargaining where it exists.

For example, the economic package of collective bargaining is generally divided between cash wage increments and fringe benefit increments; together, they are calculated as the cost of the bargain. Fringe benefits will include health payments such as a policy to cover Blue Cross and Blue Shield premium payments or more extensive group health insurance benefits. The size of the group will be used to negotiate a more advantageous premium cost than would be the case if each worker was paid an additional cash increment to purchase an individual policy.

Similarly, group purchase will be used to obtain a better travel bargain than if each worker was to use his vacation pay to purchase an individual travel package for vacationing abroad.

More often than not, the workers' union, in partnership with the firm, will organize and administer the group as is so often the case in matters of health. In vacation matters, the union is likely to be the sole administering institution.

Although these activities as well as others of a similar nature make use of the work institution as a power mechanism in receiving more effective bargains than would be the case if individually purchased, the actual performance of the service is seldom if ever linked to the work site.

Our commitment is to look into those services whose performance is linked directly to the work site; the aim is to enable the worker

to make more effective use of the time available to him for the performance of living chores. There, of course, is an implicit assumption that the performance of these chores is a disagreeable activity whose time should be minimized. Thus, if a worker can shop for his groceries and other household needs on his way from work or during his lunch time or work breaks, then, presumably, other time formerly devoted to this activity is now available for "higher" living pursuits. However, anyone who has spent any time at shopping centers like King of Prussia's or Cherry Hill's shopping malls is made aware at once that it is the occasion for a family outing; the activity of acquisition is what life is all about. This may have little appeal to a victim of the Puritan ethic but, then again, the Puritan ethic commands more vocal obedience than performance allegiance in a consumer oriented affluent society irrespective of its officially recognized scarcity oriented ideological history.

In our preliminary reports, we have dwelled upon the roots of many of these site linked services to the unsavory history of the company store and company homes in isolated communities. First initiated by management to provide services that were not available in these isolated areas, they were rapidly converted into managerial instruments of control and power over the work force which is today rejected. The ubiquitous spread of the private automobile along with unionization has, by and large, liquidated this practice.

An automobile workers' union will organize a cooperative grocery store to overcome the allegedly high charges of profiteering made by workers in an inflationary era. However, as initially unpaid volunteers' help is replaced by paid employees in the course of institutionalization, the advantages of good intentions, more often than not, are overcome by limited managerial competence. The small markup on each item belies the charge of unconscionable profiteering. This kind of service has seldom survived the initial enthusiasm of its idealistic creation when economic realities have asserted themselves.

On the other hand, union financed cooperative housing has been a success. When we link this activity to the work site, it seems to offer no more saving of time as a measure of living efficiency than privately financed housing; that is, if we define living efficiency as the saving in travel time between house and work site. The housing cooperatives of the unions seldom offer a greater location advantage over privately financed housing. To be sure, the rental savings they offer the worker are real enough, but, again, this is not the problem that makes up our area of commitment.

In an effort to determine where it would be appropriate to experiment, attention is again called to our survey of some 106 firms located in the Delaware Valley to discover what services are being performed outside the immediate work committed activities that would, presumably, increase general living efficiency rather than work productivity, though they are not necessarily mutually exclusive.

An example of the distinction we have in mind follows in the

health area. A medical dispensary on the work site provides the worker with treatment for work accidents and is work related. A health plan including the worker's dependents to treat all illness is the kind of auxiliary service we have in mind. Of course, it can be argued that such a plan, by removing the worries of illness from the worker, contributes to better attendance and higher productivity. However, the relationship between work effectiveness and the benefit made available is far more remote in this latter case than in the former.

Good examples of such general medical facilities are the New York Union Health Center of the International Ladies Garment Workers Union and the Philadelphia Medical Center of the Amalgamated Clothing Workers of America. Both of these institutions are located in the garment center markets and offer workers a general medical service in the immediate vicinity of their working sites. They are supported by fringe wage payments for which employees are taxed in accordance with the payroll. This institutional service is to be distinguished from Blue Cross and Blue Shield payments, also negotiated as fringe benefits, that are unrelated to the work site and are designed to permit beneficiaries to choose freely the personnel and location of the facility where the worker will seek medical care.

Our attention is directed to the latter kind of case. With this criterion in mind, we examine the sample of 106 firms to determine what services are now being performed. We then examine what this list suggests in the way of what's available, what is worth expanding, if any, and, finally, what service or services are so important, or bid fair to become so important that they warrant model experimentation to determine how this service should be performed most effectively.

What the Survey Showed

The sample of the 106 establishments surveyed divide themselves into 58 unionized enterprises and 48 non-unionized enterprises. Some of these non-unionized enterprises are the non-union sites of a complex other of whose affiliate units may be unionized elsewhere. In surveying services offered by enterprises, union or non-union, it is well to keep in mind that the union's attitude influences the non-union establishment as much if not more than the union enterprise. The personnel director of the non-union enterprise will, at times, anticipate union demands and make these services available to the employees of his company even sooner than the union company. This may be a means by which he persuades his employees that they do not need a union. It is, for this reason, that the union attitude influences both the union and non-union employment site, the first by direct influence, the other by indirect influence.

It should be noted that most of the firms that are union are in manufacturing and those that are in services are unorganized. This has its impact on services because there is peculiar relationship between union and non-union which is a reflection of the basic kind of

industry in which the workers find themselves rather than the status of union or non-union.

Following are some ideas of the distribution of auxiliary services furnished by employers to employees in our sample of 106 firms.

Coffee breaks are distributed as follows between the union and non-union plants.

	Union	Non-union
No coffee breaks	7	2
Informal coffee break	15	20
1 coffee break	6	10
2 coffee breaks	30	16

Whether or not employees are permitted to leave the work site during the coffee break will determine the need for services outside the immediate plant. Of our sample of 106:

	Union	Non-union
Permit no leaving	30	24
Permit leaving	13	18
Mix	8	4
No coffee break	7	2

Twenty-nine union plants and 37 non-union plants make food available to their employees, mainly in cafeterias. Twenty-six union and 11 non-union plants make no such facility available. Three of the union plants do it exclusively for their executives.

Vending machines dispensing snacks and other foods are available in 56 union plants and 36 non-union plants. The rest do not make this service available, either union or non-union.

Services such as are listed above are generally defined as working conditions and are a subject for bargaining in collective agreements. The number and time lapse of coffee breaks are negotiated in most blue collar contracts. When employers are persuaded to substitute a bank of vending machines for a short order cafeteria by vending machine sales organizations in isolated work sites, this change will result in grievances filed by workers that a change of working conditions is being instituted without consultation.

Following is a list of services that are available to the firms both union and non-union that do not arise in normal collective bargaining discussions except in a most tangential manner.

<u>Drug Store Facilities</u>	Union	Non-Union
Available	5	10
Not Available	53	38

In many cases, this drug store might be in the immediate vicinity of the plant or it may consist of a concession rented within the plant premises.

<u>Shopping for Food Facilities</u>	Union	Non-Union
Provided within industrial facility	5	4
Not provided	53	44

Merchandise generally furnished by a concessionaire is available at 8 union plants and 18 non-union plants. The remainder have no such access to any such facility.

Personal use of factory equipment is distributed as follows:

	Union	Non-Union
Freely available	9	9
Prohibited	40	31
Executives only	1	0

Informally, equipment may be used where it hasn't been defined too carefully and into this category fit 8 union and 8 non-union plants. Rental of company equipment is made available to 1 union and 2 non-union firms. The rest of the companies, both union and non-union, do not make this rental available, except for 1 non-union company that does it on a highly informal basis. None of our plants, union or non-union, rented any company property to its employees.

Typing services are made available to the employees of 4 union plants and 4 non-union plants. No such services are made available to 34 union and 23 non-union plants. Executives have access to typing at 1 union plant and 1 non-union plant. Informally, these services may be made available in 19 union and 20 non-union plants.

Copying or xeroxing services similarly are available to 3 union plants and 10 non-union plants. It is not available to 28 union plants and 18 non-union plants. Executives only enjoy such services from 1 non-union plant. Informally these services may be made available in 27 union plants and 19 non-union plants.

Shoe repair and shine services are made available to employees

of 5 union plants and 5 non-union plants. It is not available to 53 union plants and 43 non-union plants.

Barbering services are available to the employees of 3 union and 3 non-union plants and not available to 55 union and 45 non-union plants.

A wide variety of building maintenance services may be performed where the firm itself is engaged in related engineering activities but the activity itself will be on a highly informal basis where the employee who wants the service performed is permitted access to the craftsmen who can do it at a discounted rate. This includes items like waterproofing, roofing and other general forms of home maintenance, including painting, plumbing and janitorial services and general building construction, including entire programs of building reconstruction. Likewise, printing services will be available if it is within the purview of the skills of the institution. Computer programming fits into the same category.

If the company is engaged in the manufacture of electrical appliances, the employee customers for some of these employees have the privilege of a free repair service.

Laundry services, window cleaning and house cleaning services, again, are furnished where they are natural to the firm's activity and then on a highly informal basis and by very few of the firms.

Thirty-nine companies make available to their employees discounts on company products and services and 35 non-union plants do the same. The remainder do not.

Credit unions are found in 28 union plants, 14 non-union plants. Twenty-eight union plants have no credit union, 34 non-union have none. In two of the union plants the credit union is run by the union. Significantly enough, credit unions, which are, in a sense, considered a part of the cooperative labor movement, are found much more strongly in unionized plants than in non-union plants.

Among the financial services that are furnished both by union and non-union plants are credit cards, safety deposit facilities, accounting services, tax assistance and investment planning. Charity deductions from the payroll were made in 50 union plants, 41 non-union plants. Seven union and 7 non-union do not have provision for this.

Company stores that would furnish a variety of products, primarily the products of the firm, are found in 12 union and 11 non-union plants.

Recreation services, such as travel services, are made available by 14 union and 17 non-union plants. Normally, ticket services are provided for events such as ball games, theatrical performances or concerts and these are available in 11 union plants and 24 non-union plants.

Informal, semi-paternalistic activities such as parties and sports activities are performed in 40 union plants and 36 non-union plants. Sports club opportunities are furnished by 5 union plants and 1 non-union plant. Employee social associations are found in 18 union plants and 25 non-union plants. It is quite natural that the non-union plants would exceed the union plants for the simple purpose that this is one of the ways of keeping the site non-union.

Funeral services are provided by 9 union and 8 non-union plants.

Consumer programs are made available to employees of 3 union plants and 8 non-union plants.

Library facilities are made available by 20 union and 33 non-union plants.

Schooling for non-work related program opportunities are made available in 29 union plants and 24 non-union plants.

Free medical examinations are made available to employees in 24 union and 34 non-union plants. Fourteen union plants render it only for their executives and 9 non-union plants made it available only for their executives.

Medical services are made available to the employees of 45 union and 31 non-union companies. Naturally the union will be stronger in this area because of its focus at the present time on health care as a primary union objective and the number one need of the country. Mental health services are made available only by 1 union and 1 non-union plant. Similarly, prescription services are made available by 7 union and 13 non-union plants.

Parking facilities, which are an indispensable part of working conditions, are available to 48 union and 34 non-union plants. The distinction between union and non-union status is that the former enables workers to complain through the grievance procedure if anyone feels that he has been the victim of unfair treatment in the assignment of parking space. The length of walk from parking lot to work site particularly in foul weather may provide an occasion for such a grievance. Company vehicles for personal use, on the other hand, are available to 8 union and 7 non-union plants. Thirteen union plants make it available for executives only and 11 non-union plants make it available for executives only.

Shuttle bus services and other primary means of transportation are furnished to 6 union and 5 non-union plants.

Security services, which have become increasingly important with the increase in crime, are made available to the employee by 48 union and 34 non-union plants but, again, this is not so much a service as it is a working condition of employment.

Twenty-six union firms and 20 non-union firms make services

available to their retirees. This is an area in which we can expect a demand to expand services in the future.

Day care, which we expected would be an overwhelming problem, is found in only 2 non-union plants, 58 union plants have no such provisions and 46 non-union plants have no such provisions. Does this mean that there is no demand for this service or is there a demand for this service but very little response? It is our conviction that it is in this area of day care that we can expect the greatest push in the future in our industrial life. This becomes apparent when we examine the expected growth of the number of women in the labor force.

If this is a future oriented project, then what is happening at present is not important as much as it portends what future developments will be. For example, the X Life Insurance Company made a survey of its 2,000 employees after they were approached by a private agency who offered their services for a fee, of course, to set up a child care agency for working mothers on the office site. After a survey was made of some 2,000 employees, they were amazed to find that only 60 would make use of the facility. Now, 60 children or multiples of 60, that is, in the event more than one child is brought to the facility instead of one, doesn't constitute much of an incentive for X at the present time. But, of course, the X company is proceeding on the assumption that they will continue to draw their employees from the same labor force, namely, the young girl out of high school with elemental office skills who is expected to stay a maximum of 3 or 4 years and then go on, get married and become a prisoner of middle class motherhood. This is a questionable assumption.

Somewhat the same point of view was expressed by the personnel director of a large multinational enterprise in a colloquy with the interviewer, details of which appear in the chemical case. The future need for child care centers is underlined by an analysis of women in the labor force.

The Position of Women in the Labor Force

Janice Hedges (1970) reports that "although more than 250 distinct occupations are listed in the Bureau of Census tabulations, half of all women workers were employed in only 21 of them in 1969 . . . Male workers were much more widely dispersed than women with 50% in 65 occupations." Quite clearly, the civil rights act dissipates any validity that this maldistribution may have made in the past and managements will be compelled to hire more women in occupations from which they have hitherto been barred. In the year ending March 1971, about one third of the women in the labor force had both husbands and dependent children (Hedges and Barnett, 1972). Working women, in this case, not only have the responsibilities of a job but also the responsibilities of a home.

The most obvious role conflict facing working mothers relates to child care. As many as 52 percent of mothers with school-age

children were in the labor force as compared to only 31 percent of the mothers with pre-school children in the year ending March 1971 (Hedges and Barnett, 1972). Community day care facilities do not appear adequate for the demand brought about by women participating in the labor force in increasing numbers. Most women use a relative or someone else in their home to care for children rather than day care facilities (U.S. Department of Labor, 1970).

The union movement under the slogan of equal pay for equal work has always defended the right of women to receive the same pay as men when they were both performing the same job. However, both the union and the management have avoided this dilemma of equal pay for the same job in the past by agreeing upon a list of women's exclusive jobs and men's exclusive jobs. The women's protest movements now reject this solution and now claim the right to perform all jobs performed by men. They have made their voices heard in the unions and exerted pressure on the unions to arbitrate grievances that now arise from efforts to discriminate against women.

Lawrence Stessin in the New York Times of August 26, 1973 takes note of some of these cases. "After two days of hearings in February 1972, William E. Rentfro of the University of Colorado Law School laid down the principle that, under the civil rights law, it is forbidden for companies to fragment jobs into 'male' and 'female' except in certain socially sensitive situations such as rest room attendants." This, a decision in a case where a Maggie M. was denied her seniority choice of a job because it was a "man's" job.

The courts may well deprive the X Chemical Company's interviewer of an opportunity to even question a potential employee about her family status. Stessin cites a case in point. A Mrs. Phillips applied for a job in answer to a want ad for assembly trainee. The interview seemed to be going well until she revealed that there were two children at home aged two and four. The interviewer terminated the interview with the announcement that it was not company policy to hire women with pre-school children. She brought suit on the grounds of discrimination that men with pre-school children were not barred from employment. The Supreme Court ruled that the management could indeed bar women with pre-school children only if it could demonstrate that an employee with such burdens would be detrimental to the smooth functioning of a business or a department. Quite clearly, defining these terms to the satisfaction of a tough unionist is going to be a more difficult task than biting the bullet and making provision for child care.

We will suppose the X Chemical Company had still succeeded by subterfuge in avoiding the hiring of women with pre-school children. What, then? The case of Allied Markets is most revealing. A woman cashier presented a note from her doctor stating that she was able to work until a future June 15th. When the personnel director inquired as to its meaning, she answered that she was pregnant and wanted to know the firm's maternity leave policy. When the personnel director inquired when she had become married, she answered she had not. She was fired for giving the firm a bad public image. Arbitrator Richard Mettenthal ordered her reinstatement after a hearing on a grievance

filed by the union stating that he doubted that the public held an employer responsible for the morals of his employees.

The evidence discloses that the number of women in both blue collar and white collar occupations will be increasing and in jobs hitherto barred to them. Does it necessarily follow that child care centers to serve the work site will become a demand of the group?

The argument that if so few women are demanding this solution for child care of day care centers, as revealed by U.S. statistics, why should it be considered? Why not continue to let them work out the problem by the use of neighbors, the extended family and makeshift babysitters?

Such an attitude fails to consider the dynamics of the forces in the community. It is much like a factory manager taking a poll of workers in a plant in 1931, discovering that none of them feel the need for a union and then concluding that unionization presents no problems in the future.

The limitations of the present facilities for child care will become increasingly apparent to mothers as "missionaries" will continue to inform them of the cost to the child of the kind of unprofessional care furnished by ignorant neighbors and pecuniary oriented professional babysitters without any training. Professor Jack Barbash, a leading scholar of collective bargaining, expects that the demand for professional child care centers will be a leading union demand in the future (Barbash, 1973).

It is evident that as more and more women enter labor unions and make their influence felt, demands for child care and infant care facilities will emerge as a more and more insistent collective bargaining demand along with union political pressure for institutionalization of present pre-school children into public nursery school facilities as an addendum to the public school system.

If model experiments are needed to determine what auxiliary services ought to be related to the work site, investigators are convinced that almost all other services cited in our sample of 106 establishments pale before experimentation in the child care area where the future expected payoff will be most productive; the payoff in economic terms for employers in a society committed to "full employment" where the employer now gains access to a hitherto unavailable stable labor force and a payoff to the community in the improved care made available for its youngest citizens.

Such an experiment falls into the area of the Manpower Administration charged with oversight of the manpower supply function and the welfare division of the Department of Health, Education and Welfare charged with the oversight of child care facilities. A joint task force perhaps can be set up to design such an undertaking. The very first question to be answered is, "How shall such an experimental facility be linked to the work site?"

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CHAPTER XIV

A FINAL LOOK

The whole concept of increasing the living efficiency of the worker by furnishing him with services on the job, or job site, is predicated upon the assumption that, like his employer, he has come to value time as a prime scarce commodity. We wonder!

While there has been much talk about job alienation, there has always been some suspicion that increased time available for leisure can be more frightening than longer hours on the "alienating" job. The phenomenon of the "Sunday blues", the increased rate of suicides on family holidays, for which every hospital gears up, all bear testimony to the workers' dilemma. Our study is predicated upon the assumption that time is a scarce commodity which he is anxious to conserve and so it would seem from a superficial glance.

The worker unions insist upon reducing the number of hours at work. The argument against the 12-hour day, the fight for the eight-hour day has been motivated by the workers' need for more leisure to fulfill his need as parent and citizen. The continued stress to further reduce the working day is perhaps more motivated by the suspicion that it is a device for spreading limited employment opportunities among a too large work force rather than to fulfill any leisure role. Professors contemplating compulsory retirement at 65 become uneasy in their 63rd year contemplating the future even when the likelihood is that their retirement activity will largely resemble their scholarly schedule of researching, reading and writing. It is interesting to speculate whether or not what worries them is that the socializing activities of meetings and committee work will come to an end. Conventional behavior calls for the professor to protest indignantly time demands of committee and administrative assignments that interfere with "scholarly activities". Yet when confronted with retirement that calls for the cessation of these "unwanted roles", he panics. Can it be that they serve a very important part of his "leisure time socializing" that the conventions of his profession demand that he pretend to despise?

Similarly, housewives will express harried protests about the time demands that shopping always imposed. The supermarket, with all items under one roof, presumably was an instrument to conserve her shopping time. No longer does she have to go separately to the grocer, green grocer and butcher. Now they are all under one roof. "Jane Jacobs" is suspicious that this efficiency has deprived her of a sense

of neighborhood and social contact; furthermore, it has abolished the eyes of the city and threatened her safety, all this in the name of conserving time. Where, before, each contact with a merchant was a social exchange between a friendly tradesman and his customer, this has all been exchanged for an impatient transaction between an impersonal checker and a watchful suspicious customer. This kind of conservation of time is reminiscent of Army life where sergeants march corps of men in double time from one place where they have been waiting with no apparent purpose to still another where the same conservation of marching time is exchanged for the boredom of purposeless waiting time.

But to return to the worker. The current drive for early retirement, for example, 30 years of service and out, irrespective of chronological age, seems to emphasize the flight of the worker to a new life of leisure. It is surprising how many of these workers find time weighing heavy on their hands and wander back to the plant in search of the socialization and banter that was part of social life on the job, climaxed in the coffee breaks and rest pauses, which were long enough for relief from the tedium of the work but not long enough to induce the leisure day blues.

The various services, therefore, that we have reviewed at the work site must be evaluated in terms of a larger concept of efficiency than the mere saving of time. Naturally, if workers were extended the educational opportunities of the young gentlemen of 19th Century England, trained at Eton, Harrow and then Oxford or Cambridge for constructive lives of leisure, these dilemmas might be easier to handle. However, these kinds of opportunities, the result of much education, comes at a high cost that seldom enters into economic man's calculus. Even then, despite this expensive information processing to which England's young gentlemen were subjected, it produced a goodly share of well upholstered miserable wastrels.

Both management and unions have become increasingly aware of this dilemma faced by the retired worker and, as we have seen, are endeavoring to give them some preparation for senior lives of constructive leisure. Hobby literature is being made available to them and they are being included in travel clubs, theatre parties and other endeavors in an effort to make them aware of the constructive uses of leisure.

Then, again, there is a paradox in all that we have said. Despite the increase in workers' wages, opportunities to make use of and access to a plethora of new kinds of consumer goods, have so increased their desires that it has become necessary for the wife to complement her old role of child rearer and housekeeper with that of auxiliary bread winner. We have demonstrated the great addition to the work force by the increasing female contingent. Her necessity for the rational conservation of time becomes more acute than that of the male. She has become a working hour-wage earner and an after work housekeeper and mother. Housekeeping activities may be flexible, mothering is a full-time obligation.

After the age of five, the public school system acts in

loco parentis until about 3:30 p.m. After that time, the children come home to a waiting mother, a waiting relative, a grandmother or they become latch-key children generating all of the emotional problems that will later plague both parent and society.

When the children are of pre-school age, the need for mothering is most acute. The employer in the future will be far more restricted than in the past by so selecting women, both occupationally and age wise, that will prevent them from evading this problem by creaming the female labor market to obtain employees who are not saddled with this obligation. The Equal Employment Opportunity Commission has been created to force attention on this problem by the employer by preventing him from excluding this class of females from the work force. Special services, like enlarged child care facilities, will become increasingly a priority for work site or community services.

Other work site services are subject to much lighter trade-offs and in a sense make up a composite work opportunity when combined with wages. The search for jobs by workers and the search for employees by employers are costly procedures and, when combined into real wage and real cost bundles, determine the behavior of the worker in his final choice of job and the employer in his final choice of worker. Ideally, equilibrium is reached; that is, all workers are employed and all jobs filled when these two sets of decisions come into equilibrium.

As is so often the case when we attempt to use the arcane symbolism of mathematics to develop a formalism that will make these decisions explicit, we become more and more confined to the measurable variables which, more often than not, are exclusively economic.

The dilemma of the real live decision-maker, in making use of this formalism, is perhaps best portrayed by an apocryphal story that comes out of the chicken industry of Mississippi. Mississippi has become a prime breeder of chickens. The chicken raisers of Mississippi came to the president of the state university to request that the university physicists do for the state chicken industry what they had already done for the country's armament complex. Among the leading lights of the Physics Department was a Nobel laureate in theoretical physics whom the chicken raisers were particularly anxious to reach and persuade to work on their problems. The university president, after much pressure, was persuaded to bring the matter before the university star and enlist his aid. After much Sturm and Drang, the theoretical physicist was persuaded. He built a research team of theoreticians and, after six months of expensive and intensive work, announced he was ready for a presentation. The conference was turned into a celebrated occasion. The governor and his retinue occupied the seats of prestige in the university chapel. Chicken growers and their retinues came from far and near. The physicist mounted the podium, seized a piece of chalk, drew a perfect circle on the board and stated, "Gentlemen, assume a spherical a chicken." After another sentence a riot broke out.

Now, we are seeking no riots. We understand the limitations of truth about spherical chickens being applied to real ones. The

physicists have found this approach helpful in demonstrating it can be used to blow up the world. We offer our theoretical findings with no such conviction much less demonstration. We hope that these limited theoretical findings can be useful.

The model that has been used to support these findings is a multivariate statistical model for prediction of services provided through the work place.¹ The standard caveat in lending operational meaning to these conclusions is the latin *ceteris parabus*, all other matters being equal (don't tell us they never are, we know it). Again we emphasize that a model using only economic explanatory variables will possess limited capabilities for explaining as diverse a range of services as we have recorded in our study. We suspect, as a matter of fact, we are virtually certain, that the existence of most of these services are explained by social rather than economic variables but, at least, here is what the economic analysis does show. All of the services provided at the work site have been tabulated into eight classes. They are designated as follows, accompanied by the percent of firms in our observed sample.

TABLE XIV-1

SELECTED EMPLOYEE SERVICES PROVIDED THROUGH THE WORKPLACE:
PERCENTAGE OF FIRMS PROVIDING EACH SERVICE

Type of Service	Percentage of Firms
Retail	39
Clerical	72
Medical	96
Craft	12
Agent	93
Education-Information	86
Transportation	85
Security	93

The conclusions follow:

1. Urbanized work settings are more likely to provide employee services.
2. Wage variables are significantly explanatory variables for three of the seven employee classes of services offered at manufacturing work places.

¹See analysis in chapter XII.

3. The size of the labor force does not affect the probability of offering a set of services.
4. The behavior of manufacturing and non-manufacturing firms in terms of providing employee services is different.

Again, it is emphasized that these conclusions are purely economic and their future predictability is poor.

A similar analysis from a predictive econometrics model has been provided for firms offering community oriented services.

TABLE XIV-2
PERCENTAGE OF FIRMS PROVIDING SPECIFIC TYPES OF
COMMUNITY-ORIENTED SERVICES

Type of Service	Percentage of Firms Providing this Service
General Community Affairs	78
Consumer Program	36
Minority-Oriented	93
Esthetic	7
Child Care	5
Environmental	24
Community Health	12

The intercorrelation of these generalized community services is so poor that they offer even poorer predictability than the work site services.

This surprises no economist since community service processes are less directly related to the labor market decision process than work site services. An introduction of social considerations, however, has become so important that the very reverse may well be true. The kind of social anger aroused recently by the brilliant economic performance of the oil companies threatens their very survival as private enterprises to such an extent that they are spending money wildly in an attempt to try a wide variety of public relations nostrums. They hope to assuage the anger, aroused by their economic rationality, that represents something less than social institutional brilliance.

An analysis of expenditures for five classes of services related to the work site reveals the following:

TABLE XIV-3

AVERAGE EXPENDITURES BY FIRMS ON SELECTED SERVICES
PROVIDED BY THE WORKPLACE

Service	Number of Firms Providing the Service	Average Annual Expenditure
Associations	36	\$ 6,300
Cafeteria	42	102,300
Health	57	63,400
Parking	20	6,800
Subvention	32	10,500

An analysis of this data shows that quit rates are virtually independent of the cost of providing work site services. Evidence was provided, through quit rates, that male workers acted more consistently with economic criteria than did females. The social variable upon which we have dwelt, particularly the burden of child care, is probably more important to the women than the men and, hence, the difference.

When all of the economic data is analyzed, it is not surprising to find that there exists a strong negative relationship between the level of expenditures for employee services provided through the work place and the money wage rate.

In other words, employer expenditures, when analyzed economically, seem consistent. This is the area they know and understand best. The great unknown remains the area of social policy that does not lend itself so readily to numerical analysis and, yet, in all likelihood will be of increasing importance in the future.

The whole area of the social responsibility of the corporation is a great area of dispute. At one extreme, some would argue, like Milton Friedmann of Chicago, that it is no concern of the corporation. Others, at the clerical evangelistic extreme, would hold the corporation responsible for the implementation of their social morality at the cost, if need be, of the corporation's survival.

Between the two extremes is a pragmatic problem-solving area. Our own analysis would lead us to believe that practically all of these plant site services and community site services are marginal, that is, they can be exchanged for money and either paid for by the employer with higher wages or by meeting the service costs. Economics showed that when the group purchase of the service by the employees is agreeable to the worker and cheaper because of economies of scale, he will accept the service as imputed wages.

However, when we are confronted with broad social movements, like the explosive growth of females in the work force, then, services that are unavailable or inadequate in the private market, like child care services, these should become the subject for investigation.

This follows the same pattern that management and union interest and experimentation with work group health services are following.



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THE WORKPLACE REACHES OUT:
A STUDY OF ORGANIZATIONAL
IMPROPRIATION

Volume II

Samuel Z. Klausner
Robert H. Edelstein
William Gomberg

CENTER FOR RESEARCH
ON THE ACTS OF MAN

PHILADELPHIA, PENNSYLVANIA 19104

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APPENDIX A

THE SETTING, THE POPULATION AND THE SAMPLE

Yoav Santo

The sampled industries from which data for this study were drawn are centerpieces of the Delaware Valley, a diversified and well-coordinated economic region which stretches from Trenton, New Jersey, in the North through the city of Philadelphia, its center, and southward to Wilmington, Delaware. For reasons of scope, the study has been limited to industries in Pennsylvania (see Maps A-1 and A-2). The Delaware Valley --a three state, eleven county community--lies at the center of Megalopolis, almost midway along the so-called Northeast Corridor. Its position at the confluence of the Schuylkill and Delaware Rivers, the latter an estuary for oceangoing ships, has contributed to the development in the Valley of the fifth largest metropolitan area in the nation. The area is a closely integrated market of more than five and a half million people with an income level substantially higher than the national average. As a publication of the Greater Philadelphia Chamber of Commerce describes the valley (1972, pp. 7-9), it

has more than location to recommend it. It has a long tradition of skilled craftsmanship and offers a stable and diversified labor market. Its industrial base is broad enough to escape, to a large degree, the passing fluctuations in the national economy and to support the wide variety of services that companies need to operate efficiently. It boasts a range and quality of educational and research facilities that are matched by few other regions in the country. It is a major transportation hub, combining one of the finest port facilities in the world with extensive rail, highway and air networks...Its climate, moderated by the River, itself, tends to avoid extremes.

The interplay between this industrial climate and the research process is the prime concern of this appendix. The discussion opens with a general description of the population of workplaces from which the sample was drawn and closes with a comparison of the characteristics of the obtained sample with those of industry in the Delaware Valley, a test of the representativeness of the sample obtained.

The Delaware Valley's Economic Structure

The region's economy is marked by the diversity of its activities, one reason for its relative economic stability. As Boque and Beale (1961, pp. 99-?) describe it:






The remarkable variety of manufacturing establishments located in Philadelphia and its environs probably is as great and well



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MAP A-1

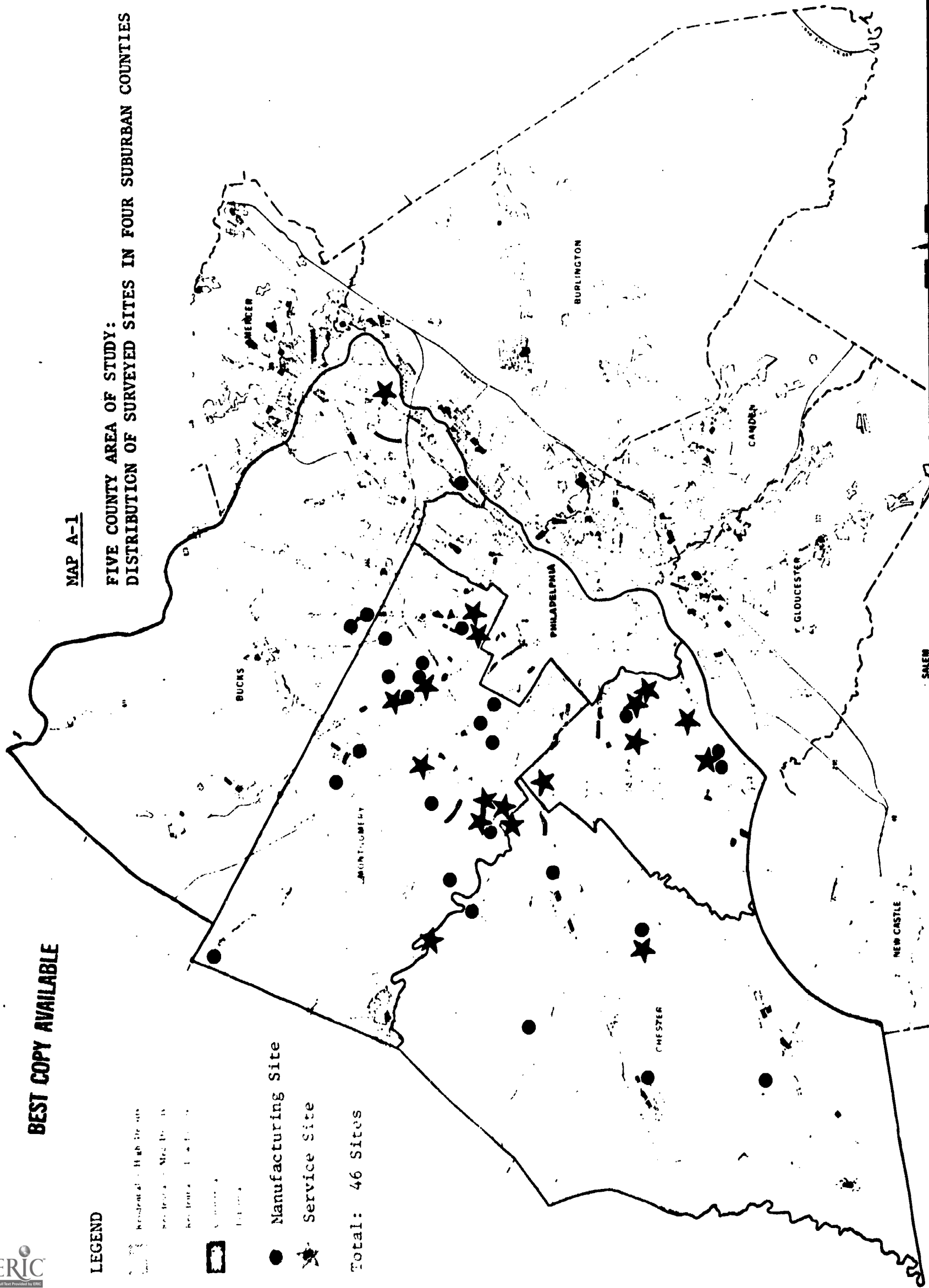
**FIVE COUNTY AREA OF STUDY:
DISTRIBUTION OF SURVEYED SITES IN FOUR SUBURBAN COUNTIES**

LEGEND

-  Interstate Highway
-  Major Road
-  Railroad
-  Waterway
-  City

-  Manufacturing Site
-  Service Site

Total: 46 Sites



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MAP A-2

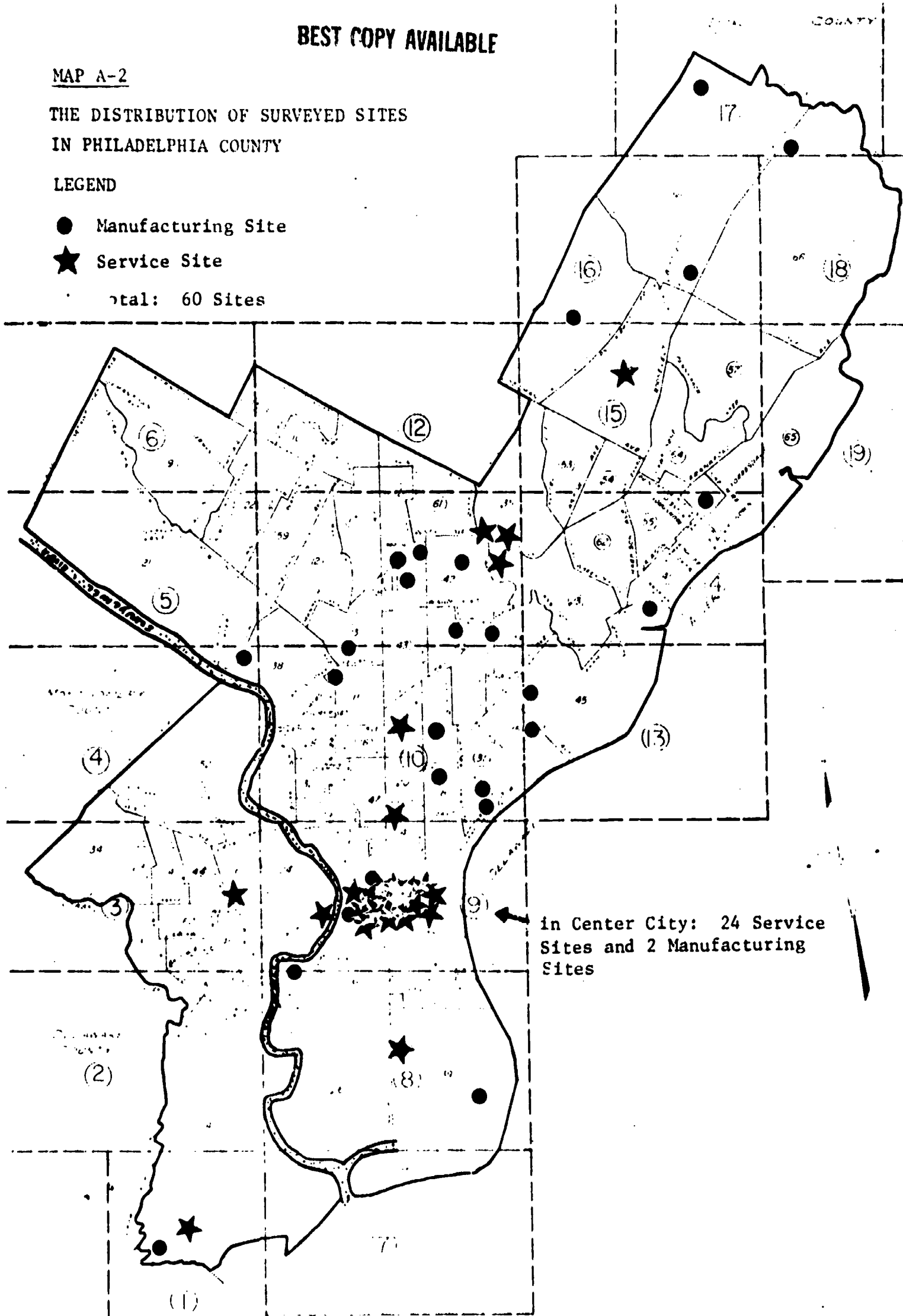
THE DISTRIBUTION OF SURVEYED SITES
IN PHILADELPHIA COUNTY

LEGEND

● Manufacturing Site

★ Service Site

Total: 60 Sites



balanced as in any metropolitan area in the Nation. It is almost equally divided between durable and non-durable goods production, and within each of these broad categories many different types of commodities are produced. The textile and apparel industries, if combined, form the largest single class of manufacture and account for about one-fifth of all manufacturing employment. Among the other leading types of manufacture are the production and processing of steel and other primary metals industries; manufacture of radios, television, and other electrical and electronic equipment; production of nonelectrical machinery and fabrication of metal; assembly of cars, trucks, buses and other transportation equipment; food production and food processing; and making of a wide variety of items of paper, rubber, leather, clay, and glass. This emphasis upon diversified manufacturing is almost as old as Philadelphia itself, and has grown with the city.

The fact that the region's economy is not based on a single major industry (as is the case with the automobile industry in Detroit or the aerospace industry in Seattle) has methodological implications for the study. A "typical" workplace representing a substantial sector of the economy hardly exists, making a case study approach inappropriate to the extent that we are charged to look at the region as a whole. A comprehensive view of the industrial scenery necessitates a survey of the many diversified industrial settings.

The existence of a coordinated, well balanced and integrated economic structure suggests a unified political structure. The existence of three states in the region has prevented unified political arrangements.

The present political partitioning of the Valley among Pennsylvania, New Jersey and Delaware may be traced to Colonial times when continental territories were granted by the English Crown. This early separation between economic development and political delegation of land ownership rights led to the emergence of an integrated economic region artificially divided by state lines. One consequence of this political division on economic activities is an inefficient distribution of public services. Regional agencies such as the Delaware Valley Regional Planning Commission, the Delaware River Port Authority and the Southeastern Pennsylvania Transportation Authority (SEPTA) were established in an effort to reduce such inefficiencies and to reintegrate the political with the economic system. The assumption of non-economic functions by industrial institutions, the very provision of non-work related services at the workplace on which this study focuses, may be a reflection of the disjointedness between the polity and the economy. Examination of this hypothesis would require a comparative survey of workplaces across state lines, a task beyond the scope of the present study which is restricted to the Commonwealth of Pennsylvania.

Any description of the region's economy would be incomplete without some notes on the human element of the economy--its labor force.

A statistical description of the labor force includes information on its size and internal composition. Sociological implications may be drawn from the description which bear directly on the methodology of the current study. Of the 2,760,000 people on the Pennsylvania side of the Delaware Valley, 58% belong to the labor force. Thirty-nine percent of this labor force is female implying that, at given workplaces, services would be provided specifically for female workers. Over half a million residents on the Pennsylvania side of the Valley commute beyond their county boundaries to work. The City of Philadelphia, where 40% of the Valley's labor force resides, provides employment only to six-tenths of its resident labor force. This phenomenon of separation between the community of residence and the community of work is even more distinct in Bucks and Delaware counties, where nearly half of the residents commute to work in other counties. Consequently, the relative location of residence and workplace became a factor for study. A breakdown of the labor force by the major occupational groups shows that operative and kindred workers constitute 24% of the force, craftsmen 15%, clerical 17% and service related 10%. Therefore, the main thrust of this research falls on the manufacturing and service sectors of the economy.

Selection of the Sample Design Criteria

Services at the workplace are often an extension of the organization's existing work-related activities into non-work related spheres. The employee community is thus both the producer and the consumer of the organization's output. The review of the literature illuminated additional aspects of the relationship between services and the industrial settings within which they are provided. Peterson (1973) suggested an association between the modes of service provision and the technology applied at work. Further specified, his hypothesis states that paternalistic and fraternalistic modes of service organization may be differentially associated with specific forms of technology.¹ Implicit in this is a possible relationship between technology applied at work and employer-employee relations, as well as a potential link between employer-employee relations and the mode by which services might be organized. Put in a more general fashion, one may assume that the relationship between the worker and his means of production leads to differentiation in the employer-employee relations and to a differentiation in the relationships among employees themselves. This approach

¹The two concepts were not explicitly defined; however, paternalistic modes of service provision reflect a paternal authority relationship and familial mutual commitments between the employer and employees extending beyond the work sphere. Fraternalistic modes of service provision establish a relationship based on pure exchange of work for wages where the entrepreneur assumes no direct responsibility for the workers outside working hours and the workers themselves develop the services (Peterson, 1973, pp. 30-1).

explains services only in terms of the technology employed in the industry. In addition, however, services are non-work related activities by the institution of work. When a concessionaire is provided, the workplace assumes functions of the market, and when day care is sponsored familial roles are performed by the work organization. The provision of services may also depend upon the organizational set, namely, the significant external organizations which comprise the environment of the focal organization (Evan, 1971). Relationships established between the focal organization and other institutions through suppliers, customers, marketing techniques and the product manufactured or the service rendered by the organization also become relevant. Inter-organizational relationships promote or discourage the diversification of services and the extension of existing services to additional personnel.

To capture these factors a variety of industrial settings was sampled. The Standard Industrial Classification, as it is defined in the Standard Industrial Classification (SIC) Manual (U.S. Bureau of the Budget, 1971) and applied in the County Business Patterns (U.S. Department of Commerce, 1971), was used as an indicator of the character of industrial settings. The selection of this indicator, which is widely used by many governmental agencies, contributed to the standardization of the research procedures and permitted the comparison of our results with findings of other studies.

The unit of analysis for this study was the worksite--a geographic locale containing all or part of some industrial complex. Agricultural sites were not studied because of the transience of their workforce in this region and construction sites were excluded from our research population because of the very mobility of their worksites. The study sought stable sites where services could be provided on a regular basis. The five major industrial activity groups selected were (1) manufacturing (SIC Code digits 2 and 3); (2) transportation, communication, electric, gas and sanitary services (SIC Code digit 4); (3) wholesale and retail trade (SIC Code digit 5); (4) finance, insurance and real estate (SIC Code digit 6) and (5) service industries (SIC Code digits 7, 8 and 9).

The resources available to the organization also influence the establishment or extension of non-work related services. Large organizations, controlling a significant number of people and capital, have more resources to commit than smaller establishments and so more opportunity, as well as demand, for services. Studies, such as National Industrial Conference Board (1936) and Slotkin *et al.* (1971), show size of firm to be a significant clue to the number of services offered. However, the simplistic assumption that size is positively related to the level of services provided does not always hold. In his survey of mental health related services in Chicago, Slotkin (1971) found that size, although significant in explaining variation in services, had a non-linear relationship with the rate of their provision. The non-linear association between size and rate of services offered suggests two threshold points: one marking a minimum size under which few

services will be found and the other marking an upper bound above which the increase in service is less than proportionate to size as economies of scale begin to operate. Number of employees was taken as a proxy for size with sites having fewer than 200 employees not being included.² Sampling was then accomplished within three categories: 200-299, 300-499 and 500 or more employees.

Resources available to the organization can be measured either through output indicators, such as volume of production, sales, profit, or rather by input indicators, for example, wages paid, or number of employees. Number of employees was taken as an indicator of organizational resources, in part because the employees are also the beneficiary of services, and organizations with high output indicators and a small number of employees might refrain from provision of services simply because of the lack of employee-consumers to use them.

The notion of employee-consumer introduces the market approach in explaining services provided at the place of work. Accessibility of services to employees, due to time and distance constraints, influences the decision to provide them at the workplace. A priori, we assumed a negative correlation between accessibility of services to employees during work hours and their rate of provision at the work-site. The results of the study did not always support this assumption. The level of services in each locale is, in part, a reflection of the degree of urbanization. Differences between center city and rural areas are clear cut in this respect.

Accessibility is also a question of the transportation modalities involved. The tracing of transportation routes to services in center city is more complex when the automobile is involved as a carrier of goods purchased. It is doubtful, to say the least, whether center city is more accessible during the regular working hours than the suburban shopping mall. Regardless of how this specific question is resolved, location of the workplace is a contributing factor affecting the provision of services and thus considered in the sampling design.

For purposes of sampling, location was defined according to the municipal county boundaries to include five counties on the Pennsylvania side of the Delaware Valley--Philadelphia, Montgomery, Delaware, Chester and Bucks. More specific locational data were obtained in the course of the study.

²The minimum size of a site that included a reasonable program of services was set of 200 employees, based on our preliminary field contacts. A problem during our field experience arose because statistics regarding size often referred to the total firm and not to a single site and also because the size category "small" in the Business Firms Directory (Greater Philadelphia Chamber of Commerce, 1972) from which cases were selected for the sample ranged between 100-299.

Obviously, industrial activity, size and location are not the only relevant factors. Given the small size of the population of sites to be studied (eventually 106), the theoretical significance of these factors and the ease of available information about them for the entire population, they were retained as primary sampling criteria. Knowing the distribution of the entire population with respect to these criteria, cases were selected proportionately to them.

Once the sample design criteria were identified and operationalized, we proceeded to the classification of the population. Five classes of industrial activity, three size levels and five locations produced a grid of 75 cells. The classification of the population of industries in the study area according to this grid permitted us to determine the number of cases to be sampled from each cell. Table A-1 provides the distribution of worksites in the population according to the three sampling criteria. One thousand three hundred seventy-seven such worksites meeting the three criteria were identified. We aimed to sample one in ten of these worksites. Of these, 60% are located in Philadelphia County followed by 19% in Montgomery County, 8% in Delaware County, 7% in Bucks County and 6% in Chester County. Viewed by industrial activity, 49% of the population are manufacturing firms, 21% are of the service industries, 17% of the sites fall within the wholesale and retail trade, 8% of the sites are in the finance-insurance-real estate industry and 5% in public utilities. According to the size categories selected, about one fifth (21%) are large, another fifth (21%) are medium size and 58% are small.

For analytical purposes, selection from various cells was differently weighted. The majority of workplaces in the population are small. Yet, large workplaces are where most of the services would be found. A random selection of cases would risk an inadequate representation of the large workplaces. To allow for this, 20% of the sample was drawn from the small size category instead of 58%, the proportion of this category in the population.

A comparison of the sample with the population will not locate points of differences or similarity between the two but will serve as a vehicle to evaluate the assumptions that governed the sampling process. The obtained sample of 106 worksites is about 8% of the eligible workplaces, and more than 15% of the employees in the population of firms in the area are part of this study. The sample may be considered representative of the population with respect to the dimensions of classification. This sense of representativeness is buttressed by a comparison of sample and population along dimensions not controlled by the sampling design.

The distribution of the labor force in the study by sex, 68% males and 32% females, follows the regional distribution. The average age of the labor force (38.9 years) in 53 sampled firms does not differ significantly from that of the age of the labor force in the entire population. Based on data drawn from the entire Standard Metropolitan

TABLE A-1
THE DISTRIBUTION OF THE POPULATION ACCORDING TO THE THREE SAMPLING CRITERIA

INDUSTRIAL ACTIVITY	Manufacturing			Transportation, Communication, Electric, Gas and Sanitary Services			Wholesale and Retail Trade			Finance, Insurance and Real Estate			Services		
	200- 299	300- 499	500+	200- 299	300- 499	500+	200- 299	300- 499	500+	200- 299	300- 499	500+	200- 299	300- 499	500+
<u>COUNTY</u>															
Philadelphia	186	100	64	25	10	15	93	24	30	50	20	18	110	37	45
Bucks	42	16	8			2	13	5	4	3			2		1
Chester	26	14	13	3	2	1	5				1		1	2	4
Delaware	29	8	15	3	2	3	11	1		6	1	1	13	3	8
Montgomery	84	31	33	4	2	2	25	4	16	13	3	1	32	4	10

Statistical Area (a somewhat larger region than the survey area), the average employee in the sample was better paid and more stably employed than is the typical member of the labor force of this region. Perhaps this finding is related to the more developed benefits and services programs found in the large well-established firms that were a significant part of this sample. A marked difference between the sample and the population can be observed in the area of employee organization for collective bargaining. Over 40% of the employees in the sample are represented by a union while the average rate in the Delaware Valley fluctuates around 25%. Elimination from the sample of the "small shop" and "ma and pa store," together with the concentration of large manufacturing sites (traditionally union strongholds) probably accounts for the higher rate.

In sum, the sample represents a diversified group of larger than usual workplaces cutting across the major industrial activities of the five county area. All the main types of worksite location (center city, urban, suburban and rural) are represented. Most forms of ownership, from the private through the mutual and publically owned companies, were found in the sample as well as various types of employees' representation for bargaining purposes. The stratified selection of cases by weighting the sampling design criteria maintained the sample's analytical power by including a variety of settings in which services are provided.

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APPENDIX B

SECURING INDUSTRIAL COOPERATION

Gail W. Donner

After the sample had been defined, 313 prospective respondent institutions, about one in four, were selected. To obtain cooperation from this planned sample, the major tasks were (1) the establishment of channels of communication between the Center and prospective respondents and (2) the effective use of these channels to both complete accurate screening procedures and persuade respondents to participate. From our pilot experience we had learned that although personnel department heads were most often the individuals with either the necessary information to complete the interview schedule or access to it, they did not consistently have the authority to commit their firm to participate in the research. Therefore, to assure that decisions to participate followed necessary corporate "channels" and to allow each institution to delegate the most qualified individual as principal informant, prospective worksites were approached "from the top." Given this decision, senior Center administrative personnel opened the communication and negotiation process. A description of this process and its impact on the research follows.

Communication between the Center and respondent firms was initiated with an introductory letter delineating the nature of the study, its sponsor, the work of the Center and the extent of cooperation sought. The chief executive at each site was the addressee and a copy was sent to the personnel department head. One week later, senior Center administrative personnel initiated telephone contact with the chief executive (or an assistant) to arrange an appointment for a member of the Center's interviewing staff. At the time of this initial contact, it was necessary for the Center personnel to confirm the information obtained in the sampling and screening procedures,¹ i.e., that the worksite did indeed fit the sample criteria. This screening led to the early elimination of 69 companies² from the sample.

¹Routine screening, accomplished by junior Center administrative personnel, eliminated 14 worksites from the sample (5 because the site was too small, 4 because the company was no longer in operation, 3 because another site of the same company had been interviewed and 2 because the company had moved outside the sample area.)

²Of the 69 cases eliminated during this screening, 30 were too small (less than 200 employees), 23 were too small at the selected worksite (although the company as a whole was large enough to be included in the sample) and 2 were in SIC categories outside the sample criteria. In addition, in some cases the nature of work required the majority of employees to work "in the field," outside the official worksite, without easy access to services provided at the workplace. Therefore, 14 such companies, including secretarial and detective agencies, parking garage systems and insurance companies, were also eliminated.

Nevertheless, six companies were discovered to be ineligible after an interview had begun. In this screening process, secondary personnel to the chief executive were often most effective in establishing the necessary links between the Center and respondent organizations.

The effort to secure cooperation, concurrent with the screening process, required that Center personnel have an understanding of the nature of the project and the information required of respondents. In fulfilling their task as link between the Center and the potential respondent firm, Center personnel helped respondents select the appropriate individual within the firm as an informant. A major obstacle to cooperation was the time commitment requested of the informant. The responsibility for arrangement of second or third appointments with original respondents and/or additional appointments with other personnel at the firm, when these were called for, fell to the interviewer-observer during the first interview and dependent, to some extent, on the personal rapport established. The following table shows the disposition of each of the 313 firms contacted in the process of obtaining the final sample of 106 firms.

TABLE B-1
RESULTS OF EFFORTS TO OBTAIN THE SAMPLE

Interviews Completed	106
Eliminated Through Routine Screening	14
Too Small	5
Company no longer in operation	4
Another site already interviewed	3
Company moved outside sample area	2
Eliminated Through Final Screening	69
Company too small	30
Site too small	23
Employees "in the field"	14
SIC Category outside sample	2
Eliminated After Interview Had Begun (too small)	6
Refusals	69
No explanation	27
Too much time for interview	13
No resolution after 6+ calls	8
Refusal by letter before call made	6
Refusal after interview had begun	4
Refusal from higher authority outside site	4
Miscellaneous	7
In Progress at Close of Field	29
Letter Never Sent Out	20
TOTAL SAMPLE	313

To complete interview schedules for 106 worksites required 150 man-days over a six month period during which interviewers travelled over 5,000 miles and held 250 meetings with key executives.

The planned and obtained samples are compared in Tables B-2 and B-3. Table B-2 shows the number sought and obtained in each cell of the grid. Table B-3 is a substructured summary of Table B-2. Size is the only criterion in which a consistent, though moderate, deviation is evident. The number of sites in the whole sale and retail category is also lower than expected. This is a result of two factors, first a decision not to include more than two sites of the same company and second the small number of eligible sites of this type in the population. Most of the establishments in this category have fewer than 200 employees at a site.

TABLE B-2
THE DISTRIBUTION OF THE PLANNED AND THE OBTAINED SAMPLES
BY INDUSTRIAL ACTIVITY, SIZE AND LOCATION

INDUSTRIAL ACTIVITY	Manufacturing			Transportation, Communication, Electric, Gas and Sanitary Services			Wholesale and Retail Trade			Finance, Insurance and Real Estate			Services		
	200-299	300-499	500+	200-299	300-499	500+	200-299	300-499	500+	200-299	300-499	500+	200-299	300-499	500+
<u>COUNTY</u>	4	13	9	1	1	2	2	3	4	2	3	2	2	5	6
Philadelphia	7	9	11	0	1	3	0	1	5	3	1	5	2	7	5
Bucks	1	2	1				1	1	1						
	0	2	1				0	0	1						
Chester	1	2	3											1	1
	0	3	4			1								0	2
Delaware	1	1	2				1								1
	0	2	1				1							1	2
Montgomery	2	5	5				1		2						1
	0	7	6				1		1				1	1	2

P = planned sample; 0 = obtained sample

TABLE B-3

THE OBTAINED VS. THE PLANNED SAMPLE
BY THE THREE SAMPLE CRITERIA

	Planned	Obtained
<u>Size of Size</u>		
Small	21	20
Medium	39	37
Large	41	49

<u>Industrial Activity</u>		
Manufacturing	52	55
Transportation, Communication, Electric-Gas, Sanitary Services	4	6
Wholesale and Retail Trade	17	11
Finance, Insurance, Real Estate Services	9 19	11 23

<u>Location</u>		
Philadelphia	60	60
Bucks	7	4
Chester	8	10
Delaware	6	9
Montgomery	20	23

APPENDIX C

THE DEVELOPMENT OF THE RESEARCH INSTRUMENT

Yoav Santo

Introduction

The systematic collection of data and its recording were formalized in this study in a research instrument through which scientific inquiry observes, analyzes and synthesizes reality. The development of our instrument is the main subject of this appendix. In constructing a research instrument an analytical explanatory scheme is developed and the relationships between indicators and key concepts describing the phenomenon under study are explicated. In this, the language of theory is transformed into the diction of research, including a statement of the associations between concepts and their referents, and also including the indicators of those referents and the methods of gathering data, that is, of measuring these indicators.

The Conceptual Scheme

"Services at the Workplace" is a survey of the feasibility of offering services to workers, in specific work settings, to meet personal and familial needs beyond those directly related to their occupational performance. Services constitute an institutional arrangement tying together strands of non-working life through the work institution. A function of services is to integrate the worker's occupational role, his leisure pursuits and his general life supporting activities.

Industrial development is associated with the increased division of labor resulting in segmentation of job, family and social life. As Durkheim (1933, p. 370), in his discussion of the anomic division of labor, describes it:

As the market expands, big industry appears. It transforms the relations between employers and employees. The needs of the workers increase under nervous fatigue and the contagious influence of urban life. Machines replace men; manufacturing replaces handicraft. The worker is regimented and separated from his family throughout the day. He always lives apart from his employer, etc. These new conditions of industrial life naturally require new organization, but as these changes have occurred with extreme rapidity, the conflicting interests have not yet had the time to reach equilibrium.

In this framework of Durkheim's, services at the workplace may be viewed as an institutional response to the anomic division of labor, a response which reconciles conflicting "interests" generated by the social division of labor. By instituting services, the work organization deviates from its specialized primary function of "production" and assumes secondary, integrative functions, auxiliary to the achievement of its primary goals. This formulation of the study's subject focuses our attention not on the traditional "productive-goals" of work organization, but rather on a set of auxiliary activities undertaken in the workplace and enhancing the worker's quality of life inside and outside his work.

The preceding description is not specific enough to distinguish services at the workplace from other institutional arrangements which impinge on the non-working life of employees. For instance, some fringe benefits and certain indirectly work related training programs link work and outside roles. Hence, we specify services as non-work related organizational activities involving either facilities or personnel of the organization which are auxiliary to the achievement of the organization's goals. Benefits involve only monetary or near-monetary rewards contributed by the employer. A cafeteria which requires facilities and operating personnel is under the above definition regarded as a service, while an insurance policy program is viewed as a benefit, since its main feature consists of paying of the premium. Armed with this more specific guideline, the identification and codification of existing and possible services produced an inventory of services.

The review of the literature, including a cross-cultural examination, field contacts with American and multi-national firms and extensive case studies yielded a lengthy list of more than a hundred qualified services. We proceeded to organize this "laundry list" by sorting the services according to two classes of beneficiaries: the employees of the organization and the communities that are part of the organization's environment. The tentative list of services included those performing familial activities like day care, retail market roles in the form of a drug store or a concessionaire and certain religious institutional roles such as the company participation in funeral arrangements.

Employee services were classified according to the social institution which has the primary responsibility of providing the services. The guiding question in this classification was "where would the employee go to secure this service were it not provided at the workplace?" Thus, for example, credit union, check cashing and investment planning are all commercial services and consequently grouped under that category. In all, thirteen categories were established. The complete listing of employee services named in the interview schedule appears in Appendix E, the frequency distributions beginning with Card III, column 38 (III:38).

A somewhat different approach was taken in the classification of community services. It was evident from our preliminary field experiences that these services are less comprehensive in their range and are clustered around subjects salient in the public mind. This suggested their classification by issues.¹ A listing of the community services grouped along ten major issues appears in the frequency distributions beginning with VII:22.

Employee and community tally sheets of services were used to map the availability of services in each workplace. The employee and organizational involvement in the use and support of the service, its accessibility to workers, the year it was instituted and the recent trends in the rate of its usage all were recorded in a Service Description Form. The latter was filled out for the most important (as determined by the informant) service in each category of employee and community services.

Defining "services" as non-work related organizational activities centers the search for explanatory variables on the organization engaged in their provision. In the coming pages, a set of strategic concepts relating intra- and inter-organizational characteristics to the provision of services will be outlined.

The client's title for the study "Services at the Workplace" reflects an ecological perspective, a concern with where the services are provided. The physical site of work becomes an entity to be analyzed in seeking an explanation to the phenomenon. However, since the dependent variable, services at the workplace, is defined as an organizational activity, the workplace as a unit of analysis has to be conceptualized in its organizational context. Sub-units of a large organization may, for instance, react differently from a total organization to a need for services for employees. Thus, the classification of a workplace according to whether it is self-directing (autonomous) or whether its procedures are given by those of some larger entity (heteronomous) seems essential.

Viewing services as organizational responses to an anomic division of labor raises the question of the organizational characteristics affecting this type of responsiveness. One such attribute is the degree of division of labor within the organization. Higher levels of division of labor are associated with increased ability to provide non-work related services. Thus, the more developed the organization, with specialized units for differentiated functions, the better its ability to respond and adapt to its environment, one dimension of which consists of the services discussed.

¹The same approach is taken in a national survey of corporate involvement in community related services titled Profile of Involvement (Nowlan and Shayon, 1972) and we modified the classification appearing in that study to our specific purposes.

In addition to the structural dimension of the organization, we hypothesized that its modes of integration with society would partially explain its responsiveness to societal needs indirectly linked to its productive activity. Relevant intermediaries between a work organization and the society were considered to be the market and the clientele which distribute and consume the organization's output.

These concepts hold to explain services at the workplace and constitute the instrument's skeleton. This structure is illustrated diagrammatically in figures 1 and 2. These "skeleton diagrams", depicting the strategic concepts and their relationships to the phenomenon studied is next "fleshed out". Abstract concepts must be transformed into measurable indicators. This transformation is discussed in the next section.

Indicators and Indices in Organization Research

A substantial amount of empirical "software" in the form of indices and indicators is embodied in the long tradition of organization research. Current organizational measures may be classified as objective or subjective according to their information base, the former resting on direct observational measure by the researcher and the latter relying on interpretation on the part of actors in those systems being observed. Since this study is concerned with the institutional and functional structures of work and not with its psychological dimensions, the objective class of indicators was utilized here.

One of our first tasks in designing the research instrument was to identify the type of organizational unit exemplified by the surveyed site. Items referring to the geographical dispersion of the organizational activities, its ownership and its control enabled us to determine whether the site visited represented a total organization or an organizational sub-unit. In the former, all organizational functions were present at the site while in the latter control was dependent to a degree on the rest of the organization. For example, a specific item of inquiry in this context was: "How many sites (the visited site included) are there in the total organization with the following number of employees: 100-124 (I:10), 250-999 (I:11) and 1000 and over (I:12)?" Another item in this section was the question: "Who owns at least half of this company (or main corporate unit)?" Here, the alternative answers circumscribed various public, private and mutual ownership forms. Very often the set of general questions referring to the broad structure of the organization served to introduce a more sensitive subject--the structure of authority.

Industrial activity is another factor related to organizational responsiveness to different societal needs emerging from the design of work and other institutions. Hospitals, for instance, may be more sensitive to their employee health needs than are retail stores while the latter may be more responsive to the consumer needs of their workers. In sum, organizational sensitivity and responsiveness to societal need can be effected by their industrial activity which in turn structures orientations toward other institutions. At yet another level, services may emerge and be administered from an existing base of organizational facilities and/or expertise dependent upon the technology of its industrial activity.

Structural attributes of organizations and their relationship to the achievement of organization goals constitute the core of a long tradition of organization theory and research of which bureaucracy and its characteristics are probably the most outstanding example. We assert that there is an association between structure and goal achievement, not only in respect to the organization's primary goals but also to its secondary objectives. Thus attributes, such as authority structure, linked to the achievement of the organization's primary goals, may also be indicative of its involvement in services. Hence, the recording of authority structure in various levels of the organization was incorporated into the research instrument.

Size of the organization², a reflection of its scale of operations, is another structural dimension related to both primary and secondary functions of the organization. The size and structure of the specific organizational unit mainly responsible for services, such as the personnel department, should also be examined in this context.

The form of work organization determines when and where work is to be performed and thus when and where non-work related services can be consumed. As such, this subject is of specific significance in understanding the conditions facilitating provision of services. The composition of the labor force is another background variable that affects the type of services offered by the organization. More working mothers, for example, may imply a stronger need for day care center. The location of the workplace relative to other institutions that provide services is another factor to be taken into account.

Since the workplace is engaged in services as a secondary activity, it is probably not a "competitor" in the market of service provision, and the proximity and availability of alternative sources of services will affect the work organization's decision concerning the question of what services to provide.

²A more detailed examination of this concept and its relationships to the provision of services at the workplace is given in Appendix A.

FIGURE C-1

CONCEPTS EXPLAINING AUXILIARY ACTIVITIES:
CONTEXTUAL VARIABLES

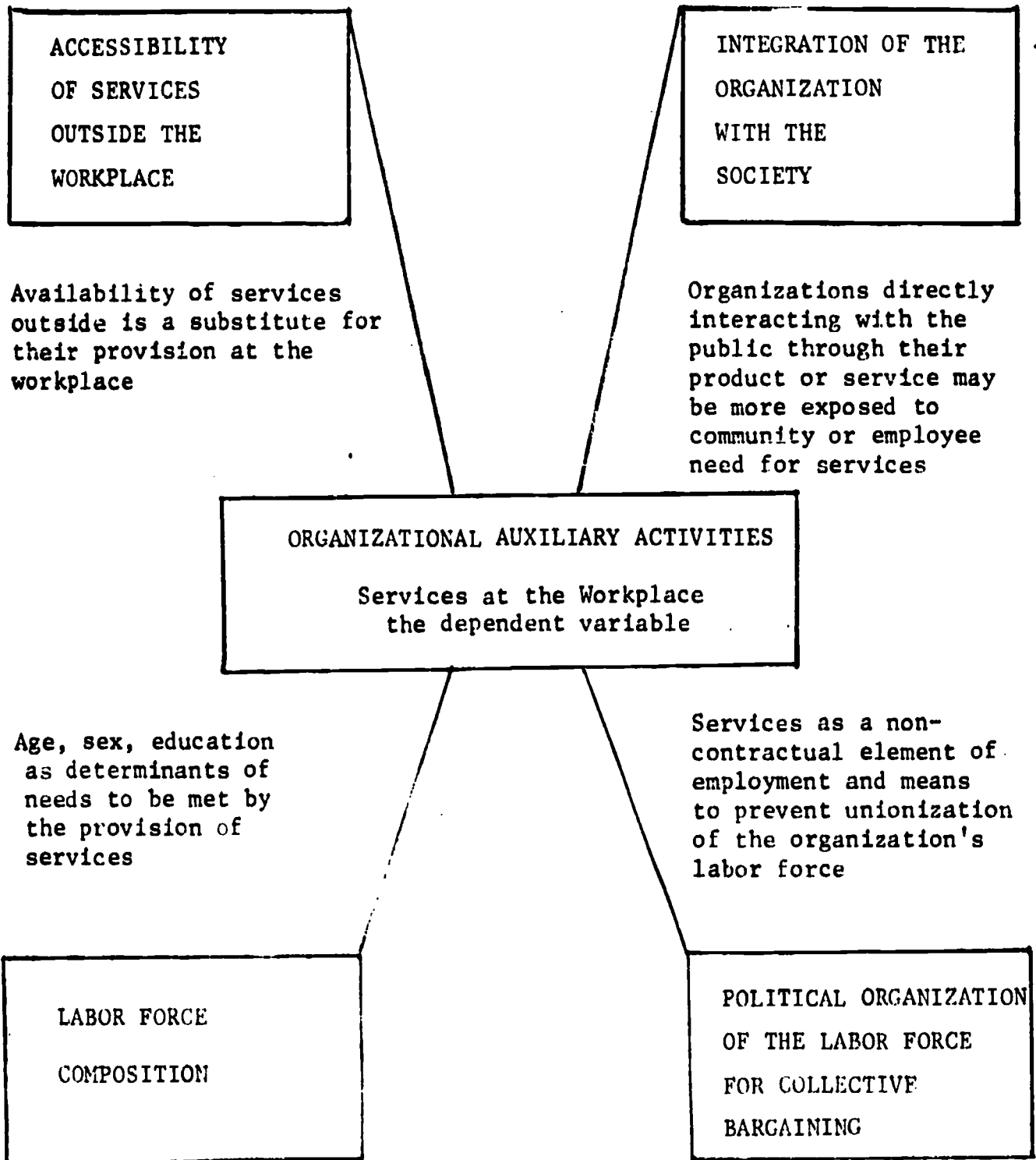
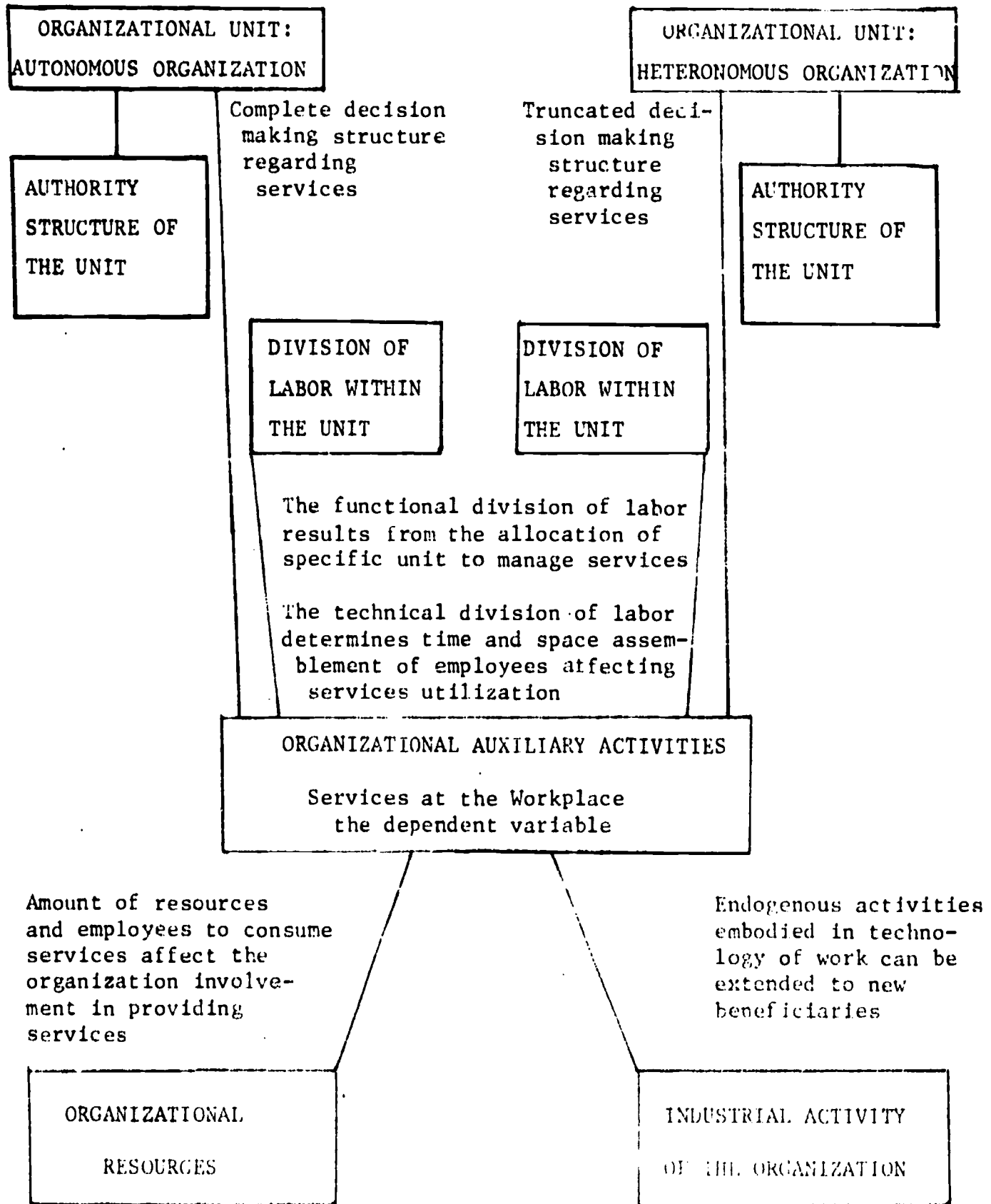


FIGURE C-2

CONCEPTS EXPLAINING AUXILIARY ACTIVITIES:
ORGANIZATIONAL VARIABLES



A common postulate of theories of stratification and organizations is that different degrees of hierarchical structure produce different consequences for any given social system. Authority patterns, the central dimension of organizational hierarchy, are thus the focus of the coming section.

W. M. Evan in "Indices of the Hierarchical Structures of Industrial Organization" (1962) suggests several indicators of authority of which three seemed most appropriate to this study. The first is the managerial concept of "span of control" measured by the ratio of foremen/workers, supervisors/foremen, division managers/department managers. The second is a count of the levels of authority, and the third the ratio of administration to production personnel. A somewhat different method of measuring span of control that can be linked to the measurement of layers of authority is suggested by J. H. Healy (1956). Healy uses the "number of immediate subordinates" thus facilitating the measure of span of control for every position in every layer of authority.

In our research instrument we used Healy's definition of span of control to measure the concept in the higher echelons of the organization and Evan's ratio of administrative/production and the ratios between various levels of authority for other organizational units. This dual measurement reduces the error element possible when an indicator is borrowed from one setting, say, manufacturing, and is incorporated into another, say, the services sector of the economy. For example, span of control at the highest levels of authority was recorded by responding to the item "How many members of this organization, at this site, report directly to the president (or chief executive)?" (I:35). A similar question was repeated for every position in the second layer of authority (I:39-58). The ratio technique was used in two modes, first, by recording the number of executives in specific layers that report directly to the layer "above" them (I:69-76) and secondly by obtaining information on specific categories of employees like operative, office-clerical, technical, exempt and non-exempt (XVIII:9-32).

The ancient (Exodus 18:13-27) metaphor presenting an organization's authority structure as a pyramid has undergone substantial modifications with recent research. The development of organizational morphology as a special field reflects the growing interest in this topic and an increased sophistication in mapping organizational structure types. Terms like steep and flat, referring to the ratio between number of layers and number of people in each layer (H. Kaufman and D. Seidman, 1970) reflect a bi-dimensional approach to the subject examining both its vertical and horizontal aspects. In the research instrument, we further specified these two dimensions of authority structure using descriptive terms borrowed from graph theory. These were

1. Height--the number of consecutive vertical links in an authority structure.
2. Local degree--the number of outgoing horizontal links at any node (equivalent to span of control).
3. Terminal node--a node with no outgoing links (no span of control).

These terms reflect the following assumptions regarding an ideal type of authority structure:

1. It is connected and directed. Every node (position) is connected with at least another node (position) and every link is assigned a direction.
2. It is non-cyclic--there are no paths that return to their starting points.

These assumptions imply that an ideal type of authority structure is a tree in which every node (position) can be reached by one path only. Following these characteristics, the height of an authority structure was measured not only for the entire organization (the total number of authority layers, 1:34) but also for every position in the second layer (1:59-68).

A multitude of approaches have been utilized in examination of internal division of labor in the organization. Division of labor is often manifested through organizational complexity which, in itself, defies unambiguous definition. P. R. Lawrence and J. W. Lorsch (1967) approach the concept through the term differentiation, meaning the division of organizations into units to perform differing functions. Pugh et al. (1969) used the term specialization to reflect the distribution of functions in the organization and their division into official duties embodied in different positions. Hall (1972) stresses the horizontal, vertical and spatial dimensions of complexity as different aspects of internal division of labor. An attempt to scale complexity has to define the range of the phenomenon from the performance of a set of universal functions embodied in one position and to the other extreme of allocation of every function to a different position. To fix both ends of the scale a set of universal functions performed in every organization has to be designed. E. W. Bakke (1959) assembled a universal set of functions and their abstract description which may be used in most industrial settings. His index of sixteen activities was fully incorporated into the instrument (11:5-36).

A similar approach to Bakke's was taken to describe the complexity of the personnel department using an index of universal personnel functions assembled through our review of management literature. Nine items were identified, further specifying Bakke's sixteen activities. To illustrate, Bakke's single activity, "acquire and allocate human resources" (employment, etc.) recorded on

Card II, 11/, was further particularized to include three activities of lower level: "acquire information on the job market (research manpower availability)"(II:58), "recruit and hire employees for this site" (II:46) and "assign employees to jobs at this site" (II:44).

Following reformulation of the concept of the "workplace" as a unit of organization and the measurement of authority and complexity on various levels in the organization we turned to the examination of the employees' organization for collective bargaining. As the section "workforce organization at this site" (III:5-14) indicates, we attempted to identify the type of organization for collective bargaining, whether a union was the collective bargaining agent, whether the organization was a closed or an open shop (III:10), how many employees were "covered" by collective agreements and to what functional categories they belonged (III:68, III:7, III:9). In addition, attention was given to institutional communication channels for employees in order to examine the relation between the provision of services and the existence of such articulating structures. Formal suggestion and grievance systems were taken as indicators of organizational articulation mechanisms (III:15-19).

The temporal organization of work was next covered in the interview schedule. Here items such as the length of the work week (III:27) and the organization of shifts (III:20-24) were delineated. Since the utilization of services depends upon the degree to which the employees are ambulatory during their work or during break periods, the nature, frequency and timing of breaks for most employees were scrutinized (III:28-36).

Integration of the work organization with society establishes the channels through which society influences their industrial activity. Examination of some of these specific channels appears in Appendix E the frequency distributions beginning with XVI:45. The management of an organization's output is one sphere in which the organization interacts with its environment, one component of which is the organization's clientele. We hypothesized that the nature of the client population may well condition the organization's orientation to services. The producer of baby food, for example, may be more sensitive to services oriented for the working mother, say, day care, than the manufacturer of construction equipment. Thus items examining several characteristics of the clients including age, sex and socioeconomic status were incorporated in the schedule. Major categories of clients were identified and, where they were industrial, their Standard Industrial Classification recorded. A numerical description of the dispersion of clientele in the society enables us to compare the categories of clients with the nature of the organization's industrial activity.

The clientele, looked at from an economic perspective, are the organization's market. The market is a medium through which societal norms are articulated into organizational performance. The structure of the market is indicated by its geographic scope and the means used by the organization to market its product were measured in the instrument. Specific items in this section are, for example, "What are the primary media through which information on the product (or service) is communicated?"(XVI:71) and "Through what channels is the major product (or service) marketed?"(XVI:69).

The contact between the employees and the customers of the organization is a channel of cultural influence on the company. Specific items were developed to assess that channel (XVI:73). The interaction between the employees and the organization's environment brings the structure of the workforce to bear as a primary factor in every organization's performance. Workforce employment characteristics are the main concepts operationalized in the "statistical packet" which is described in the next section--the administration of the research instrument.

The Administration of the Research Instrument

An indicator is the product of the application of a measuring method to specified classes of objects. The validity with which an indicator represents the referents of a concept depends not only upon its content but also on the techniques by which the measure is obtained. Thus, the selection of number of employees as an indicator of size may have differential validity if measured through company payroll checks rather than through an account of employees entering the company gates in a given period or direct questioning of the personnel officer.

The final research instrument was entitled an "interview" schedule to reflect the main procedure used to elicit information, an informant interview. This data collection method was supplemented by three different data gathering techniques: direct observation, documentary material analysis and the administration of a "statistical packet". Items concerning the composition of the workforce in the site by age, sex, length of service and education and information about turnover, absenteeism and pay were all condensed into the packet (Cards XVIII-XX). Since these are topics about which information is not routinely available during the course of an interview, and since the time demands on the respondent were already excessive, the "statistical packet" was explained during the interview and left at the site to be completed and returned by mail. To avoid additional research efforts, the items were requested in the same format as required in statistical reports which organizations produce for governmental agencies such as the Equal Employment Opportunity Commission.

Conclusions

The effective transition of concepts from the analytical to the operational level is one of the most critical tasks of the analyst, since it is in the empirical sphere that the ultimate utility of an analytical scheme is tested. This transformation of the abstract to the observable requires the articulation and specification of both domains. In addition to exposing the relationships between concepts and indicators this process laid the foundation for the design of the analysis. Explication of key concepts pertaining to the study as exemplified in our map served as a "heuristic path of causal relationships" which, in turn, suggests some empirical relationships to be expected among the indicators.

The multitude of indicators and field methods to measure them were the means to secure the collection of valid data. The inclusion in the design of internal validity checks and overlapping data bases were geared to increase the overall effectiveness of the interview schedule. Ultimate utility of an instrument is confirmed only after field implementation and analysis, which is the topic of the following appendix.

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APPENDIX D

AN EVALUATION OF FIELD TECHNIQUES FOR RESEARCH ON COMPLEX FORMAL ORGANIZATIONS

Joseph R. Piasecki

Two major and divergent concepts of work organizations are common in the sociological literature. On the one hand, work organizations may be viewed interactively as collections of actors with variant interests pursuing different ends through coalitions contributing to at least one central goal (Cyert and March, 1960). Organizational studies in this framework typically focus on the attitudes and interests of the actors and the degree to which each actor influences decision-making. On the other hand, work organizations may be approached institutionally as functionally specialized locales characterized by various modes of activity. Such a study would map the classes of activities, the objective conditions at the worksite which affect these activities and assess the implications of the way these activities are carried out for the organization as well as for other institutions with which it is linked.

We have elected the second or institutional perspective in our analysis of auxiliary functions of work organizations. Consistent with this approach we focus on the social collective at the worksite as our unit of analysis. We have sought to specify objective conditions of work and the organizational formats within which work occurs through the use of a survey schedule as a guide for discussions with "informants" within work organizations, supplemented by participant observation. These informants are individuals, often directors of personnel, with access to information about auxiliary services to the workforce.

Several technical problems arise in sample survey informant interviewing. First an informant population with access to the data sought must be identified. Second, the researcher must gain entry to the organizations to be surveyed and, in the process, to appropriate informants. Third, the informant must achieve a sufficient understanding of his role in the survey to enable him to provide adequate and current data for the items under study. The way each of these steps is taken influences the nature of the data obtained. Our contact and entry procedures involved correspondence with presidents of organizations and personnel officers. This is discussed in and Appendices B and C.

¹For general discussions of the dilemmas faced by research in complex organizations see Dalton (1959), Men Who Manage and Blau (1963), The Dynamics of Bureaucracy (complete references are in the bibliography attached to this appendix).

The items to be surveyed, as outlined in our interview schedule, (The construction of the schedule is discussed in Appendix C and is presented through Appendix E on the Frequency Distributions) were treated flexibly during the informant-interview. The form of questions was adjusted to meet the particularities of the site chosen in order to standardize meaning rather than wording. For example, a "conversation" about services could cover, in less time and greater specificity, more services and their descriptions than an extensive set of pre-formulated questions. The alternative procedure of a self-administered questionnaire would have required several pages of written instructions to describe the rules for listing services and completing "service description" forms.

To be more specific, we gathered data on (1) characteristics of the worksite (organization, technology and auxiliary functions), (2) composition of the workforce at the site and (3) contextual factors such as the firm's client populations and the geographic location of the site. These three classes of data were assembled by four techniques (1) an interview of a main informant(s) following the schedule, (2) visual inspection of worksites, (3) unstructured dialogue with employee informants and (4) extension of the on-site survey through a mail-returned questionnaire (statistical packet). Successful integration of the data garnered was principally accomplished through the expansion of the role of the "field worker" to the editing and validating of the survey results.²

This approach requires a field staff with general knowledge of complex organization, communications skills and the ability to provide the respondent with a clear understanding of the topics

² Advantages of a multi-technique design are suggested by Webb (1966) and Seiber (1973). The minimum coverage of a set of items is increased if more than one measurement is attempted for each item. Additionally, the incorporation of relatively less structured field techniques allows the researcher to penetrate areas of activity typically closed to impersonal or purely formal inquiry. Traditional survey techniques standardize stimuli to respondents in order to minimize the possible influence of the interviewer's idiosyncratic behavior. Instructions to NORC interviewers indicate this concern for a consistently applied format, "All interviews are conducted face-to-face, with the interviewer reading the questions and then recording on the questionnaire the respondent's answer..." (Hyman, *et al.*, p. 362). In contrast, our field workers purposely varied the "form" in which questions were asked in order to standardize their content. That is, for the respondent to serve as an effective informant it was necessary that he clearly understand the meaning of the inquiry. In asking the firm's possible participation in "funeral" services, it was important that the informant realize that we were not seeking out industrial graveyards or trying to estimate the mortality conditions associated with employment at his worksite. The informant was to understand the question with regard to the firm's involvement in facilitating communal or personal expression of condolence or participation in rites for the deceased.

addressed. Initially, two field workers with training in the sociology of complex organizations were assigned all cases to be surveyed. However, time and distance constraints³ made it necessary to add three interviewers to the field staff. Although they were selected for their general research and sociological backgrounds, these secondary interviewers had substantially less exposure to the field of complex organizations. The emergent problems associated with the addition of field workers with less training in the study of complex organizations are central in evaluating our field techniques.

Appendix C, on concepts and indicators in organization research, elucidates the methodological dilemmas associated with conceptual translations from social theory to empirical indicators. This appendix evaluates the success with which measures of these indicators were obtained. The dependability of the indicator is conditioned by characteristics of interviewers and of informants as well as by the relation between the interviewer and the informant. The following pages examine some of these effects.

Interviewer Effects in the Survey of Services

Interviewer effects are typically associated with problems of bias.⁴ In this survey, certain interviewer effects were considered positive contributions to the research effort. The primary role of the active field worker is to "get the data." His effectiveness in this task may depend on rapport with or provocation of informants. As an intentionally active agent, the field worker was encouraged to seek out alternative sources of data or multi-informant confirmations of responses. If a respondent in a subsidiary worksite could not furnish information about the size or scope of the parent firm, the field worker often resorted to an "annual report" as a source of data.

The primary and secondary interviewers were differentially successful in obtaining responses. In the enumeration of employee services, for instance, the mean rate of non-response was less than

³The on-site interview was rarely completed in less than two hours; a five county area in addition to the city of Philadelphia was surveyed.

⁴Discussions of these effects are presented in detail in: "On Errors in Surveys", W. E. Deming, American Sociological Review XIX (August 1944) 359-69; Interviewing in Social Research, Herbert Hyman, et al., University of Chicago Press, 1954; Methods in Social Research, William J. Goode and Paul K. Hatt, McGraw-Hill, 1952.

.5 percent for eighty-nine questions about these activities. The low rate of non-response obtained suggests that both primary and secondary field workers were generally successful in determining the presence or absence of the services referred to by specific questions. The primary field workers, however, had a propensity to record "other" services⁵ more often than the other staff members.

Of seventy-five "other" services found at worksites, the two primary field workers reported sixty-four, an average of .98 per case, the three secondary interviewers reported only eleven such services, .28 per case. Since the mean total number of services found per site was in excess of twenty-seven services, a variation in the reporting of these marginal "other" services does not affect the overall analysis of auxiliary activities at the workplace. Since all field staff members had formal training in sociology and social research methods, it was expected that they would perform their field tasks in a relatively similar manner and yield consistent reports. Yet, this observation of interview differences is both perplexing and disturbing.

One possible explanation is that while all members of the field staff were sociologically experienced, the two primary interviewers had extensive training in the study of complex organizations. The content of their professional training was more congruent with the requirements of this research project than that of the other field workers. This training may account for an increased sensitivity to service activities or to the frames of reference which our respondents, industrial managers, used.

The recording of "other" services varied widely by functional categories of services. Thus, a second possibility is that an interviewer's propensity to concentrate on the identification of a specific set of "other" services might result in disclosing more services in a given category. In fact, the two interviewers finding more "other" services were quite likely to report on "other" services in the category of support for "professional activities". In thirty-seven percent of the sixty-five firms they visited, an unanticipated "professional service" was found. The three other members of the field staff never noted such a service.

But why should some interviewers find services while others found none? The specifications of the "other" services reported yield a clue to this dilemma. Most "other" services to professionals were reported as "memberships in professional organizations" or

⁵The "other (specify)" response category was included when the list of responses in a service group (e.g., Health Services) was limited to the more frequent responses. In order to provide a means for recording information about unanticipated services, the "other (specify)" response was added to thirteen of the fifteen service groups.

"subvention for professional activities, meetings and conventions". These services at the workplace are links between the job and the occupational field. Being a professional requires some recurrent and substantial interaction with others performing similar tasks. This aspect of professionalism is facilitated by the workplace by means of a subvention, in terms of money, leave and supported attendance at professional convocations. The two primary interviewers, who recognized more professional services, have been studying the sociology of the professions. This is more than coincidental.

One further element can be invoked to complete the linkages among interviewer orientations, disclosing "other" services, and the differential reporting of "professional services". The two primary field workers were assigned a "Case Study" which was completed before they began their regular field tasks. Their "case" was the intensive examination of the headquarters of a major corporation, a specialized site of professional managerial functions. As such, this early field experience included review of personnel practices at sites where almost all employees were "white-collar" and many were professionals. A small manufacturing site might also offer professional services but it is unlikely that they would be as pervasive or as formalized as such services are in a large corporate headquarters.

A field worker's capabilities are also tested in scoring items with indefinite boundaries. The greater the precision with which a service is referenced by its name the less demanding is the search for that service. For example, most services were easily incorporated by simple interrogatory statements such as: "Does this firm provide a check cashing service?" But, where the referents to the terms listed in the schedule were broad in scope, composed of possibly diverse services or where the means of providing the service varied widely, the field worker had to explore several topics related to the service in order to ensure adequate enumeration. For example, services to the "retired" employees is a diffuse category rather than a specific service. A "retiree" service could include extension of general employee services to the firm's retirees or a service particular to this population, e.g., annual banquets for all retired employees. The field worker was typically required to perform considerable interpretation of this item for the respondent together with a probe for the presence of an "extended" service.

The frequency distributions in Appendix E show that fifty-four percent of 106 sites surveyed had some "services to the retired". Service industries had a slightly higher but not significant propensity to offer such services; fifty-nine percent (N = 51) of Service industries versus fifty-one percent (N = 54) of Manufacturing industries. However, interviewers differed in their reporting of this service. The two primary interviewers reported its presence

in seventy-nine percent (N = 43) of their cases, another field worker reported that it occurred in forty-five percent (N = 31) of his cases, while the remaining two interviewers reported this service in only twenty-nine percent (N = 31) of their assignments.

The interviewers reporting the largest number of services to the retired stated that they were alerted to the several dimensions of this item in their early field experiences with firms where substantial retiree services were offered. Consequently, they confronted respondents with specific probes to clearly express the range and types of services which might be reported in this item. The field workers reporting very few retiree services, not having had the same earlier interviewing experience, probably failed to probe in sufficient depth to disclose this service.

This underenumeration may reduce the "true" correlation of this service with factors related to its occurrence. Having noted the presence and direction of this interviewer effect, interpretation of findings regarding services to retirees, should be adjusted accordingly.

The reporting of "craft" services was also subject to the effect of field experience. A higher number of "craft" services⁶ offered to employees is reported by the primary than by the secondary field workers. In all, thirty percent of the 106 sites surveyed had at least one craft service, but eighty percent (N = 26) of these craft services were found in Service industries. A comparison of scores among interviewers within each class of sites shows a slight difference in reporting in manufacturing but not in service industries.

TABLE D-1

PROPORTION OF SERVICE AND MANUFACTURING INDUSTRIAL
SITES REPORTING AT LEAST ONE CRAFT SERVICE BY
INTERVIEWER EXPERIENCE
(in percents)

Type of Industry	Primary Interviewers	Secondary Interviewers
Service	50 (28)	50 (22)
Manufacturing	16 (37)	0 (18)

⁶ A craft service is the provision of a company employee, e.g., an accountant or computer programmer, for the accomplishment of the personal work of another employee.

Conceivably, where craft services are common, as in Service industries, all interviewers were equally likely to identify them but in sites where these services are less usual, experienced field workers were more likely to disclose their presence. Analyses of these services in Manufacturing settings should allow for the effect of a slight underenumeration--taking the findings of the primary interviewers as the standard.

The frequencies of the balance of services to employees show no discrepancies between the findings of primary and secondary interviewers. In the following pages to assess possible interviewer effects on the wide range of other items not measuring services to employees, we will examine rates of non-response.

Interviewer and Informant Effects on the Collection of Cost Data: The Problem of Non-Response

Non-responses may be produced by faultily constructed questions, but they also may be due to differential ability of interviewers to obtain responses regarding particular characteristics of informants. This approaches the traditional sense in which the term "interviewer bias" has been used. In addition, non-responses are a function of the characteristics of the informants. All interviewers noted difficulty in obtaining information about the costs of services, especially costs of operating cafeterias and parking facilities. The non-response rate on these items is an index of the reliability of the obtained responses. The table below does not support a suggestion that interviewer training and experience influenced the collection of cost data. It does not, of course, reveal a possible difference in the magnitude of cost estimates where such estimates were attempted.

TABLE D-2

PROPORTION OF NON-RESPONSE FOR FOUR MEASURES OF COST
BY THE TRAINING OF INTERVIEWERS
(in percents)

Items Costed	Primary Interviewers	Secondary Interviewers
Parking: Land Costs	88 (59)	79 (29)
Parking: Operating Costs	64 (61)	79 (29)
Cafeteria: Operating Costs	33 (42)	42 (24)
Cafeteria: Subsidization	12 (42)	21 (24)

While the non-response rates to these items are hardly encouraging, no differences appear to be attributable to the experience of the interviewer. (Based on chi square tests, comparing the rows, there were no statistically significant differences between primary and secondary interviewers.) Thus, the cited interviewer characteristics did not seem to affect the reliability of our cost data.

The survey schedule included several measures of personal attributes and organizational status of informants. It is appropriate to test the assumption that the informants were equally able to provide information. Table D-3 shows rates of non-response for items regarding costs according to the rank and length of tenure with the firm of the informants.

TABLE D-3

RATES OF NON-RESPONSE ON SELECTED MEASURES OF COST BY THE
RANK AND LENGTH OF TENURE OF INFORMANTS (in years)
(in percents)

Items Costed	Length of Service		Organizational Rank	
	Up to 5 Years	Over 5 Years	High	Middle
Parking: Land Costs	88 (25)	83 (62)	90 (40)	81 (34)
Parking: Operating Costs	68 (25)	70 (64)	66 (41)	71 (49)
Cafeteria: Operating Costs	47 (15)	33 (52)	42 (32)	30 (34)
Cafeteria: Subsidization	13 (15)	15 (52)	21 (33)	9 (34)

No statistically significant differences appear in the proportions failing to provide cost data between informants of short and long tenure and between those of relatively high or middle rank in the organization.

The respondents' tenure may be divided between time with the firm and in their current positions. The age of respondents would, of course, affect both of these measures. An index of the rate of non-responses for all four items above was constructed.⁷ The mean number of non-responses for the four items is 1.965. Rates of non-response were correlated (Pearson) with informant age, length of service and years in this position. No correlation coefficient exceeded .073 ($N = 57$, $p < .25$) and none was significantly different from zero. These attributes of informants do not, therefore, seem to be a source of unreliability in our cost data--at least as measured by their willingness or ability to provide dollar figures.

The analysis may be pursued a step further, while all four cost items had substantial rates of non-response, cafeteria subventions were more often estimated than were parking costs. The explanation in terms of diffuseness of the items, offered in the cases of "other" and "retiree" services, would not seem relevant here since the referents of these questions are quite specific.

At least four factors may have contributed to variations in rates of response among these cost items. First, the organizational locus of respondents may affect their ability to provide information. Eighty-nine of the respondents were positively identified as personnel officers⁸ and most of the remaining seventeen had substantial personnel related responsibilities, e.g., store managers in department stores. Thus we might expect that activities of a firm within the sphere of personnel functions would be better "known" by these respondents. Although eighty-five percent of the firms sampled provided some parking services, thirty-one percent of the personnel department were not institutionally involved in the provision of these services. Therefore, consistent with the "knowledgeability thesis", our personnel department informants would not necessarily have been informed directly about parking costs.

Second, completeness of recording of costs was influenced by the nature of the on-site tour granted to field workers. The observer usually could question the cafeteria manager or some employee assigned to the facility. The field worker could obtain an estimate of the size of the cafeteria subvention if none were offered by

⁷ Score = 4 (all four items responded to), to 0 (no cost data on any item).

⁸ Personnel officers were defined as those who had been identified as such in the field notes.

the principal informant. Third, activities subject to routine examination might be more readily accessed by our informants. Typically they were either directly involved in the provision of food services or could make legitimate claims for reports on cafeteria costs. Fourth, cafeteria subvention and operating costs are more likely to be subjected to periodic or even continual review since they represent variable costs as opposed to the relatively fixed costs of facilities for parking. If documents were generated reporting such cost, the field worker could ask to examine them.

Each of these four factors could be an independent cause of response or non-response. Quite possibly, however, a central theme connects them. That connection might be the degree of organizational commitment to, substantive involvement with, the various activities. Field workers did not rest "satisfied" when a respondent answered "don't know" but rephrased the question or sought other sources of information. An ultimate record of non-response in these cases becomes an indicator of organizational orientations to certain activities. That large numbers of NA's were reported for items dealing with participation in recreational events indicates that the organization is not institutionally "interested" in tabulating such items. But wage payments to cafeteria workers often represent substantial dollar outflows which are readily monitored in an organizational setting.

Following the same reasoning, the extent to which activities are monitored through organizational records suggests the degree of significance the organization attaches to these auxiliary" functions. A fifth cost item not included in the discussion above, Health Care Labor Cost, was reported for ninety percent (89) of the firms in which this activity occurred. Firms monitor, and are thus "interested in, the provision of health services to a greater degree than parking or even cafeteria costs.

Interviewer Effects and the Packet

To document the characteristics of the workforce at a site, a statistical packet was constructed for mail-return. In it the informant was asked to record tabulations of the number of employees of each age, sex, length of tenure and educational group. The "mail-return" approach was designed to avert anticipated difficulty in retrieving a volume of tallies and rates during the interview. Informants usually had to consult records to obtain this information.

Interviewers worked with their informants procedures for completing and returning the packet. Firms late in returning the packet were recontacted by the interviewer assigned to those firms to ascertain the reasons why they did not. Eighty-two of the 106 firms returned the packet, but only 40 provided the data. The problem encountered in obtaining completed packets and attempts to explain the relatively low rate of return.

In earlier discussion of the field worker's contribution to the identification of "other" services, it was noted that the primary field personnel disclosed some "hard-to-measure" services. However, the summary effect of this bias was slight. Most items in the interview schedule were not differentially scored as a function of interviewer experience and training.

Table D-4 shows rates of packet return by size (number of personnel) and type (Service or Manufacturing) of firms.

TABLE D-4

RATES OF PACKET RETURN FROM MANUFACTURING AND SERVICE
INDUSTRY SITES OF VARIOUS SIZES
(in percents)

Number of Personnel*	Type of Industry	
	Manufacturing	Service
Small	78 (32)	72 (25)
Medium	80 (15)	90 (21)
Large	88 (8)	20 (5)
Mean Rate of Return	80 (55)	75 (51)

*Small = 125 to 499 employees

Medium = 500 to 1999 employees

Large = 2000 to 4000+ employees

While the total average return rates for manufacturing and service sites are quite similar (eighty percent versus seventy-five percent), some disturbing variations are noted in the return rates among service sites. Among manufacturing sites, the likelihood of packet return seemed to increase slightly with the size of the site, but among service industries, four out of the five largest sites did not return a packet. Of course, the numbers here are but suggestive.

Table D-5 shows rates of packet return by type of site and interviewer experience.

TABLE D-5

RALES OF PACKET EFFICIENCY ACCORDING TO TYPE OF INDUSTRY
AND EXPERIENCE OF INTERVIEWERS
(in percents)

Class of Interviewers	Type of Industry	
	Manufacturing	Service
More Experienced Interviewers (Primary)	84 (37)	96 (28)
Less Experienced Interviewers (Secondary)	72 (18)	45 (22)

Table D-4, which shows lower returns among service industries, must be interpreted in the light of the interviewer effect. In fact, for the interviewers with greater training in complex organizations, obtaining a packet from a service site was a relatively "easy" task (ninety-six percent). Yet the field workers with less exposure to organizational study found that obtaining a packet from a service industry was quite difficult.

In addressing the problem of why some field workers found service industry sites more responsive and others found service sites recalcitrant we may examine some differences within the category of "service" site. The functional designation of a site as a "service" or "manufacturing" site is based on the activities performed at a site. This may differ from the Standard Industrial Classification of the corporation as a whole. Some are a locus at which the public may acquire services or goods not produced at the site. In other cases, if a site performed administrative rather than production functions it was termed a "service" site. Thus the designation "service" site covers two distinct forms of work organization.

A review of the field assignment of the interviewers by type of service site shows that the primary field workers were assigned administrative headquarters, while secondary field workers visited "retail" type service sites. Since the packet addresses characteristics of the employee population at a site, different types of sites may have different orientations toward collecting and reporting such data. These differences may be reflected in what appear to be interviewer effects. Administrative offices, by nature, covary in collecting data on personnel characteristics. For both internal and external reporting, administrative sites are responsible for periodic reporting on turnover, absenteeism, etc. An experienced interviewer should be able to tap sources of such data at these sites.

In the case of retail outlets, concern with personnel is also high. They are characterized by very high quit and hire rates, seasonal fluctuations and more part-time employees. Since our packet asked for yearly rates of personnel activity, our questions may not have adequately matched the data collection procedures of these firms with concentrate on short term personnel activities. Effective administration of the packet at these sites might have required field workers who could help respondents interpret institutional records for use in reporting items. Unfortunately, the field staff members best suited to performing these conceptual translations were inadvertently assigned to other sites.

This, of course, has been a post hoc analysis. The reader may take it as a point of reference for interpreting the findings of this study. For the researcher, these are problems to be attended to in the next research design.

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APPENDIX E

FREQUENCY DISTRIBUTIONS

This appendix presents all of the items in which data was gathered and on which the analysis was based. Each item begins with a descriptive statement or question with response categories below it. The card number as it appears in the Center's file is given alongside the descriptive statement. The middle column provides the numbers "punched" in that column(s) for each response category. The far left column gives the frequencies of the responses. In cases in which numerical information was entered directly (e.g. items Card I, 35/36/ to Card I, 75/76/) the means (\bar{X}), medians (M_e) and the ranges are given. In these cases the numbers of cases on which the computations are based (N), the number for which the item is not applicable (NAP) and the number not answering (NA) are also provided. The total is always 106 cases. The material on the following pages also constitutes a "code book". With this and the data cards another investigator will be able to reanalyse and continue the analysis of the data gathered. For how indices were formed or variables "computed", instructions are provided in the text of the report.

Response
Distributions Punch Response Categories

Organizational Structure

Card I, 5/

Location of this site:

28	1	Center city, all major services within a 5 minute walk
18	2	Urban, near a shopping center, most services within a 5 minute walk
11	3	Urban, most services within a 5 minute walk
4	4	Near a shopping center, only some services within a 5 minute walk
29	5	Industrial area, no services within a 5 minute walk
12	6	Rural area
1	7	Other
3	9	NA

Card I, 6/-9/

What is the SIC classification describing the function of the total organization?

60	2xxx	Manufacturing
	3xxx	
6	4xxx	Transportation, Communication, Electric, Gas and Sanitary Services
13	5xxx	Wholesale and Retail Trade
13	6xxx	Finance, Insurance and Real Estate
14	7xxx	Services
	8xxx	

Card I, 10/-12/

How many sites are there in the total organization (including this location) with the following numbers of employees (in the United States)?

10/ Number of sites with 100-249 employees

28	0	None
16	1	
7	2	
1	3	
6	5	
2	6	
4	7	
38	8	8+
4	9	NA

Response
Distributions Punch Response Categories

11/ Number of sites with 250-999 employees

19	0	None
28	1	
6	2	
3	3	
2	4	
3	5	
3	6	
1	7	
38	8	8+
3	9	NA

12/ Number of sites with 1000+ employees

51	0	None
17	1	
4	2	
3	3	
3	4	
2	5	
2	6	
1	7	
16	8	8+
7	9	NA

Card I, 13/-15/

How many sites are there in the total organization with the following numbers of employees outside the United States?

13/ Number of sites with 100-249 employees

65	0	None
3	1	
1	2	
2	3	
4	4	
2	5	
16	8	8+
13	9	NA

14/ Number of sites with 250-999 employees

68	0	None
5	1	
2	2	
3	4	
4	5	
1	6	
12	8	8+
11	9	NA

Response
Distributions Punch Response Categories

15/ Number of sites with 1000+ employees

81	0	None
4	1	
1	7	
5	8	8+
15	9	NA

Card I, 16/

What is the total number of employees in the entire organization?

9	1	200-399
15	2	400-799
12	3	800-1599
11	4	1600-3199
59	5	3200+

Card I, 17/

Who owns at least half of this company (or main corporate unit)?

51	1	Public ownership through current public sale of stock
1	2	Public ownership through limited or private sale of stock
5	3	Public ownership through governmental or institutional (profit) body
8	4	Private--owners and top management not same person(s)
11	5	Private--owners and top management same person(s)
8	6	Mutual share ownership
19	7	Wholly owned subsidiary or division
3	8	Other

Card I, 18/

Scope of Operation (this company/main corporate unit)

60	1	Domestic
46	2	Multinational

Card I, 19/

Stated Profit Motive

94	1	Profit
12	2	Non-profit

**Response
Distributions Punch Response Categories**

Card I, 20/

Geographical Organization (total organization)

12	1	Single (working) site--single (corporate) unit
3	2	Single (working) site--multiple (corporate) unit
28	3	Multiple (working) site--single (corporate) unit
63	4	Multiple (working) site--multiple (corporate) unit

Card I, 21/22/

Is a headquarters function performed at this site and if so what is the scope of authority of the headquarters?

9	03	Headquarters of the total organization
2	05	Regional headquarters (reporting to the headquarters of the total organization)
29	07	Local headquarters (i.e., for this site only)
2	08	03+05
26	10	03+07
3	11	No headquarters
16	12	05+07
19	15	03+05+07

Card I, 23/

How many corporate units are located at this site? (corporate units include major functional units, divisions, operating groups, etc.)

80	1	1
14	2	2-3
7	3	4-7
0	4	8-15
1	5	16-31
1	6	32+
3	9	NA

Size and Function of this site

Card I, 24/-27/

What is the SIC classification of this site?

55	2xxx	Manufacturing
	3xxx	
6	4xxx	Transportation, Communication, Electric, Gas and Sanitary Services
12	5xxx	Wholesale and Retail Trade
10	6xxx	Finance, Insurance and Real Estate
23	7xxx	Services
	8xxx	

Response
Distributions Punch Response Categories

Card I, 28/-31/

What is the total number of employees at this site (as of 1-1-73)?

20	Small (up to 299)
35	Medium (300-499)
50	Large (500+)
1	NA

Card I, 32/

Into what category does this number (28/-31/) fall?

11	1	100-249
46	2	250-499
19	3	500-999
17	4	1000-1999
8	5	2000-3999
5	6	4000+

Card I, 33/

Does this organization have a formal organizational chart?

85	1	Yes
20	2	No
1	9	NA

Card I, 34/

How many layers of authority are there at this site? Answer for the major corporate unit (if more than one) at this site. A layer is a set of positions within an organization with similar placement in the hierarchy of organizational authority.

	Number of Layers	
4	2	3
29	3	4
28	4	5
21	5	6
16	6	7
4	7	8
4	8	9+

Span of Control

Card I, 35/36/

How many members of this organization (at this site) report directly to the President (or Chief Executive)?*

$$\bar{X} = 7.5 (6.6), N = 102 (4 \text{ NAP})$$

$$M_e = 6.5 (1-50)$$

Card I, 37/38/

How many vice presidents or executives on the second level are there?

$$\bar{X} = 6.7 (4.6), N = 104 (2 \text{ NA})$$

$$M_e = 6 (1-35)$$

Card I, 39/-58/

How many people report directly to each position in the second level?

39/40/ #1 position

$$\bar{X} = 4.8 (3.3), N = 96 (10 \text{ NA})$$

$$M_e = 4.5 (0-18)$$

41/42/ #2 position

$$\bar{X} = 4.5 (3.7), N = 91 (3 \text{ NAP}; 12 \text{ NA})$$

$$M_e = 4 (0-25)$$

43/44/ #3 position

$$\bar{X} = 5.0 (7.0), N = 81 (12 \text{ NAP}; 13 \text{ NA})$$

$$M_e = 3 (0-45)$$

45/46/ #4 position

$$\bar{X} = 4.4 (4.0), N = 67 (26 \text{ NAP}; 13 \text{ NA})$$

$$M_e = 4 (0-20)$$

* \bar{X} = mean (standard deviation), N = number (NAP = not applicable; NA = no answer)
 M_e = median (range)

The punch for NAP on I, 35/36/ and I, 37/38/ is 98; for items I, 39/40/ through I, 57/58/ the punches for NAP are 97 and 98; for items I, 59/-68/ the punch is 8; for items I, 69/70/ through I, 75/76/ the punch is 98; in all cases, the punch for NA is 9 or 99.

47/48/ #5 position

$$\bar{X} = 4.1 (3.8), N = 63 (29 \text{ NAP}; 14 \text{ NA})$$

$$M_e = 3 (0-14)$$

49/50/ #6 position

$$\bar{X} = 3.1 (2.2), N = 50 (43 \text{ NAP}; 13 \text{ NA})$$

$$M_e = 3 (0-7)$$

51/52/ #7 position

$$\bar{X} = 3.4 (2.8), N = 42 (55 \text{ NAP}; 9 \text{ NA})$$

$$M_e = 3 (0-12)$$

53/54/ #8 position

$$\bar{X} = 2.8 (2.0), N = 27 (71 \text{ NAP}; 8 \text{ NA})$$

$$M_e = 3 (0-8)$$

55/56/ #9 position

$$\bar{X} = 3.4 (2.6), N = 15 (82 \text{ NAP}; 9 \text{ NA})$$

$$M_e = 4 (0-10)$$

57/58/ #10 position

$$\bar{X} = 3.3 (2.0), N = 13 (84 \text{ NAP}; 9 \text{ NA})$$

$$M_e = 4 (0-6)$$

Card I, 59/-68/

How many layers of authority are subordinate to each position in the second authority layer? (If none, enter 0.)

59/ #1 position

$$\bar{X} = 2.5 (1.7), N = 95 (11 \text{ NA})$$

$$M_e = 2 (0-7)$$

60/ #2 position

$$\bar{X} = 2.3 (1.6), N = 88 (4 \text{ NAP}; 14 \text{ NA})$$

$$M_e = 2 (0-7)$$

61/ #3 position

$$\bar{X} = 1.9 (1.6), N = 78 (13 \text{ NAP}; 15 \text{ NA})$$

$$M_e = 2 (0-7)$$

62/ #4 position

$$\bar{X} = 2.0 (1.5), N = 64 (28 \text{ NAP}; 16 \text{ NA})$$

$$M_e = 2 (0-7)$$

63/ #5 position

$$\bar{X} = 1.8 (1.5), N = 60 (29 \text{ NAP}; 17 \text{ NA})$$

$$M_e = 2 (0-7)$$

64/ #6 position

$$\bar{X} = 1.9 (1.5), N = 51 (42 \text{ NAP}; 13 \text{ NA})$$

$$M_e = 2 (0-7)$$

65/ #7 position

$$\bar{X} = 1.8 (1.2), N = 42 (54 \text{ NAP}; 10 \text{ NA})$$

$$M_e = 2 (0-5)$$

66/ #8 position

$$\bar{X} = 1.9 (1.6), N = 27 (70 \text{ NAP}; 9 \text{ NA})$$

$$M_e = 2 (0-7)$$

67/ #9 position

$$\bar{X} = 1.7 (1.2), N = 15 (81 \text{ NAP}; 10 \text{ NA})$$

$$M_e = 2 (0-5)$$

68/ #10 position

$$\bar{X} = 1.4 (1.0), N = 13 (83 \text{ NAP}; 10 \text{ NA})$$

$$M_e = 1 (0-3)$$

Card I, 69/70/

How many executives in the third layer report directly to executives in the second layer?

$$\bar{X} = 24.1 (18.7), N = 98 (8 \text{ NA})$$

$$M_e = 19.5 (1-97)$$

Card I, 71/72/

How many executives in the fourth layer report directly to executives in the third layer?

$$\bar{X} = 34.2 (30.2), N = 84 (4 \text{ NAP}; 18 \text{ NA})$$

$$M_e = 22.5 (1-97)$$

Card I, 73/74/

How many executives in the fifth layer report directly to executives in the fourth layer?

$$\bar{X} = 40.9 (35.4), N = 38 (36 \text{ NAP}; 32 \text{ NA})$$

$$M_e = 23 (5-97)$$

Card I, 75/76/

How many executives in the sixth layer report directly to executives in the fifth layer?

$$\bar{X} = 46.7 (39.6), N = 18 (60 \text{ NAP}; 28 \text{ NA})$$

$$M_e = 40 (0-97)$$

Response
Distributions Punch Response Categories

Card II, 5/-36/

Functions Performed at This Site: For each of the following functions, circle one number corresponding to the appropriate answer for each question (with reference to this site).

1. Develop, legitimize and symbolize the organization's charter (public relations, advertising, etc.)

5/ Is the function performed here?

83	1	Yes
23	2	No

6/ Is it the main task of at least one person?

63	1	Yes
40	2	No
3	3	Allocation unclear

2. Dispose of, distribute and service the output (sales and service, customer complaints, etc.)

7/ Is the function performed here?

97	1	Yes
9	2	No

8/ Is it the main task of at least one person?

93	1	Yes
10	2	No
3	3	Allocation unclear

3. Carry outputs and resources from place to place (transport)

9/ Is the function performed here?

75	1	Yes
31	2	No

10/ Is it the main task of at least one person?

71	1	Yes
33	2	No
2	3	Allocation unclear

Response
Distributions Punch Response Categories

4. Acquire and allocate human resources (employment, etc.)

11/ Is the function performed here?

106	1	Yes
0	2	No

12/ Is it the main task of at least one person?

91	1	Yes
11	2	No
4	3	Allocation unclear

5. Develop and transform human resources (education and training, etc.)

13/ Is the function performed here?

96	1	Yes
10	2	No

14/ Is it the main task of at least one person?

60	1	Yes
41	2	No
5	3	Allocation unclear

6. Maintain human resources and promote their identification with the organization (welfare, medical, safety, magazine, sports and social, etc.)

15/ Is the function performed here?

97	1	Yes
9	2	No

16/ Is it the main task of at least one person?

70	1	Yes
33	2	No
3	3	Allocation unclear

7. Obtain and control materials and equipment (buying material control, stores, stock control, etc.)

17/ Is the function performed here?

101	1	Yes
5	2	No

18/ Is it the main task of at least one person?

93	1	Yes
12	2	No
1	3	Allocation unclear

Response
Distributions Punch Response Categories

8. Maintain and erect buildings and equipment (maintenance, works engineer, etc.)

19/ Is the function performed here?

98	1	Yes
8	2	No

20/ Is it the main task of at least one person?

92	1	Yes
12	2	No
2	3	Allocation unclear

9. Record and control financial resources (accounts, costs, wages, etc.)

21/ Is the function performed here?

103	1	Yes
3	2	No

22/ Is it the main task of at least one person?

99	1	Yes
6	2	No
1	3	Allocation unclear

10. Control the workflow (planning, progressing, etc.)

23/ Is the function performed here?

101	1	Yes
4	2	No
1	9	NA

24/ Is it the main task of at least one person?

87	1	Yes
13	2	No
5	3	Allocation unclear
1	9	NA

11. Control the quality of materials, equipment and outputs (inspection, testing, etc.)

25/ Is the function performed here?

85	1	Yes
19	2	No
2	9	NA

Response
Distributions Punch Response Categories

26/ Is it the main task of at least one person?

74	1	Yes
26	2	No
4	3	Allocation unclear
2	9	NA

12. Assess and devise ways of producing the output (work study, operations research, rate-fixing, methods study, etc.)

27/ Is the function performed here?

91	1	Yes
15	2	No

28/ Is it the main task of at least one person?

73	1	Yes
31	2	No
2	3	Allocation unclear

13. Devise new out-puts, equipment and processes

29/ Is the function performed here?

86	1	Yes
20	2	No

30/ Is it the main task of at least one person?

66	1	Yes
37	2	No
3	3	Allocation unclear

14. Develop and operate administrative procedures (registry, filing, statistics, O&M)

31/ Is the function performed here?

99	1	Yes
7	2	No

32/ Is it the main task of at least one person?

76	1	Yes
24	2	No
6	3	Allocation unclear

Response
Distributions Punch Response Categories

15. Deal with legal and insurance requirements (legal, registrar, insurance, licensing, etc.)

33/ Is the function performed here?

82	1	Yes
24	2	No

34/ Is it the main task of at least one person?

62	1	Yes
39	2	No
5	3	Allocation unclear

16. Acquire information on the operational field (market research)

35/ Is the function performed here?

80	1	Yes
26	2	No

36/ Is it the main task of at least one person?

55	1	Yes
43	2	No
8	3	Allocation unclear

Personnel Department

Card II, 37/38/

How many employees are there in the personnel department?

$\bar{X} = 14.8$ (20.4), $N = 103$ (3 NAP)
 $M_e = 5$ (1-97)

Card II, 39/40/

How many of these employees report directly to the head of this department?

$\bar{X} = 3.6$ (3.8), $N = 102$ (4 NAP)
 $M_e = 3$ (0-32)

Response
Distributions Punch Response Categories

Card II, 41/

Is the head of this department responsible mainly to someone in this site or to another corporate unit in another site?

96	1	Personnel department is part of the chain of command in this site and thus reports within this site
5	2	Personnel is part of corporate headquarters and reports to headquarters outside this site
5	3	Other

Card II, 42/

How many persons in this unit are employed mainly to provide services to employees at this site?

38	0	None
17	1	1
26	2	2-3
7	3	4-7
4	4	8-15
12	5	16+
2	9	NA

Card II, 43/

How many employees are there in your public relations department?

54	0	None (no public relations department)
10	1	1
10	2	2-3
17	3	4-7
8	4	8-15
5	5	16+
2	9	NA

Card II, 44/-61/

Functions of the Personnel Department: For each of the following functions, circle one number corresponding to the appropriate answer for each question (with reference to the personnel department at this site). (N=103, in 3 cases there is no personnel department at the site.)

1. Assign employees to jobs at this site

44/ Is the function performed here?

82	1	Yes
21	2	No

Response
Distributions Punch Response Categories

45/ Is it the main task of at least one person?

51	1	Yes
48	2	No
4	3	Allocation unclear

2. Recruit and hire employees for this site

46/ Is the function performed here?

96	1	Yes
6	2	No
1	9	NA

47/ Is it the main task of at least one person?

67	1	Yes
32	2	No
4	3	Allocation unclear

3. Provide work-related education and training

48/ Is the function performed here?

80	1	Yes
23	2	No

49/ Is it the main task of at least one person?

31	1	Yes
67	2	No
5	3	Allocation unclear

4. Provide for employee hygiene (medical, mental)

50/ Is the function performed here?

84	1	Yes
19	2	No

51/ Is it the main task of at least one person?

43	1	Yes
58	2	No
2	3	Allocation unclear

Response
Distributions Punch Response Categories

5. Plan and maintain service facilities (cafeteria, parking, etc.)

52/ Is the function performed here?

73	1	Yes
30	2	No

53/ Is it the main task of at least one person?

28	1	Yes
72	2	No
3	3	Allocation unclear

6. Record and control employee related financial functions (payroll, benefits deductions, etc.)

54/ Is the function performed here?

73	1	Yes
30	2	No

55/ Is it the main task of at least one person?

43	1	Yes
59	2	No
1	3	Allocation unclear

7. Deal with legal and insurance requirements (workman's compensation, medical insurance, etc.)

56/ Is the function performed here?

97	1	Yes
6	2	No

57/ Is it the main task of at least one person?

47	1	Yes
53	2	No
3	3	Allocation unclear

8. Acquire information on the job market (research manpower availability)

58/ Is the function performed here?

87	1	Yes
16	2	No

59/ Is it the main task of at least one person?

23	1	Yes
74	2	No
6	3	Allocation unclear

Response
Distributions Punch Response Categories

9. Plan employee services (plan and organize sports teams, picnics, etc.)

60/ Is the function performed here?

73	1	Yes
30	2	No

61/ Is it the main task of at least one person?

16	1	Yes
81	2	No
6	3	Allocation unclear

Card II, 62/

How many positions similar to that of the "head of this site" are there in the total organization?

51	0	None
2	1	1
5	2	2-3
12	3	4-7
6	4	8-15
25	5	16+
4	8	No head of site
1	9	NA

Card II, 65/

How many more layers of authority are there in the total organization above the layers of authority at this site?

42	0	None
18	1	
17	2	
18	3	
5	4	
4	5	
2	9	NA

Card II, 66/

When was this site occupied?

44	1	Before 1941
8	2	1941-1948
17	3	1949-1956
16	4	1957-1964
19	5	1965-1972
0	6	1973
2	9	NA

Response
Distributions Punch Response Categories

Card II, 67/

When was this (total organization) founded?

11	1	Before 1847
53	2	1847-1910
23	3	1911-1942
14	4	1943-1958
2	5	1959-1966
1	6	1967-1970
2	9	NA

Card II, 68/69/

What is the recent (since 1960) history of structural changes within the total organization?

1	03	There was a recent split
4	05	There was a recent merger
25	07	There was a recent acquisition
3	10	Split and acquisition
8	11	Other
9	12	Merger and acquisition
6	15	Split and merger and acquisition
1	18	Acquisition and other
1	26	Split and merger and acquisition and other
47	98	None
1	99	NA

Card II, 70/

Is this organization (at this site) increasing in size (number of employees), decreasing or remaining about the same?

11	1	Sharply (25% or more) increasing
44	2	Increasing
36	3	Remaining the same
10	4	Decreasing
5	5	Sharply (25% or more) decreasing

Workforce Organization at This Site

Card III, 5/6/

Which types of organizations for collective bargaining do employees have?

2	03	Independent employee association
2	05	Local union (wider than organization)
50	07	National or International union
1	10	Independent employee association and National or International union
3	12	Local union and National or International union
48	98	None

Response
Distributions Punch Response Categories

Card III, 7/8/

What wage categories of employees are organized?

43	03	Hourly, non-exempt
1	05	Salaried, non-exempt
12	08	Hourly, non-exempt and Salaried, non-exempt
2	15	Hourly, non-exempt; Salaried, non-exempt and Salaried, exempt
48	98	None

Card III, 9/

What is the maximum salary level at which salaried employees are organized?

0	1	Less than \$8,000
2	2	\$8,000-\$9,999
0	3	\$10,000-\$11,999
12	4	\$12,000 or more
91	8	No salaried are organized
1	9	NA

Card III, 10/

Is this a union shop or an open shop?

50	1	Union shop
8	2	Open shop
48	8	No union at all

Card III, 11/

How many collective bargaining agreements are there at this site?

48	0	None
29	1	1
21	2	2-3
5	3	4-7
2	4	8-15
1	5	16-31

Card III, 68/-71/

How many employees at this site are covered by collective agreements?

$\bar{X} = 374.9$ (301.5), $N = 98$ (8 NA)
 $M_e = 105$ (0-4800)

Response
Distributions Punch Response Categories

Card III, 12/

For hourly non-exempt workers, wages, hours and working conditions are primarily determined by:

55	1	Collective bargaining
46	2	Management
0	3	Individual negotiation
5	9	NA

Card III, 13/

For salaried non-exempt workers, wages, hours and working conditions are primarily determined by:

11	1	Collective bargaining
91	2	Management
2	3	Individual negotiation
2	8	No salaried non-exempt workers

Card III, 14/

For salaried exempt workers, wages, hours and working conditions are primarily determined by:

1	1	Collective bargaining
90	2	Management
15	3	Individual negotiation

Suggestions, Complaints and Grievance Systems

Card III, 15/

Is the suggestions system formal or informal?

34	1	Formal only
37	2	Informal only
6	3	Formal and informal
29	8	No suggestions system

Card III, 16/17/

How many employees received awards last year (1972) for suggestions that included improvement or savings for the operation?

$\bar{X} = 23.8$ (33.6), $N = 44$ (57 NAP; 5 NA)
 $M_e = 7$ (0-96)

Response
Distributions Punch Response Categories

Card III, 18/19/

What is the nature of the most commonly used grievance process, the role of the personnel department in it and how many authority layers are involved before a final settlement?

0	03	There is a formal grievance procedure
3	05	There is an informal grievance procedure
0	07	A grievance can pass through some but not all authority layers in this site before it is resolved
5	10	03+07
0	11	A grievance can pass through all authority layers in this site before it is resolved
3	12	05+07
0	13	Personnel or industrial relations department acts in mediating role at any level of grievance resolution
10	14	03+11
1	16	03+13
1	17	05+11
6	18	05+13
31	23	03+07+13
12	25	05+07+13
25	27	03+11+13
6	29	05+11+13
3	98	No grievance system at all

Work Organization

Card III, 20/

How many shifts (more than 50 workers or at least 25% of total workforce) are employed?

40	1	One day shift
19	2	Two (day-evening) shift
26	3	Three shifts
0	4	Four shifts
10	5	Other
11	6	One day shift with one or more other shifts with less than 50

Card III, 21/

Are these shifts fixed or floating?

95	1	Fixed
6	2	Floating
0	3	Fixed with a core hours system
4	4	Combination fixed and floating
1	9	NA

Response
Distributions Punch Response Categories

Card III, 22/-24/

If any shifts are fixed, what is the proportion of workers in each fixed shift.

22/ Day Shift

0	1	0-15%
3	2	16-39%
39	3	40-79%
60	4	80%+
4	8	No fixed shifts

23/ Evening shift

17	1	0-15%
37	2	16-39%
2	3	40-79%
0	4	80%+
46	7	No evening shift
4	8	No fixed shifts

24/ Night shift

14	1	0-15%
13	2	16-39%
0	3	40-79%
0	4	80%+
75	7	No night shift
4	8	No fixed shifts

Card III, 25/

What is the proportion of permanent employees who are part time (as of January 1, 1973)?

30	0	No part time employees
64	1	Less than one third
11	2	One to two thirds
0	3	More than two thirds
1	9	NA

Card III, 75/76/

What is the required number of hours worked per week (not including overtime) in 1972?

1	33	
7	35	
2	36	
3	37	
26	38	(37 1/2 or 38)
64	40	
3	99	NA

Response
Distributions Punch Response Categories

Card III, 26/

What was the average overtime per week during 1972?

55	1	Up to two hours
28	2	2-4 hours
8	3	5-7 hours
4	4	8-10 hours
0	5	11-13 hours
1	6	14+ hours
7	8	No overtime
3	9	NA

Card III, 27/

What was the average number of hours worked per week (including overtime) in 1972? Into what category does this number fall?

1	1	30-34 hours
38	2	35-39 hours
57	3	40-44 hours
7	4	45-49 hours
2	5	50-54 hours
0	6	55+ hours
1	9	NA

Nature, Frequency and Timing of Breaks for Most Employees

Card III, 28/

Are there any regular coffee breaks during the day?

9	1	No coffee breaks allowed
35	2	No scheduled breaks, but allowed at employee discretion
16	3	One scheduled during the day
46	4	One scheduled during each half day

Card III, 29/30/

Which mealtime breaks do you have?

78	05	Lunch only
3	08	Breakfast and lunch
12	12	Lunch and Dinner
11	15	Breakfast and Lunch and Dinner
2	98	None

Response
Distributions Punch Response Categories

Card III, 31/

How are the breaktimes regulated?

5	1	Workers punch in and out at scheduled breaks
0	2	Meal tickets have time printed on them
56	3	Supervisor controls
22	4	General signal (e.g., bell)
2	5	At employees' request
10	6	Self-regulated
8	7	According to production schedule
3	9	NA

Card III, 32/

Can workers leave the site during coffee breaks?

54	1	No workers may leave the site
31	2	All employees may leave the site
12	3	Some workers may leave the site
9	8	No coffee breaks

Card III, 33/

What proportion of employees leave the site during lunch?

12	1	Most (90%+)
11	2	Nearly all (60-89%)
15	3	About half (40-59%)
25	4	Some (10-39%)
39	5	Few or none (0-9%)
1	7	Can't leave site
1	8	No lunch break
2	9	NA

Card III, 34/

For most of the workers in this site, is the work pace in each department set by:

27	1	Specific machine
42	2	Supervisor
2	3	Group assembly
11	4	Self
7	5	Customers
13	6	Volume of business
3	7	Other
1	9	NA

Response
Distributions Punch Response Categories

Card III, 35/

The model work team in production operations at this site has how many members?

29	1	No production operations
12	2	Up to 3
17	3	4-7
9	4	8-11
7	5	12-15
1	6	16-19
1	7	20+
29	8	No work teams
1	9	NA

Card III, 36/

What is the proportion of employees at this site who are unable to leave their position without a relief or a stoppage of work?

4	0	None
53	1	Up to .04
14	2	.05-.09
9	3	.10-.19
14	4	.20-.39
6	5	.40-.79
6	6	.80+

Card III, 37/ (Answered by interviewer on basis of observation)

Work in the production (including clerical) sections is performed in:

6	0	No production section
1	1	Large spaces (over 2400 sq ft) with highly dense areas (less than 15 sq ft per employee)
1	2	Medium spaces (about 1500 sq ft) with highly dense areas
9	3	Large spaces with dense areas (about 30 sq ft per employee)
25	4	Medium spaces with dense areas
37	5	Large spaces with low density areas (45 sq ft per employee)
13	6	Medium spaces with low density areas
7	7	Most employees work 3 or more to a room (300 sq ft)
4	8	Most employees work 1 or 2 to a room
3	9	NA

Card VI, 5/-8/

Service Code and Name in the cleaning service category*

103	1600	Cleaning Services
3	1601	Laundry

Card VI, 9/

Is there a service in this category?

15	1	Yes
91	0	No

Card VI, 10/

What is the proportion of employees who have used this service over the past year?

91	0	No service in this category
0	1	Under 11%
2	2	11-40%
0	3	41-60%
1	4	61-90%
0	5	91-100%
12	9	NA

Card VI, 11/

Which layer of employees has the highest proportion using this service?

91	0	No service
0	1	The highest layer
1	2	The middle layer(s)
0	3	The lowest layer
0	4	The highest and middle layers
0	5	The middle and lowest layers
2	6	All layers
12	9	NA

Card VI, 12/

Organizational Involvement in Service

91	0	No service
2	1	Totally paid for by firm, service is free for workers
0	2	Cash subsidy by firm, users pay some of the cost
1	3	Firm allows the use of its facilities without cost and any other costs paid by workers
0	4	Service is organized and financed by employee bargaining unit
0	5	Service is organized and financed by employee social unit
0	6	Service is provided on a profit basis for the company, workers pay all costs
12	9	NA

*Responses Card VI, 5/-8/ to Card VI, 21/ refer to the most important services mentioned in the cleaning services category.

Tally Sheet for Employee Services

The following is a list of services that could be provided to employees at or through the workplace. Please indicate which of the following services are available to the employees at this site by circling the appropriate number opposite each service. If you have any service(s) within a particular category which we have not included, please write it in next to the "Other-specify" line for that category.

For each service (Card III, 38/-67/; Card IV, 5/-66/), the following are the response categories and punches:

Is this service available?	Yes	1
	No.	2
	Provided by union	6
	Provided for special groups only	7
	Provided informally only.	8
	NA.	9

Card III	1	2	6	7	8	9***
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COMMERCIAL MARKET

**RETAIL SERVICES

38/ Drug Store	15*	91*				
39/ Food Shopping	9	97				
40/ Concessionaire	26	80				
41/ Free Use of Company Equipment Outside Workplace (other than cars)	18	71		1	16	
42/ Rental of Company Equipment	3	102			1	
43/ Rental of Company Property		106				
67/ Other (specify)	7	99				
44/ MANUAL FOOD SERVICE	66	37		3		
**45/ MECHANICAL FOOD SERVICE	92	14				

**CLERICAL SERVICES

46/ Typewriters	8	57		2	39	
47/ Xeroxing	13	46		1	46	
48/ Other (specify)	3	99			4	

**CRAFT SERVICES

49/ Shoe Repair and Shoe Shine	10	96				
50/ Barber	6	100				
51/ Beauty Shop	8	98				
52/ Home Maintenance	3	103				
53/ Roofing	2	103			1	

*Frequency

**Major Categories

***"punches"

	1	2	6	7	8	9
Card III	1	2	6	7	8	9
54/ Waterproofing	1	104			1	
55/ Painting	1	104			1	
56/ Plumbing	3	102			1	
57/ Janitorial Services	1	104			1	
58/ Building Reconstruction		105			1	
59/ Printing	6	95			5	
60/ Computer Programming	1	104			1	
61/ Appliance Repair	5	93			8	
62/ Other (specify)	4	101			1	
**CLEANING SERVICES						
63/ Laundry	2	102		2		
64/ House Cleaning	2	104				
65/ Window Cleaning	1	105				
66/ Other (specify)	1	105				
Card IV						
**COMMERCIAL SERVICES						
5/ Discounting on Company Products/Services	74	32				
6/ Credit Union	42	62	2			
7/ Banking Services, Advances on Pay	61	38		3	4	
8/ Check Cashing	48	54		2	2	
9/ Automatic Payroll Deduction (other than charity)	96	9		1		
10/ Savings and/or Loans	52	53				1
11/ Credit Cards	25	61		19		1
12/ Safety Deposits	6	100				
13/ Accounting	2	100		1	3	
14/ Tax Aid	22	69		2	13	
15/ Investment Planning	22	77		4	3	
16/ Payroll Deduction for Charity	91	14				1
17/ Company Store	23	83				
18/ Other (specify)	10	95				1
**AGENT SERVICES						
19/ Purchasing non-company products	32	70			4	
20/ Finding, moving	53	23		27	3	
21/ Travel Services	31	69		4	2	

Card IV	1	2	6	7	8	9
22/ Ticket Service	39	63		5	3	
23/ Advertising in company journal	21	84			1	
24/ Placement service	39	49		2	16	
25/ Other (specify)	4	102				
**FAMILY SERVICES						
26/ Day Care	2	104				
27/ Services to the retired	55	49			2	
28/ Other (specify)	3	103				
**LEISURE AND RECREATION						
29/ Relaxation rooms, lounge (without mechanical food)	62	40		3	1	
30/ Music, Radio, TV	55	45		1	5	
31/ Parties, Movies	66	35		2	3	
32/ Sports Activities	76	25		1	4	
33/ Country Clubs, Resorts	6	96		3		1
34/ Employee Association	43	53		6	3	1
35/ Other (specify)	11	93		1		1
**RELIGIOUS, COMMUNAL, POLITICAL						
36/ Funeral	17	87			2	
37/ Religious Services	11	95				
38/ Use of auditorium (by employees)	43	63				
39/ Consumer program	11	94			1	
40/ Charity Collection	66	40				
41/ Other (specify)	3	103				
PROFESSIONS AND PROFESSIONAL ORGANIZATIONS						
**EDUCATIONAL-INFORMATIONAL SERVICES						
42/ Library	53	50		3		
43/ School (non work-related programs)	53	51		1	1	
44/ Publishing in company journal	30	75		1		
45/ Other (specify)	15	82		9		
HEALTH SERVICES						
46/ On-the-job first-aid treatment	101	5				
47/ Family Health	54	23		23		1
48/ General Medical Care (Dispensary)	76	50				

Card IV	1	2	6	7	8	9
50/ Psychiatric	15	92		1		
50A/ Drug Abuse, Alcoholism Treatments	23	79	1	1	21	
51/ Dental Clinic	2	104				
52/ Prescription Services	20	86				
53/ Blood bank	77	28			1	
54/ Counseling (personal, family)	48	42	1		15	
55/ Other (specify)	12	94				
**TRANSPORTATION						
56/ Auto Services	7	91		6	1	2
57/ Parking	82	18		6		
58/ Company vehicles for personal use	15	67		24		
59/ Shuttle bus service	11	94		1		
60/ Airplanes, helicopters	1	103		2		
61/ Other (specify)	3	102		1		
**MISCELLANEOUS						
62/ Security	82	21		1	2	
63/ Flexibility of work hours	34	66			5	1
64/ Communications Services	78	24		1	1	
65/ Special arrangements for the handicapped	39	66				1
66/ Other (specify)	6	100				

After going through the tally sheet of services for employees, ask the respondent to choose the most important service in his organization in each of the 13 major categories of services preceeded by two asterisks. Do not include the cafeteria, parking, employee association, credit union or health services. For each of the 13 individual services so named, fill out "Service Description Form I" following. In that form the first item identifies the category, and specifies the various services recorded. The other items provide information on all the important services in that category, combined, serving as a composite measurement of the significant services within a given category.

Response
Distributions Punch Response Categories

Card V, 5/-8/

Service Code and Name in the retail category*

67	1100	Retail Services
9	1101	Drug Store
4	1102	Food Shopping
12	1103	Concessionaire
14	1104	Free Use of Company Equipment (outside worksite)

Card V, 9/

Is there a service in this category?

61	1	Yes
45	0	No

Card V, 10/

What is the proportion of employees who have used this service over the past year?

45	0	No service in this category
14	1	Under 11%
5	2	11-40%
8	3	41-60%
7	4	61-90%
4	5	91-100%
23	9	NA

Card V, 11/

Which layer of employees has the highest proportion using this service?

45	0	No service
0	1	The highest layer
4	2	The middle layer(s)
6	3	The lowest layer
2	4	The highest and middle layers
10	5	The middle and lowest layers
17	6	All layers
22	9	NA

*Responses Card V, 5/-8/ to Card V, 21/ refer to the most important service in the retail category.

Response
Distributions Punch Response Categories

Card V, 12/
 Organizational Involvement in Service

45	0	No service
12	1	Totally paid for by firm, service is free for workers
5	2	Cash subsidy by firm, users pay some of the cost
16	3	Firm allows the use of its facilities without cost and any other costs paid by workers
0	4	Service is organized and financed by employee bargaining unit
0	5	Service organized and financed by employee social unit
6	6	Service is provided on a profit basis for the company, workers pay all costs
22	9	NA

Card V, 13/-17/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

$$\bar{X} = 4582.0 (18,787.2), N = 28 (45 \text{ NAP}; 33 \text{ NA})$$

$$M_e = 0 (0-99997)$$

Card V, 18/

What is the accessibility of this service to the average employee?

45	0	No service
31	1	Within a five minute walk of place of work
4	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
2	4	The service is provided outside the site
24	9	NA

Card V, 19/20/

When (what year) was this service established?

45	00	No service
5		Up to 1920
4		1921-1940
11		1941-1960
15		1961-1973
26	99	NA

Response
Distributions Punch Response Categories

Card V, 21/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

45	0	No service
1	1	Decreasing--employees are getting it elsewhere
0	2	Decreasing--current employees have less use for it-- change type of employee
1	3	Decreasing--current employees have less use for it-- disenchanted with the service
17	4	About the same
1	5	Increasing--employees less able to get it elsewhere
2	6	Increasing--current employees more interested--change in type of employee
14	7	Increasing--current employees more interested--better information or better service
1	8	Decreasing--management decided to reduce costs
24	9	NA

Card V, 22/-25/

Service Code and Name in mechanical food category*

106	1300	Mechanical Food Service
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Card V, 26/

Is there a service in this category?

93	1	Yes
13	0	No

Card V, 27/

What is the proportion of employees who have used this service over the past year?

13	0	No service in this category
1	1	Under 11%
8	2	11-40%
11	3	41-60%
24	4	61-90%
20	5	91-100%
29	9	NA

*Responses Card V, 22/-25/ to Card V, 33/ refer to the most important services mentioned in the mechanical food category.

Response
Distributions Punch Response Categories

Card V, 28/

Which layer of employees has the highest proportion using this service?

13	0	No service
0	1	The highest layer
4	2	The middle layer(s)
10	3	The lowest layer
1	4	The highest and middle layers
21	5	The middle and lowest layers
28	6	All layers
29	9	NA

Card V, 29/

Organizational Involvement in Service

13	0	No service
1	1	Totally paid for by firm, service is free for workers
9	2	Cash subsidy by firm, users pay some of the cost
40	3	Firm allows the use of its facilities without cost and any other costs paid by workers
0	4	Service is organized and financed by employee bargaining unit
1	5	Service organized and financed by employee social unit
12	6	Service is provided on a profit basis for the company, workers pay all costs
30	9	NA

Card V, 30/-34/

What is the total cost (direct and hidden) of the operation of this service to the company per year?

$$\bar{X} = 2703.8 (5097.8), N = 52 (13 \text{ NAP}; 41 \text{ NA})$$

$$M_e = 0 (0-30,000)$$

Card V, 35/

What is the accessibility of this service to the average employee?

13	0	No service
55	1	Within a five minute walk of place of work
3	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
0	4	The service is provided outside this site
30	9	NA

Response
Distributions Punch Response Categories

Card V, 36/37/

When (what year) was this service established?

13	00	No service
1		Up to 1920
4		1921-1940
17		1941-1960
32		1961-1973
39	99	NA

Card V, 38/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

13	0	No service
1	1	Decreasing--employees are getting it elsewhere
0	2	Decreasing--current employees have less use for it-- change type of employee
2	3	Decreasing--current employees have less use for it-- disenchanted with the service
42	4	Use about the same
0	5	Increasing--employees less able to get it elsewhere
1	6	Increasing--current employees more interested--change in type of employee
13	7	Increasing--current employees more interested--better information or better service
1	8	Decreasing--management decided to reduce costs
33	9	NA

Card V, 39/-42/

Service Code and Name in the clerical category.

83	1400	Clerical Services
2	1401	Typewriters
20	1402	Xeroxing
1	1499	Other

Card V, 43/

Is there a service in this category?

64	1	Yes
42	0	No

*Responses Card V, 39/-42/ to Card V, 55/ refer to the most important services mentioned in the clerical category.

Response
Distributions Punch Response Categories

Card V, 44/

What is the proportion of employees who have used this service over the past year?

42	0	No service in this category
14	1	Under 11%
4	2	11-40%
2	3	41-60%
0	4	61-90%
2	5	91-100%
42	9	NA

Card V, 45/

Which layer of employees has the highest proportion using this service?

42	0	No service
1	1	The highest layer
3	2	The middle layer(s)
1	3	The lowest layer
5	4	The highest and middle layers
3	5	The middle and lowest layers
10	6	All layers
41	9	NA

Card V, 46/

Organizational Involvement in Service

42	0	No service
21	1	Totally paid for by firm, service is free for workers
0	2	Cash subsidy by firm, users pay some of cost
2	3	Firm allows the use of its facilities without cost and any other costs paid by workers
0	4	Service is organized and financed by employee bargaining unit
0	5	Service organized and financed by employee social unit
0	6	Service is provided on a profit basis for the company, workers pay all costs
41	9	NA

Card V, 47/-51/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

$\bar{X} = 481.6$ (726.2), $N = 16$ (42 NAP; 48 NA)

$M_e = 275$ (0-3000)

Response
Distributions Punch Response Categories

Card V, 52/

What is the accessibility of this service to the average employee?

42	0	No service
23	1	Within a five minute walk of place of work
0	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
0	4	The service is provided outside this site
41	9	NA

Card V, 53/54/

When (what year) was this service established?

42	00	No service
1		1921-1940
9		1941-1960
11		1961-1973
43	99	NA

Card V, 55/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

42	0	No service
0	1	Decreasing--employees are getting it elsewhere
0	2	Decreasing--current employees have less use for it-- change type of employee
0	3	Decreasing--current employees have less use for it-- disenchanted with the service
9	4	Use about the same
0	5	Increasing--employees less able to get it elsewhere
0	6	Increasing--current employees more interested--change in type of employee
11	7	Increasing--current employees more interested--better information or better service
0	8	Decreasing--management decided to reduce costs
44	9	NA

Card V, 56/-59/

Service Code and Name in the craft category*

88	1500	Craft Services
3	1501	Shoe Repair and Shoe Shine
2	1502	Barber
4	1503	Beauty Shop
1	1504	Home Maintenance
2	1511	Printing
1	1512	Computer Programming
4	1513	Appliance Repair
1	1599	Other

*Responses Card V, 56/-59/ to "What is the most important services mentioned in the craft category."

Response
Distributions Punch Response Categories

Card V, 60/

Is there a service in this category?

34	1	Yes
72	0	No

Card V, 61/

What is the proportion of employees who have used this service over the past year?

72	0	No service in this category
7	1	Under 11%
7	2	11-40%
2	3	41-60%
1	4	61-90%
1	5	91-100%
16	9	NA

Card V, 62/

Which layer of employees has the highest proportion using this service?

72	0	No service
1	1	The highest layer
2	2	The middle layer(s)
1	3	The lowest layer
2	4	The highest and middle layers
7	5	The middle and lowest layers
6	6	All layers
15	9	NA

Card V, 63/

Organizational Involvement in Service

72	0	No service
6	1	Totally paid for by firm, users pay some of the cost
5	2	Cash subsidy by firm, users pay some of the cost
7	3	Firm allows use of its facilities without cost and any other costs paid by workers
0	4	Service is organized and financed by employee bargaining unit
0	5	Service organized and financed by employee social unit
1	6	Service is provided on a profit basis for the company, workers pay all costs
15	9	NA

Response
Distributions Punch Response Categories

Card V, 64/-68/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

$\bar{X} = 1522.7$ (1872.3), $N = 11$ (72 NAP; 23 NA)
 $M_e = 750$ (0-5000)

Card V, 69/

What is the accessibility of this service to the average employee?

72	0	No service
17	1	Within a five minute walk of place of work
1	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
1	4	The service is provided outside this site
15	9	NA

Card V, 70/71/

When (what year) was this service established?

72	00	No service
1		Up to 1920
3		1921-1940
4		1941-1960
8		1961-1973
18	99	NA

Card V, 72/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

72	0	No service
0	1	Decreasing--employees are getting it elsewhere
1	2	Decreasing--current employees have less use for it-- change type of employee
0	3	Decreasing--current employees have less use for it-- disenchanted with the service
9	4	Use about the same
0	5	Increasing--employees less able to get it elsewhere
2	6	Increasing--current employees more interested--change in type of employee
6	7	Increasing--current employees more interested--better information or better service
0	8	Decreasing--management decided to reduce costs
16	9	NA

Response
Distributions Punch Response Categories

Card VI, 13/-17/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

1	00000	No cost
1	99997	\$99997+
91	99998	No service
13	99999	NA

Card VI, 18/

What is the accessibility of this service to the average employee?

91	0	No service
3	1	Within a five minute walk of place of work
0	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
0	4	The service is provided outside this site
12	9	NA

Card VI, 19/20/

When (what year) was this service established?

91	00	No service
1		Up to 1920
1		1921-1940
1		1941-1960
0		1961-1973
12	99	NA

Card VI, 21/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

91	0	No service
0	1	Decreasing--employees are getting it elsewhere
0	2	Decreasing--current employees have less use for it-- change type of employee
0	3	Decreasing--current employees have less use for it-- disenchanted with the service
2	4	Use about the same
0	5	Increasing--employees less able to get it elsewhere
0	6	Increasing--current employees more interested--change in type of employee
1	7	Increasing--current employees more interested--better information or better service
0	8	Decreasing--management decided to reduce costs
12	9	NA

Response
Distributions Punch Response Categories

Card VI, 22/-25/

Service Code and Name in the commercial category*

16	1700	Commercial Services
39	1701	Discounting on Company Products/Services
8	1702	Credit Union
7	1703	Banking Services, Advances on Pay
7	1704	Check Cashing
8	1705	Automatic Payroll Deduction (other than charity)
6	1706	Savings and/or Loans
1	1707	Credit Cards
3	1711	Investment Planning
2	1712	Payroll Deduction for Charity
6	1713	Company Store
3	1799	Other

Card VI, 26/

Is there a service in this category?

105	1	Yes
1	0	No

Card VI, 27/

What is the proportion of employees who have used this service over the past year?

1	0	No service
11	1	Under 11%
26	2	11-40%
12	3	41-60%
14	4	61-90%
28	5	91-100%
14	9	NA

Card VI, 28/

Which layer of employees has the highest proportion using this service?

1	0	No service
1	1	The highest layer
11	2	The middle layer(s)
8	3	The lowest layer
7	4	The highest and middle layers
17	5	The middle and lowest layers
47	6	All layers
14	9	NA

*Responses Card VI, 22/-25/ to Card VI, 28/ refer to the most important services mentioned in the commercial category.

Response
Distributions Punch Response Categories

Card VI, 29/
 Organizational Involvement in Service

1	0	No service
41	1	Totally paid for by firm, service is free for workers
20	2	Cash subsidy by firm, users pay some of the cost
26	3	Firm allows the use of its facilities without cost and any other costs paid by workers
0	4	Service is organized and financed by employee bargaining unit
0	5	Service is organized and financed by employee social unit
3	6	Service is provided on a profit basis for the company, workers pay all costs
15	9	NA

Card VI, 30/-34/

What is the total cost (direct and hidden) of the operation of this service
per year to the company?

$$\bar{X} = 16569.5 (33321.6), N = 63 (1 \text{ NAP}; 42 \text{ NA})$$

$$M_e = 2000 (0-99997)$$

Card VI, 35/

What is the accessibility of this service to the average employee?

1	0	No service
81	1	Within a five minute walk of place of work
1	2	Between a 5 and a 15 minute walk
1	3	Over a 15 minute walk
6	4	The service is provided outside this site
1	5	Not applicable
15	9	NA

Card VI, 36/37/

When (what year) was this service established?

1	00	No service
11		Up to 1920
8		1921-1940
28		1941-1960
33		1961-1973
25	99	NA

Response
Distributions Punch Response Categories

Card VI, 38/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

1	0	No service
2	1	Decreasing--employees are getting it elsewhere
2	2	Decreasing--current employees have less use for it-- change type of employee
1	3	Decreasing--current employees have less use for it-- disenchanted with the service
37	4	Use about the same
3	5	Increasing--employees less able to get it elsewhere
7	6	Increasing--current employees more interested--change in type of employee
34	7	Increasing--current employees more interested--better information or better service
0	8	Decreasing--management decided to reduce costs
19	9	NA

Card VI, 39/-42/

Service Code and Name in the agent category*

35	1800	Agent Services
17	1801	Purchasing non-company products
28	1802	Finding, moving
10	1803	Travel Services
5	1804	Ticket Services
5	1805	Advertising in company journal
6	1806	Placement Service

Card VI, 43/

Is there a service in this category?

97	1	Yes
9	0	No

Card VI, 44/

What is the proportion of employees who have used this service over the past year?

9	0	No service
46	1	Under 11%
16	2	11-40%
4	3	41-60%
2	4	61-90%
2	5	91-100%
27	9	NA

*Responses Card VI, 39/-42/ to Card VI, 55/ refer to the most important services mentioned in the agent category.

Response
Distributions Punch Response Categories

Card VI, 45/

Which layer of employees has the highest proportion using this service?

9	0	No service
24	1	The highest layer
8	2	The middle layer(s)
3	3	The lowest layer
8	4	The highest and middle layers
17	5	The middle and lowest layers
11	6	All layers
26	9	NA

Card VI, 46/

Organizational Involvement in Service

9	0	No service
41	1	Totally paid for by firm, service is free for workers
7	2	Cash subsidy by firm, users pay some of the cost
19	3	Firm allows the use of its facilities without cost and any other costs paid by workers
0	4	Service is organized and financed by employee bargaining unit
4	5	Service organized and financed by employee social unit
0	6	Service is provided on a profit basis for the company, workers pay all costs
26	9	NA

Card VI, 47/-51/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

$$\bar{X} = 15375.1 (30212.8), N = 54 (9 \text{ NAP}; 43 \text{ NA})$$

$$M_e = 2000 (0-99997)$$

Card VI, 52/

What is the accessibility of this service to the average employee?

9	0	No service
44	1	Within a five minute walk of place of work
2	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
23	4	The service is provided outside this site
28	9	NA

Response
Distributions Punch Response Categories

Card VI, 53/54/

When (what year) was this service established?

9	00	No service
2		Up to 1920
2		1921-1940
21		1941-1960
32		1961-1973
40	99	NA

Card VI, 55/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

9	0	No service
0	1	Decreasing--employees are getting it elsewhere
4	2	Decreasing--current employees have less use for it-- change type of employee
1	3	Decreasing--current employees have less use for it-- disenchanted with the service
43	4	Use about the same
1	5	Increasing--employees less able to get it elsewhere
4	6	Increasing--current employees more interested--change in type of employee
14	7	Increasing--current employees more interested--better information or better service
0	8	Decreasing--management decided to reduce costs
30	9	NA

Card VI, 56/-59/

Service Code and Name in the family service category*

65	2000	Family Services
40	2002	Services to the Retired
1	2099	Other

Card VI, 60/

Is there a service in this category?

61	1	Yes
45	0	No

*Responses Card VI, 56/-59/ to Card VI, 72/ refer to the most important service mentioned in the family services category.

Response
Distributions Punch Response Categories

Card VI, 61/

What is the proportion of employees who have used this service over the past year?

45	0	No service
27	1	Under 11%
5	2	11-40%
0	3	41-60%
0	4	61-90%
1	5	91-100%
28	9	NA

Card VI, 62/

Which layer of employees has the highest proportion using this service?

45	0	No service
3	1	The highest layer
5	2	The middle layer(s)
0	3	The lowest layer
1	4	The highest and middle layers
9	5	The middle and lowest layers
16	6	All layers
5	7	Other
22	9	NA

Card VI, 63/

Organizational Involvement in Service

45	0	No service
34	1	Totally paid for by firm, service is free for workers
4	2	Cash subsidy by firm, users pay some of the cost
3	3	Firm allows the use of its facilities without cost and any other costs paid by workers
0	4	Service organized and financed by employee bargaining unit
0	5	Service organized and financed by employee social unit
0	6	Service is provided on a profit basis by the company, workers pay all costs
20	9	NA

Card VI, 64/-68/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

\bar{X} = 4686.6 (17251.6), N = 33 (45 NAP; 28 NA)
 M_e = 1000 (0-99997)

Response
Distributions Punch Response Categories

Card VI, 69/

What is the accessibility of this service to the average employee?

45	0	No service
20	1	Within a five minute walk of place of work
1	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
15	4	The service is provided outside this site
1	5	Not applicable
24	9	NA

Card VI, 70/71/

When (what year) was this service established?

45	00	No service
2		Up to 1920
3		1921-1940
9		1941-1960
18		1961-1973
29	99	NA

Card VI, 72/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

45	0	No service
0	1	Decreasing--employees are getting it elsewhere
0	2	Decreasing--current employees have less use for it-- change type of employee
0	3	Decreasing--current employees have less use for it-- disenchanted with the service
16	4	Use about the same
0	5	Increasing--employees less able to get it elsewhere
10	6	Increasing--current employees more interested--change in type of employee
11	7	Increasing--current employees more interested--better information or better service
0	8	Decreasing--management decided to reduce costs
24	9	NA

Card VII, 5/-8/

Service Code and Name in the leisure and recreation category*

28	3000	Leisure and Recreation
20	3001	Relaxation Rooms, Lounge (without manual food)
10	3002	Music, Radio, TV
15	3003	Parties, Movies
16	3004	Sports Activities
17	3006	Employee Association

*Responses Card VII, 7/-9/ to Card VII, 21/ refer to the most important services mentioned in the leisure and recreation category.

Response
Distributions Punch Response Categories

Card VII, 9/

Is there a service in this category?

97	9	Yes
9	0	No

Card VII, 10/

What is the proportion of employees who have used this service over the past year?

9	0	No service in this category
7	1	Under 11%
22	2	11-40%
10	3	41-60%
17	4	61-90%
22	5	91-100%
19	9	NA

Card VII, 11/

Which layer of employees has the highest proportion using this service?

9	0	No service
4	1	The highest layer
5	2	The middle layer(s)
8	3	The lowest layer
5	4	The highest and middle layers
21	5	The middle and lowest layers
35	6	All layers
19	9	NA

Card VII, 12/

Organizational Involvement in Service

9	0	No service
56	1	Totally paid for by firm, service is free for workers
13	2	Cash subsidy by firm, users pay some of the cost
6	3	Firm allows the use of its facilities without cost and any other costs paid by workers
1	4	Service organized and financed by employee bargaining unit
3	5	Service organized and financed by employee social unit
0	6	Service is provided on a profit basis for the company, workers pay all costs
18	9	NA

Response
Distributions Punch Response Categories

Card VII, 13/-17/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

\bar{X} = 6692.9 (12855.1), N = 71 (9 NAP; 26 NA)
 M_e = 3000 (0-99997)

Card VII, 18/

What is the accessibility of this service to the average employee?

9	0	No service
54	1	Within a five minute walk of place of work
4	2	Between a 5 and a 15 minute walk
1	3	Over a 15 minute walk
14	4	The service is provided outside this site
2	5	Not applicable
22	9	NA

Card VII, 19/20/

When (what year) was this service established?

9	00	No service
5		Up to 1920
8		1921-1940
21		1941-1960
32		1961-1973
31	99	NA

Card VII, 21/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

9	0	No service
1	1	Decreasing--employees are getting it elsewhere
1	2	Decreasing--current employees have less use for it-- change type of employee
0	3	Decreasing--current employees have less use for it-- disenchantment with the service
42	4	Use about the same
1	5	Increasing--employees less able to get it elsewhere
5	6	Increasing--current employees more interested--change in type of employee
21	7	Increasing--current employees more interested--better information or better service
0	8	Decreasing--management decided to reduce costs
26	9	NA

Response
Distributions Punch Response Categories

Card VII, 22/-25/

Service Code and Name in religious, communal, political category*

56	4000	Religious, Communal, Political
4	4001	Funeral
2	4002	Religious Services
17	4003	Use of Auditorium (by employees)
2	4004	Consumer Program
25	4005	Charity Collection

Card VII, 26/

Is there a service in this category?

85	1	Yes
21	0	No

Card VII, 27/

What is the proportion of employees who have used this service over the past year?

21	0	No service in this category
11	1	Under 11%
14	2	11-40%
4	3	41-60%
18	4	61-90%
3	5	91-100%
35	9	NA

Card VII, 28/

Which layer of employees has the highest proportion using this service?

21	0	No service
2	1	The highest layer
4	2	The middle layer(s)
0	3	The lowest layer
7	4	The highest and middle layers
11	5	The middle and lowest layers
26	6	All layers
35	9	NA

Card VII, 29/

Organizational Involvement in Service

21	0	No service
38	1	Totally paid for by firm, service is free for workers
2	2	Cash subsidy by firm, users pay some of the cost
10	3	Firm allows the use of its facilities without cost and any other costs paid by workers

*Responses Card VII, 22/-25/ to Card VII, 38/ refer to the most important services mentioned in the religious, communal, political category.

Response
Distributions Punch Response Categories

Card VII, 29/ (cont.)

0	4	Service organized and financed by employee bargaining unit
0	5	Service organized and financed by employee social unit
0	6	Service is provided on a profit basis for the company, workers pay all costs
35	9	NA

Card VII, 30/-34/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

$$\bar{X} = 2473.4 (4190.4), N = 35 (21 \text{ NAP}, 50 \text{ NA})$$

$$M_e = 1000 (0-20000)$$

Card VII, 35/

What is the accessibility of this service to the average employee?

21	0	No service
46	1	Within a five minute walk of place of work
2	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
2	4	The service is provided outside this site
35	9	NA

Card VII, 36/37/

When (what year) was this service established?

21	00	No service
2		Up to 1920
10		1921-1940
13		1941-1960
22		1961-1973
38	99	NA

Card VII, 38/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

21	0	No service
0	1	Decreasing--employees are getting it elsewhere
2	2	Decreasing--current employees have less use for it--change type of employee
1	3	Decreasing--current employees have less use for it--disenchanted with the service
36	4	Use about the same
1	5	Increasing--employees less able to get it elsewhere

Response
Distributions Punch Response Categories

Card VII, 38/ (cont.)

3	6	Increasing--current employees more interested--change in type of employee
6	7	Increasing--current employees more interested--better information or better service
0	8	Decreasing--management decided to reduce costs
36	9	NA

Card VII, 39/-42/

Service Code and Name in the educational-informational services category*

42	5100	Educational-Informational Services
12	5101	Library
36	5102	School, non-work-related programs
4	5103	Publishing in company journal (professional activity)
12	5199	Other

Card VII, 43/

Is there a service in this category?

88	1	Yes
18	0	No

Card VII, 44/

What is the proportion of employees who have used this service over the past year?

18	0	No service in this category
41	1	Under 11%
10	2	11-40%
7	3	41-60%
2	4	61-90%
1	5	91-100%
27	9	NA

Card VII, 45/

Which layer of employees has the highest proportion using this service?

18	0	No service
13	1	The highest layer
10	2	The middle layer(s)
3	3	The lowest layer
19	4	The highest and middle layers
6	5	The middle and lowest layers
11	6	All layers
1	7	Other
25	9	NA

*Responses Card VII, 39/-42/ to Card VII, 55/ refer to the most important services mentioned in the educational-informational services category.

Response
Distributions Punch Response Categories

Card VII, 46/
 Organizational Involvement in Service

18	0	No service
44	1	Totally paid for by firm, service is free for workers
19	2	Cash subsidy by firm, users pay some of the cost
0	3	Firm allows the use of its facilities without cost and any other costs paid by workers
0	4	Service organized and financed by employee bargaining unit
0	5	Service organized and financed by employee social unit
0	6	Service is provided on a profit basis for the company, workers pay all costs
25	9	NA

Card VII, 47/-51/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

$\bar{X} = 17296.8$ (3770.1), $N = 50$ (18 NAP; 38 NA)
 $M_e = 5000$ (250-99997)

Card VII, 52/

What is the accessibility of this service to the average employee?

18	0	No service
27	1	Within a five minute walk of place of work
0	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
34	4	The service is provided outside this site
1	5	Not applicable
26	9	NA

Card VII, 53/54/

When (what year) was this service established?

18	00	No service
4		Up to 1920
6		1921-1940
18		1941-1960
20		1961-1973
40	99	NA

Response
Distributions Punch Response Categories

Card VII, 55/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

18	0	No service
0	1	Decreasing--employees are getting it elsewhere
1	2	Decreasing--current employees have less use for it-- change type of employee
1	3	Decreasing--current employees have less use for it-- disenchanted with the service
27	4	Use about the same
0	5	Increasing--employees less able to get it elsewhere
4	6	Increasing--current employees more interested--change in type of employee
20	6	Increasing--current employees more interested--better information or better service
0	8	Decreasing--management decided to reduce costs
35	9	NA

Card VII, 56/-59/

Service Code and Name in the transportation category*

79	6000	Transportation
4	6001	Auto Services
5	6002	Parking
13	6003	Company vehicles for personal use
4	6004	Shuttle bus service
1	6099	Other

Card VII, 60/

Is there a service in this category?

88	1	Yes
17	0	No
1	9	NA

Card VII, 61/

What is the proportion of employees who have used this service over the past year?

17	0	No service
17	1	Under 11%
6	2	11-40%
1	3	41-60%
2	4	61-90%
0	5	91-100%
63	9	NA

*Responses Card VII, 56/-59/ to Card VII, 72/ refer to the most important services mentioned in the transportation category.

Response
Distributions Punch Response Categories

Card VII, 62/

Which layer of employees has the highest proportion using this service?

17	0	No service
10	1	The highest layer
2	2	The middle layer(s)
3	3	The lowest layer
2	4	The highest and middle layers
5	5	The middle and lowest layers
4	6	All layers
63	9	NA

Card VII, 63/

Organizational Involvement in Service

17	0	No service
17	1	Totally paid for by firm, service is free for workers
5	2	Cash subsidy by firm, users pay some of the cost
4	3	Firm allows the use of its facilities without cost and any other costs paid by workers
0	4	Service organized and financed by employee bargaining unit
0	5	Service organized and financed by employee social unit
0	6	Service provided on a profit basis for the company, workers pay all costs
63	9	NA

Card VII, 64/-68/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

$$\bar{X} = 17599.7 (31525.1), N = 20 (17 \text{ NAP}; 69 \text{ NA})$$

$$M_e = 3500 (0-99997)$$

Card VII, 69/

What is the accessibility of this service to the average employee?

17	0	No service
14	1	Within a five minute walk of place of work
1	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
9	4	The service is provided outside this site
65	9	NA

Response
Distributions Punch Response Categories

Card VII, 70/71/

When (what year) was this service established?

17	00	No service
0		Up to 1920
2		1921-1940
5		1941-1960
12		1961-1973
70	99	NA

Card VII, 72/

Has the use of this service over the past few years been decreasing, about the same or increasing? Why do you think this is so?

17	0	No service
0	1	Decreasing--employees are getting it elsewhere
1	2	Decreasing--current employees have less use for it-- change type of employee
1	3	Decreasing--current employees have less use for it-- disenchanted with the service
14	4	Use about the same
1	5	Increasing--employees less able to get it elsewhere
3	6	Increasing--current employees more interested--change in type of employee
4	7	Increasing--current employees more interested--better information or better service
1	8	Decreasing--management decided to reduce costs
64	9	NA

Card VIII, 5/-8/

Service Code and Name in the miscellaneous category*

52	7000	Miscellaneous
19	7001	Security
12	7002	Flexibility of Work Hours
11	7003	Communications Services
8	7004	Special Arrangements for the Handicapped
4	7099	Other

Card VIII, 9/

Is there a service in this category?

101	1	Yes
5	0	No

*Responses Card VII, 5/-8/ to Card VIII, 21/ refer to the most important services mentioned in the miscellaneous category.

Response
Distributions Punch Response Categories

Card VIII, 10/

What is the proportion of employees who have used this service over the past year?

5	0	No service
17	1	Under 11%
2	2	11-40%
3	3	41-60%
7	4	61-90%
25	5	91-100%
47	9	NA

Card VIII, 11/

Which layer of employees has the highest proportion using this service?

5	0	No service
0	1	The highest layer
2	2	The middle layer(s)
4	3	The lowest layer
1	4	The highest and middle layers
10	5	The middle and lowest layers
35	6	All layers
1	7	Other
48	9	NA

Card VIII, 12/

Organizational Involvement in Service

5	0	No service
46	1	Totally paid for by firm, service is free for workers
1	2	Cash subsidy by firm, users pay some of the cost
6	3	Firm allows the use of its facilities without cost and any other costs paid by workers
0	4	Service organized and financed by employee bargaining unit
0	5	Service organized and financed by employee social unit
0	6	Service is provided on a profit basis for the company, workers pay all costs
48	9	NA

Card VIII, 13-17/

What is the total cost (direct and hidden) of the operation of this service per year to the company?

1000 (0-99999)

Response
Distributions Punch Response Categories

Card VIII, 18/

What is the accessibility of this service to the average employee?

5	0	No service
50	1	Within a five minute walk of place of work
0	2	Between a 5 and a 15 minute walk
0	3	Over a 15 minute walk
1	4	The service is provided outside this site
3	5	Not applicable
47	9	NA

Card VIII, 19/20/

When (what year) was this service established?

5	00	No service
5		Up to 1920
3		1921-1940
15		1941-1960
24		1961-1973
54	99	NA

Card VIII, 21/

Has the use of this service over the past few years been decreasing, about the same, or increasing? Why do you think this is so?

5	0	No service
0	1	Decreasing--employees are getting it elsewhere
0	2	Decreasing--current employees have less use for it-- change type of employee
1	3	Decreasing--current employees have less use for it-- disenchanted with the service
36	4	Use about the same
1	5	Increasing--employees less able to get it elsewhere
4	6	Increasing--current employees more interested--change in type of employee
10	7	Increasing--current employees more interested--better information or better service
1	8	Decreasing--management decided to reduce costs
48	9	NA

	<u>Service Code and Name</u>	1	2	9
**	40 ENVIRONMENT			
36/	41 Recycling	7	96	3
37/	42 Pollution research	6	97	3
38/	43 Pollution education	5	98	3
39/	44 Pollution control	18	85	3
40/	45 Environmental Improvement program	10	93	3
67/	49 Other	2	104	
**	50 HOUSING			
41/	51 Renewal programs	7	96	3
42/	52 Low income housing	8	95	3
68/	59 Other	1	105	
**	60 MINORITY			
43/	61 Minority employment opportunities, minority and disadvantaged emp.	81	22	3
44/	62 Minority enterprise, advisory com- mittees and counseling	30	73	3
69/	69 Other	4	102	
**	70 HEALTH			
45/	71 Mobile dental and health unit	3	99	4
46/	72 Research on community health problems	8	95	3
47/	73 Community health facilities	9	93	4
70/	79 Other	5	101	
**	80 YOUTH			
48/	81 Athletic programs	21	82	3
49/	82 Counseling and guidance	12	91	3
50/	83 Summer employment	47	56	3
51/	84 Junior achievement programs	15	87	4
71/	89 Other	14	91	1

	<u>Service Code and Name</u>	1	2	9
**	MISCELLANEOUS			
52/	91 Voter registration	14	89	3
53/	92 Police recruitment	3	100	3
54/	93 Child care centers	5	98	3
55/	94 Counseling	6	97	3
56/	95 Exhibits	19	84	3
57/	96 Theater groups	9	94	3
58/	97 Music appreciation programs	7	96	3
59/	98 Cultural awareness programs	8	95	3
72/	99 Other	13	92	1

Card VIII, 60/-62/

How much is expended directly from this site for all community services?
CODE THOUSANDS OF DOLLARS

$\bar{X} = 116.7$ (251.0), $N = 68$ (11 NAP; 27 NA)
 $M_e = 10$ (0-997)

INTERVIEWER: After going through the tally sheet of service for community community services, ask the respondent to choose the most important service in his organization in each of the 10 major categories of services preceded by two asterisks. For each of the 10 services named, fill out "Service Description Form II" following. The first item in each form identifies the category and specifies the various services recorded. The other items provide information on all the important services in that category combined.

Response
Distributions Punch Response Categories

Card IX, 5/6/

Service Code and Name--Community Affairs*

64	00	General Community Affairs
22	01	Community Relations Committees
9	02	Social Service Agencies
10	03	Community Development
1	09	Other

Card IX, 7/

How many employees are paid their full salary to provide this service?

32	0	None
6	1	
0	2	
0	3	
1	4	
0	5	5+
52	8	No service
15	9	NA

Card IX, 8/

How many employees are involved in the provision of this service on a part time basis?

2	0	None
17	1	1-2
14	2	3-4
6	3	5-6
1	4	7-8
0	5	9-10
0	6	11-12
1	7	13+
52	8	No service
13	9	NA

Card IX, 9/-12/

What is the total cost (manpower, facilities, etc.) involved in providing this service?

\bar{X} = 3527.3 (3774.0), N = 34 (52 NAP; 20 NA)
 M_e = 1600 (0-9997)

*Items Card IX, 5/6/ to Card IX, 13/14/ refer to the Community Affairs category.

Response
Distributions Punch Response Categories

Card IX, 13/14/

When was this service established? What year?

9		Up to 1960
7		1961-1965
15		1966-1970
4		1971-1973
52	98	No service
19	99	NA

Card IX, 15/16/

Service Code and Name--Consumer Program*

83	10	Consumer Programs
3	11	Consumer education
1	12	Credit Information
1	13	Driver's education
18	14	Community Service Projects

Card IX, 17/

How many employees are paid their full salary to provide this service?

21	0	None
0	1	
0	2	
0	3	
0	4	
1	5	5+
70	8	No service
14	9	NA

Card IX, 18/

How many employees are involved in the provision of this service on a part time basis?

0	0	None
8	1	1-2
8	2	3-4
3	3	5-6
0	4	7-8
1	5	9-10
0	6	11-12
1	7	13+
70		No service
15		NA

*Items Card IX, 15/16/ to Card IX, 23/24/ refer to the Consumer Program category.

Response
Distributions Punch Response Categories

Card IX, 19/-22/

What is the total cost (manpower, facilities, etc.) involved in providing this service?

\bar{X} = 4681.0 (3928.4), N = 22 (70 NAP; 14 NA)

M_e = 3750 (0-9997)

Card IX, 23/24/

When was this service established? What year?

7		Up to 1960
3		1961-1965
6		1966-1970
3		1971-1973
70	98	No service
17	99	NA

Card IX, 25/26/

Service Code and Name--Drugs*

101	20	Drugs
4	21	Drug education--films, talks, etc. (not for employees)

Card IX, 27/

How many employees are paid their full salary to provide this service?

7	0	None
0	1	
0	2	
0	3	
0	4	
0	5	5+
89	8	No service
10	9	NA

Card IX, 28/

How many employees are involved in the provision of this service on a part time basis?

0	0	None
4	1	1-2
3	2	3-4
0	3	5-6
0	4	7-8
0	5	9-10
0	6	11-12
0	7	13+
89	8	No service
10	9	NA

*Items Card IX, 25/26/ to Card IX, 33/34/ refer to the Drugs category.

Response
Distributions Punch Response Categories

Card IX, 29/-32/

What is the total cost (manpower, facilities, etc.) involved in providing This service?

2	0000	No cost
2	9997	\$9997+
89	9998	No service
13	9999	NA

Card IX, 33/34/

When was this service established? What year?

1		Up to 1960
3		1961-1965
3		1966-1970
0		1971-1973
89	98	No service
10	99	NA

Card IX, 35/36/

Service Code and Name -- Education*

80	30	Education
2	31	Leadership training
3	32	Reading Labs
7	33	Tutorial programs
10	34	Programs for drop-outs and ghetto children
2	35	Adult education
2	39	Other

Card IX, 37/

How many employees are paid their full salary to provide this service?

20	0	None
3	1	
0	2	
0	3	
0	4	
2	5	5+
68	8	No service
13	9	NA

*Items Card IX, 35/36/ to Card IX, 43/44/ refer to the Education category.

Response
 Distributions Pmn. b Response Categories

Card IX, 38/

How many employees are involved in the provision of this service on a part time basis?

3	0	None
9	1	1-2
8	2	3-4
3	3	5-6
0	4	7-8
1	5	9-10
0	6	11-12
3	7	13+
68	8	No service
11	9	NA

Card IX, 39/-42/

What is the total cost (manpower, facilities, etc.) involved in providing this service?

$\bar{X} = 4463.8$ (4390.3), $N = 17$ (68 NAP; 21 NA)
 $M_e = 2400$ (0-9997)

Card IX, 43/44/

When was this service established? What year?

4		Up to 1960
1		1961-1965
17		1966-1970
3		1971-1973
68	98	No service
13	99	NA

Card IX, 45/46/

Service Code and Name --Environment*

90	40	Environment
2	41	Recycling
1	42	Pollution research
11	44	Pollution control
2	43	Environmental improvement program

*Items Card IX, 46/46 to Card IX, 53/54/ refer to the Environment category.

Response
Distributions Punch Response Categories

Card IX, 47/

How many employees are paid their full salary to provide this service?

12	0	None
1	1	
1	2	
0	3	
1	4	
1	5	5+
76	8	No service
14	9	NA

Card IX, 48/

How many employees are involved in the provision of this service on a part time basis?

3	0	None
8	1	1-2
2	2	3-4
0	3	5-6
0	4	7-8
1	5	9-10
0	6	11-12
1	7	13+
76	8	No service
15	9	NA

Card IX, 49/-52/

What is the total cost (manpower, facilities, etc.) involved in providing this service?

1		\$100
2		\$500
2		\$2000
7		\$9997+
76	9998	No service
18	9999	NA

Card IX, 53/54/

When was this service established? What year?

1		Up to 1960
2		1961-1965
10		1966-1970
3		1971-1973
76	99	No service
14	99	NA

Response
Distributions Punch Response Categories

Card IX, 55/56/
 Service Code and Name--Housing*

99	50	Housing
3	51	Renewal programs
4	52	Low income housing

Card IX, 57/
 How many employees are paid their full salary to provide this service?

3	0	None
2	1	
1	2	
0	3	
0	4	
1	5	5+
96	8	No service
3	9	NA

Card IX, 58/
 How many employees are involved in the provision of this service on a part time basis?

0	0	None
2	1	1-2
4	2	3-4
1	3	5-6
0	4	7-8
0	5	9-10
0	6	11-12
0	7	13+
96	8	No service
3	9	NA

Card IX, 59/-62/
 What is the total cost (manpower, facilities, etc.) involved in providing this service?

0	0000	No cost
5	9997	\$9997+
96	9998	No service
5	9999	NA

*Items Card IX, 55/56/ to Card IX, 62/64/ refer to the Housing category.

Response
Distributions Punch Response Categories

Card IX, 63/64/

When was this service established? What year?

1		Up to 1960
0		1961-1965
6		1966-1970
0		1971-1973
96	98	No service
3	99	NA

Card IX, 65/66/

Service Code and Name--Minority*

42	60	Minority
47	61	Minority employment opportunities, minority and disadvantaged employment
14	62	Minority enterprise, advisory committees and counseling
3	69	Other

Card IX, 67/

How many employees are paid their full salary to provide this service?

53	0	None
2	1	
1	2	
1	3	
1	4	
0	5	5+
23	8	No service
25	9	NA

Card IX, 68/

How many employees are involved in the provision of this service on a part time basis?

5	0	None
34	1	1-2
15	2	3-4
1	3	5-6
0	4	7-8
0	5	9-10
2	6	11-12
1	7	13+
0		No service
25	9	NA

*Items Card IX, 65/66/ to Card IX, 75/74/ refer to the Minority category.

Response
Distributions Punch Response Categories

Card IX, 69/-72/

What is the total cost (manpower, facilities, etc.) involved in providing this service?

\bar{X} = 4391.0 (4230.0), N = 44 (23 NAP; 39 NA)
 M_e = 2000 (0-9997)

Card IX, 73/74/

When was this service established? What year?

11		Up to 1960
11		1961-1965
30		1966-1970
6		1971-1973
23	98	No service
25	99	NA

Card X, 5/6/

Service Code and Name --Health*

93	70	Health
3	71	Mobile dental and health unit
1	72	Research on community health problems
6	73	Community health facilities operated by organization
3	79	Other

Card X, 7/

How many employees are paid their full salary to provide this service?

8	0	None
0	1	
0	2	
0	3	
0	4	
3	5	5+
88	8	No service
7	9	NA

*Items Card X, 5/6/ to Card X, 13/14/ refer to the Health category.

Response
Distributions Punch Response Categories

Card X, 8/

How many employees are involved in the provision of this service on a part time basis?

0	0	None
6	1	1-2
1	2	3-4
0	3	5-6
1	4	7-8
0	5	9-10
0	6	11-12
2	7	13+
88	8	No service
8	9	NA

Card X, 9/-12/

What is the total cost (manpower, facilities, etc.) involved in providing this service?

$\bar{X} = 185.3$ (4218.7), $N = 7$ (88 NAP; 11 NA)
 $M_e = 2000$ (1000-9997)

Card X, 13/14/

When was this service established? What year?

4		Up to 1960
2		1961-1965
3		1966-1970
0		1971-1973
88	98	No service
9	99	NA

Card X, 16/

Service Code and Name--Youth*

59	80	Youth
9	81	Athletic programs
4	82	Counseling and guidance
17	83	Summer employment
7	84	Junior achievement programs
10	89	Other

* For Card X, 15/16/ to Card X, 23/24/ refer to the Youth category.

Response
Distributions Punch Response Categories

Card X, 17/

How many employees are paid their full salary to provide this service?

42	0	None
1	1	
0	2	
0	3	
0	4	
2	5	5+
39	8	No service
22	9	NA

Card X, 18/

How many employees are involved in the provision of this service on a part time basis?

4	0	None
18	1	1-2
13	2	3-4
4	3	5-6
0	4	7-8
3	5	9-10
1	6	11-12
2	7	13+
39	8	No service
22	9	NA

Card X, 19/-22/

What is the total cost (manpower, facilities, etc.) involved in providing this service?

$\bar{X} = 2887.0$ (3646.4), $N = 36$ (39 NAP; 31 NA)
 $M_e = 1000$ (0-9997)

Card X, 23/24/

When was this service established? What year?

11		Up to 1960
11		1961-1965
15		1966-1970
4		1971-1973
39	98	No service
26	99	NA

Response
Distributions Punch Response Categories

Card X, 25/26/

Service Code and Name--Miscellaneous*

87	90	Miscellaneous
1	91	Voter registration
2	93	Child care centers
7	95	Exhibits
2	97	Music appreciation program
7	99	Other

Card X, 27/

How many employees are paid their full salary to provide this service?

18	0	None
1	1	
0	2	
0	3	
0	4	
1	5	5+
68	8	No service
18	9	NA

Card X, 28/

How many employees are involved in the provision of this service on a part time basis?

4	0	None
10	1	1-2
4	2	3-4
1	3	5-6
0	4	7-8
0	5	9-10
0	6	11-12
1	7	13+
68	8	No service
18	9	NA

Card X, 29/-32/

What is the total cost (manpower, facilities, etc.) involved in providing this service?

$\bar{X} = 3667.8$ (4459.0), $N = 16$ (68 NAP; 22 NA)
 $M_e = 1000$ (0-9997)

*Items Card X, 25/26/ to Card X, 33/34/ refer to the Miscellaneous category.

Response
Distributions Punch Response Categories

Card X, 33/34/

When was this service established? What year?

3		Up to 1960
4		1961-1965
3		1966-1970
5		1971-1973
68	98	No service
23	99	NA

Parking

Card XI, 5/

Is there any parking provided by the company?

16	0	No parking space provided by company
9	1	Free parking space for some (e.g. executive) employees
10	2	Free parking space for about 1/2 the employees
12	3	Free parking space for nearly all the employees
53	4	Free parking space for all the employees
2	5	Parking available to some employees against fee
2	6	Parking available to most employees against fee
2	7	Company subvents parking elsewhere for some employees
0	8	Company subvents parking elsewhere for all employees

Card XI, 6/

Is the parking area (other than public area) owned by the company or leased?

71	1	Owned
13	2	Leased
4	3	Some of each
18	8	No parking area

Card XI, 7/

Are there security services for the parking area(s)?

24	1	No security services
5	2	Yes, fence only
23	3	Yes, guard only
34	4	Yes, guard and fence
2	5	Yes, guard and fence and TV monitoring
18	8	No parking area

Card XI, 8/

Was parking a demand in collective bargaining?

3	1	Yes
78	2	No
2	3	Unknown
16	8	No parking
7	9	NA

Response
Distributions Punch Response Categories

Cost per year of parking to the Company:

Card XI, 14/-18/

Land valuation (yearly rental equivalent)

\bar{X} = 20,538.5 (19,911.7), N = 13 (18 NAP; 75 NA)
 M_e = 13,000 (0-60,000)

Card XI, 19/-23/

Total operating costs (improvement, personnel, and equipment, maintenance, utilities) per year

\bar{X} = 6669.6 (6871.4), N = 28 (16 NAP; 62 NA)
 M_e = 4000 (0-25,000)

Cafeteria

Card XI, 24/

What proportion of employees at this site are served breakfast?

41	1	Up to .24
7	2	.25-.49
1	3	.50-.74
1	4	.75-1.0
18	7	No breakfast
36	8	No cafeteria
2	9	NA

Card XI, 25/

What proportion of employees at this site are served lunch?

10	1	Up to .24
12	2	.25-.49
28	3	.50-.74
19	4	.75-1.0
0	7	No lunch
36	8	No cafeteria
1	9	NA

Card XI, 26/

What proportion of employees at this site are served dinner?

27	1	Up to .24
6	2	.25-.49
1	3	.50-.74
1	4	.75-1.0
32	7	No dinner
36	8	No cafeteria
3	9	NA

Response
Distributions Punch Response Categories

Card XI, 27/

What proportion of employees at this site are served between meal snacks?

11	1	Up to .24
7	2	.25-.49
15	3	.50-.74
13	4	.75-1.0
23	7	No snacks
35	8	No cafeteria
2	9	NA

Card XI, 28/

Vending machines available to employees at this site:

6	1	Drinks only (coffee and soda)
25	2	Drinks and candy
25	3	Drinks and candy and cold food
42	4	Drinks and candy and cold food and hot food
2	5	Other (non-scale types)
6	8	No vending machines

Card XI, 29/-32/

Number of eating spaces available at this site:

$\bar{X} = 199.4$ (281.9), $N = 104$ (2 NA)
 $M_e = 105$ (0-2000)

Card XI, 33/

What proportion of employees is this number?

9	0	No spaces
62	1	Up to .24
24	2	.25-.49
7	3	.50-.74
2	4	.75-1.0
2	9	NA

Card XI, 34/

How many conference dining rooms are there?

71	0	
25	1	
6	2	2-3
3	3	4-7
0	4	8+
1	9	NA

Response
Distributions Punch Response Categories

Card XI, 35/36/

What are the criteria for using the executive dining room?

79	00	No executive dining room
7	03	Officers of the company only
9	05	Executives from a particular level and up
0	07	By salary level
2	08	03+05
1	10	03+07
4	11	By informal social basis--anyone can join an executive
0	13	By length of service
1	14	03+11
2	15	03+05+07
1	16	03+13

Card XI, 37/

What is the source of operating funds for the cafeteria?

7	1	Cafeteria totally paid by firm (workers eat free)
52	2	Cafeteria subsidized by firm, workers pay something
8	3	Cafeteria paid for only by workers
39	8	No cafeteria

Card XI, 38/

Who allocates funds for purchase of food?

20	1	Management
0	2	Worker group
1	3	Joint group
46	4	Operators
39	8	No cafeteria

Card XI, 39/

Who supervises the personnel operating the cafeteria?

22	1	Management
0	2	Worker group
0	3	Joint group
43	4	Outside agency
2	5	Other
39	8	No cafeteria

Response
Distributions Punch Response Categories

Card XI, 40/

Who decides on the schedule of operations?

55	1	Management
0	2	Worker group
2	3	Joint group
9	4	Outside agency
1	5	Other
39	8	No cafeteria

Card XI, 13/

What is the source of operating funds for the vendeteria?

37	0	No vendeteria
0	1	Vendeteria totally paid by firm, workers eat free
22	2	Vendeteria subsidized by firm, workers pay something
44	3	Vendeteria paid for only by workers
3	9	NA

Card XI, 41/42/

When was formal cafeteria service opened at this workplace?

9		1920 or earlier
12		1921-1940
21		1941-1960
22		1961-1973
39	98	No cafeteria
3	99	NA

Card XI, 43/

What type of food service is provided at this site?

25	1	Cafeteria only
26	2	Vendeteria only
42	3	Cafeteria and vendeteria
13	0	None

Card XI, 44/

What changes in range of services has it undergone since it was established (or in last 10 years if established earlier)?

8	1	Services more restricted than in the past
32	2	Services about the same as in the past
37	3	Services expanded
29	8	No cafeteria

Response
Distributions Punch Response Categories

Card XI, 45/

Has any union been involved in criticisms or suggestions as to the improvement of cafeteria operations?

36	0	No union
2	1	Yes, some time ago
4	2	Yes, recently
6	3	Yes, currently
2	4	No, never--they have no right to
9	5	No, they have never taken an interest
8	6	No, they have always been satisfied
37	8	No cafeteria
2	9	NA

Card XI, 46/-48/

How much is "expended" (total cost--direct and hidden) for operation of the cafeteria per year? CODE THOUSANDS

\bar{X} = 176.6 (216.2), N = 43 (39 NAP; 24 NA)
 M_e = 109 (0-997)

Card XI, 49/-51/

How much of cafeteria budget is subvented by management? (include indirect subsidies) CODE THOUSANDS

\bar{X} = 85.6 (189.0), N = 57 (39 NAP; 10 NA)
 M_e = 25 (0-997)

Card XI, 52/

Are beverages and/or food physically brought around to most employees at their job site?

3	1	Yes, at company expense
10	2	Yes, with worker payment and company subvention
11	3	Yes, total cost borne by workers
79	4	No
3	9	NA

Card XI, 53/

Which of the following describes the availability of company products to employees?

29	0	No company product or service available to employees
6	1	Available at the worksite at retail price
31	2	Available at the worksite at retail less discount
23	3	Available at the worksite at wholesale price
4	4	Available at company outlets at discount
1	5	Available at company outlets at wholesale
1	6	Available by mail order at discount

Response
Distributions Punch Response Categories

Card XI, 53/ (cont.)

0	7	Available by mail order at wholesale
10	8	Small amounts distributed "free" to employees
1	9	NA

Credit Union

Card XI, 54/

How many employees are members of the credit union(s) serving this site?
 CODE PROPORTION OF TOTAL EMPLOYEES

62	0	No credit union
9	1	Up to 24%
14	2	25-49%
15	3	50-74%
4	4	75% and over
2	9	NA

Card XI, 55/56/

Which of the following services are provided through the credit union(s)?

62	00	No credit union
1	03	Small loans (less than 2 weeks average pay)
0	05	Large loans (at least 2 weeks average pay)
0	07	Savings plan(s)
1	08	03+05
2	10	03+07
0	11	Investment plan(s) (stock purchasing)
1	12	05+07
0	13	Travel and vacation plan(s)
29	15	03+05+07
3	28	03+05+07+13
1	39	03+05+07+11+13
0	40	Other
1	43	03+40
3	55	03+05+07+40
1	68	03+05+07+13+40
1	79	03+05+07+11+13+40

Card XI, 57/58/

In what ways is the credit union supported by the employer?

60	00	No credit union
8	03	Space provided by employeer
3	05	Administration provided by employer
3	07	Other
21	08	03+05
1	10	03+07
10	98	No support

Response
Distributions Punch Response Categories

Health Services

Card XI, 59/60/

Which of the following health facilities are available at this site?

17	00	None
23	03	First aid dispensary
0	05	Examination room(s) available on non-emergency basis
0	07	Hospital beds
6	08	03+05
4	10	03+07
0	11	X-ray equipment
0	13	Medical lab
19	15	03+05+07
2	17	Other
1	19	03+05+11
1	20	03+17
4	25	03+05+17
1	26	03+05+07+11
3	28	03+05+07+13
5	32	03+05+07+17
1	36	03+05+11+17
1	38	03+05+13
6	39	03+05+07+11+13
2	45	03+05+07+13+17
10	56	03+05+07+11+13+17

Card XI, 61/62/

What kinds of professional health personnel are available on a regular basis?

22	00	None
9	03	Nurse(s)
8	05	Doctor(s) on call
3	07	Doctor(s) on daily schedule
7	08	03+05
22	10	03+07
4	11	Other
1	12	05+07
3	14	03+11
11	15	03+05+07
3	16	05+11
4	19	03+05+11
2	21	03+07+11
6	26	03+05+07+11
1	99	NA

Response
Distributions Punch Response Categories

Card XI, 63/-65/

What are the direct labor costs resulting from health care services?
 TOTAL DIRECT COSTS FROM 1/1/72-12/31/72. CODE THOUSANDS

$$\bar{X} = 49.8 (117.3), N = 80 (17 \text{ NAP}; 9 \text{ NA})$$

$$M_e = 12.5 (0-720)$$

Card XI, 66/-70/

How much space at this site is devoted to medical facilities? CODE
 SQUARE FEET

$$\bar{X} = 10,080 (27, 716.6), N = 83 (\text{NAP } 20; 3 \text{ NA})$$

$$M_e = 300 (0-99997)$$

Employees' Social Organization

Card XI, 71/

Ratio of membership to the total number of employees in the principal
 (largest) employee association?

54	0	No employee association
19	1	Up to .24
7	2	.25-.49
9	3	.50-.74
16	4	.75-1.0
1	9	NA

Card XI, 72/

Method of appointment of leaders (president)

54	0	No employee association
41	1	Elected by members--serves voluntarily
1	2	Elected by members--stipend from association
1	3	Elected by members--stipend from management
1	4	Nominated by management and confirmed by election-- voluntary service
0	5	Nominated by management and confirmed by election-- stipend from employees
1	6	Nominated by management and confirmed by election-- stipend from management
1	7	Appointment by management--stipend from management
5	8	Other
1	9	NA

Response
Distributions Punch Response Categories

Card XI, 73/
 Leader of Association

54	0	No employee association
48	1	Employee who serves association part time
0	2	Position of association leader is full time position paid by company
0	3	Position of association leader is full time position paid by association
4	9	NA

Card XI, 74/-76/

What are the total annual expenditures of the employee association?
 CODE AMOUNT IN THOUSANDS

$$\bar{X} = 11.8 (12.3), N = 43 (54 \text{ NAP}; 9 \text{ NA})$$

$$M_e = 7 (0-50)$$

Card XI, 77/

What proportion of this total annual expenditure is provided by the company?

50	0	No employee association activities
6	1	No company subvention
1	2	.01-.19
5	3	.20-.39
7	4	.40-.59
8	5	.60-.79
3	6	.80-.99
22	7	Company provides the total budget
4	9	NA

Card X, 35/-37/

If no employee association, what is the budget from management for employee activities? CODE THOUSANDS

$$\bar{X} = 4.4 (6.2), N = 55 (30 \text{ NAP}, 21 \text{ NA})$$

$$M_e = 2 (0-35)$$

Tally Sheet for Employee Activities

Ask respondent if each of the activities mentioned on the tally sheet is available to any employees through this site. If the answer is yes, then ask the following questions circling the appropriate responses on the grid. The question on participation should be answered with respect to either salaried and hourly or exempt and non-exempt employees for all the activities in a particular organization. Please indicate which distinction is being made.

Response

Distributions Punch Response Categories

Card XII, 5/

For the following questions on employee activities the participation questions are answered for these employee categories.

8	0	No employee activities
59	1	Hourly
35	2	Non-exempt
4	9	NA

111 Fashion Show

Card XII, 6/

Is this activity made available through this site?

17	1	Yes
89	2	No

Card XII, 7/8/

Who provides this activity?

89	00	Not offered
8	03	Management
3	05	Employee Social Organization
0	07	Union
5	11	Other
1	14	Management and other

Card XII, 9/-12/

What is the total number of participants?

$\bar{X} = 460.8$ (869.2), $N = 13$ (89 NAP; 4 NA)
 $M_e = 50$ (25-3010)

Card XII, 13/-16/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 391.5$ (840.7), $N = 13$ (89 NAP; 4 NA)
 $M_e = 45$ (10-3000)

Response
Distributions Punch Response Categories

Card XII, 17/18/

What is the proportion of participants who are hourly (non-exempt)?

89	00	No service
0		1%-25%
3		26%-50%
0		51%-75%
9		76%-97%
2		98%+
3	99	NA

112 Shopping Trips

Card XII, 19/

Is this activity made available through this site?

10	1	Yes
96	2	No

Card XII, 20/21/

Who provides this activity?

96	00	Not offered
3	03	Management
6	05	Employee Social Organization
0	07	Union
1	11	Other

Card XII, 22/-25/

What is the total number of participants?

$\bar{X} = 92.9$ (96.6), $N = 7$ (96 NAP; 3 NA)
 $M_e = 50$ (15-300)

Card XII, 26/-29/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 67.7$ (61.8), $N = 7$ (96 NAP; 3 NA)
 $M_e = 45$ (14-200)

Card XII, 30/31/

What is the proportion of participants who are hourly (non-exempt)?

96	00	No service
0		1%-25%
0		26%-50%
2		51%-75%
4		76%-97%
1		98%+
3	99	NA

Response
Distributions Punch Response Categories

199 Other Consumer Activities

Card XII, 32/

Is this activity made available through this site?

6	1	Yes
100	2	No

Card XII, 33/34/

Who provides this activity?

100	00	Not offered
1	03	Management
2	05	Employee Social Organization
0	07	Union
1	08	Management and Employee Social Organization
0	11	Other
2	16	Employee Social Organization and other

Card XII, 35/-38/

What is the total number of participants?

100	0000	No service
6	9999	NA

Card XII, 39/-42/

What is the total number of participants who are hourly or non-exempt?

100	0000	No service
6	9999	NA

Card XII, 43/44/

What is the proportion of participants who are hourly (non-exempt)?

100	00	No service
6	99	NA

311 Bowling

Card XII, 45/

Is this activity made available through this site?

64	1	Yes
42	2	No

Response
Distributions Punch Response Categories

Card XII, 46/47/

Who provides this activity?

42	00	Not offered
20	03	Management
19	05	Employee Social Organization
0	07	Union
2	08	Management and Employee Social Organization
5	11	Other
10	14	Management and other
5	16	Employee Social Organization and other
3	99	NA

Card XII, 48/-51/

What is the total number of participants?

$\bar{X} = 91.6$ (115.9), $N = 57$ (42 NAP; 7 NA)
 $M_e = 50$ (5-650)

Card XII, 52/-55/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 62.4$ (76.5), $N = 52$ (42 NAP; 12 NA)
 $M_e = 36.5$ (3-390)

Card XII, 56/57/

What is the proportion of participants who are hourly (non-exempt)?

42	00	No service
0		1%-25%
11		26%-50%
20		51%-75%
17		76%-97%
7		98%+
9	99	NA

312 Dances

Card XII, 58/

Is this activity made available through this site?

27	1	Yes
79	2	No

Card XII, 59/60/

Who provides this activity?

79	00	Not offered
5	03	Management

Response
Distributions Punch Response Categories

Card XII, 59/60/ (cont.)

14	05	Employee Social Organization
1	07	Union
2	11	Other
1	14	Management and other
3	16	Employee Social Organization and other
1	99	NA

Card XII, 61/-64/

What is the total number of participants?

\bar{X} = 203.6 (173.8), N = 22 (79 NAP; 5 NA)
 M_e = 175 (50-850)

Card XII, 65/-68/

What is the total number of participants who are hourly or non-exempt?

\bar{X} = 149.8 (167.0), N = 21 (79 NAP; 6 NA)
 M_e = 85 (0-765)

Card XII, 69/70/

What is the proportion of participants who are hourly (non-exempt)?

79	00	No service
2	01	No hourly (non-exempt) participants
1		1%-25%
1		26%-50%
6		51%-75%
9		76%-97%
2		98%+
6	99	NA

313 Golf

Card XIII, 5/

Is this activity made available through this site?

52	1	Yes
54	2	No

Card XIII, 6/7/

Who provides this activity?

54	00	Not offered
12	03	Management
21	05	Employee Social Organization
0	07	Union

Response
Distributions Punch Response Categories

Card XIII, 6/7/ (cont.)

1	08	Management and Employee Social Organization
4	11	Other
6	14	Management and other
5	16	Employee Social Organization and other
3	99	NA

Card XIII, 8/-11/

What is the total number of participants?

$\bar{X} = 86.5$ (121.0), $N = 47$ (54 NAP; 5 NA)
 $M_e = 38$ (8-500)

Card XIII, 12/-15/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 44.5$ (71.5), $N = 44$ (54 NAP; 8 NA)
 $M_e = 14$ (0-275)

Card XIII, 16/17/

What is the proportion of participants who are hourly (non-exempt)?

54	00	No service
7	01	No hourly (non-exempt) participants
10		1%-25%
17		26%-50%
5		51%-75%
4		76%-97%
1		98%+
8	99	NA

314 Picnics (for sub-groups)

Card XIII, 18/

Is this activity made available through this site?

23	1	Yes
83	2	No

Card XIII, 19/20/

Who provides this activity?

83	00	Not offered
7	03	Management
6	05	Employee Social Organization
2	07	Union
4	11	Other

Response
Distributions Punch Response Categories

Card XIII, 19/20/ (cont.)

1	12	Employee Social Organization and Union
1	14	Management and other
1	18	Union and other
1	99	NA

Card XIII, 21/-24/

What is the total number of participants?

\bar{X} = 364.0 (448.0), N = 15 (83 NAP; 8 NA)
 M_e = 150 (15-1500)

Card XIII, 25/-28/

What is the total number of participants who are hourly or non-exempt?

\bar{X} = 169.7 (265.0), N = 14 (83 NAP; 9 NA)
 M_e = 70 (0-1000)

Card XIII, 29/30

What is the proportion of participants who are hourly (non-exempt)?

83	00	No service
1	01	No hourly (non-exempt) participants
1		1%-25%
1		26%-50%
1		51%-75%
6		76%-97%
4		98%+
9	99	NA

315 Vacation Trips

Card XIII, 31/

Is this activity made available through this site?

26	1	Yes
78	2	No
2	9	NA

Response
Distributions Punch Response Categories

Card XIII, 32/33/

Who provides this activity?

78	00	Not offered
5	03	Management
11	05	Employee Social Organization
0	07	Union
1	08	Management and Employee Social Organization
4	11	Other
1	14	Management and other
4	16	Employee Social Organization and other
2	99	NA

Card XIII, 34/-37/

What is the total number of participants?

$\bar{X} = 86.2$ (99.9), $N = 22$ (78 NAP; 6 NA)
 $M_e = 55$ (0-400)

Card XIII, 38/-41/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 40.4$ (33.8), $N = 21$ (78 NAP; 7 NA)
 $M_e = 36$ (1-130)

Card XIII, 42/43/

What is the proportion of participants who are hourly (non-exempt)?

78	00	No service
1		1%-25%
7		26%-50%
5		51%-75%
6		76%-97%
2		98%+
7	99	NA

316 Softball

Card XIII, 44/

Is this activity made available through this site?

56	1	Yes
50	2	No

Response
Distributions Punch Response Categories

Card XIII, 45/46/

Who provides this activity?

50	00	Not offered
26	03	Management
22	05	Employee Social Organization
0	07	Union
1	08	Management and Employee Social Organization
2	11	Other
3	14	Management and other
2	99	NA

Card XIII, 47/-50/

What is the total number of participants?

\bar{X} = 62.1 (129.9), N = 51 (50 NAP; 5 NA)
 M_e = 25 (9-900)

Card XIII, 51/-54/

What is the total number of participants who are hourly or non-exempt?

\bar{X} = 42.1 (103.1), N = 49 (50 NAP; 7 NA)
 M_e = 15 (0-720)

Card XIII, 55/56/

What is the proportion of participants who are hourly (non-exempt)?

50	00	No service
1	01	No hourly (non-exempt) participants
1		1%-25%
13		26%-50%
12		51%-75%
15		76%-97%
6		98%
8	99	NA

317 Bridge

Card XIII, 57/

Is this activity made available through this site?

18	1	Yes
88	2	No

Response
Distributions Punch Response Categories

Card XIII, 58/59/

Who provides this activity?

88	00	Not offered
1	03	Management
11	05	Employee Social Organization
0	07	Union
4	11	Other
1	14	Management and other
1	99	NA

Card XIII, 60/-63/

What is the total number of participants?

$\bar{X} = 24.3$ (13.4), $N = 16$ (88 NAP; 2 NA)
 $M_e = 20$ (8-50)

Card XIII, 64/-67/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 10.8$ (13.4), $N = 15$ (88 NAP; 3 NA)
 $M_e = 8$ (0-45)

Card XIII, 68/69/

What is the proportion of participants who are hourly (non-exempt)?

88	00	No service
4	01	No hourly (non-exempt) participants
3		1%-25%
3		26%-50%
3		51%-75%
3		76%-97%
0		98%+
2	99	NA

318 Photo/hobby Show

Card XIV, 5/

Is this activity made available through this site?

8	1	Yes
98	2	No

Response
Distributions Punch Response Categories

Card XIV, 6/7/

Who provides this activity?

98	00	Not offered
2	03	Management
5	05	Employee Social Organization
0	07	Union
1	11	Other

Card XIV, 8/-11/

What is the total number of participants?

$\bar{X} = 111.7$ (149.6), $N = 6$ (98 NAP; 2 NA)
 $M_e = 40$ (2-400)

Card XIV, 12/-15/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 49.5$ (57.2), $N = 6$ (98 NAP; 2 NA)
 $M_e = 32$ (5-160)

Card XIV, 16/17/

What is the proportion of participants who are hourly (non-exempt)?

98	00	No service
1		1%-25%
3		26%-50%
0		51%-75%
2		76%-97%
0		98%+
2	99	NA

319 Fishing

Card XIV, 18/

Is this activity made available through this site?

23	1	Yes
83	2	No

Card XIV, 19/20/

Who provides this activity?

83	00	Not offered
6	03	Management
11	05	Employee Social Organization

Response
Distributions Punch Response Categories

Card XIV, 19/20/ (cont.)

0	07	Union
1	10	Management and Union
3	11	Other
1	14	Management and other
1	16	Employee Social Organization and other

Card XIV, 21/-24/

What is the total number of participants?

$\bar{X} = 27.1 (21.7)$, $N = 18$ (83 NAP; 5 NA)
 $M_e = 20$ (10-100)

Card XIV, 25/-28/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 16.0 (19.3)$, $N = 17$ (83 NAP; 6 NA)
 $M_e = 10$ (0-70)

Card XIV, 29/30/

What is the proportion of participants who are hourly (non-exempt)?

83	00	No service
6	01	No hourly (non-exempt) participants
1		1%-25%
2		26%-50%
1		51%-75%
3		76%-97%
4		98%+
6	99	NA

320 Tickets for Recreational Activities

Card XIV, 31/

Is this activity made available through this site?

59	1	Yes
47	2	No

Card XIV, 32/33/

Who provides this activity?

47	00	Not offered
18	03	Management
19	05	Employee Social Organization
1	07	Union
1	08	Management and Employee Social Organization

Response
Distributions Punch Response Categories

Card XIV, 32/33/ (cont.)

5	11	Other
7	14	Management and other
4	16	Employee Social Organization and other
4	99	NA

Card XIV, 34/-37/

What is the total number of participants?

\bar{X} = 143.9 (186.8), N = 46 (47 NAP; 13 NA)
 M_e = 65 (10-1000)

Card XIV, 38/-41/

What is the total number of participants who are hourly or non-exempt?

\bar{X} = 82.1 (143.1), N = 43 (47 NAP; 16 NA)
 M_e = 40 (0-800)

Card XIV, 42/43/

What is the proportion of participants who are hourly (non-exempt)?

47	00	No service
6	01	No hourly (non-exempt) participants
1		1%-25%
10		26%-50%
9		51%-75%
14		76%-97%
3		98%+
16	99	NA

321 Choral Group

Card XIV, 44/

Is this activity made available through this site?

6	1	Yes
100	2	No

Card XIV, 45/46/

Who provides this activity?

100	00	Not offered
2	03	Management
2	05	Employee Social Organization
0	07	Union
1	11	Other
1	99	NA

Response
Distributions Punch Response Categories

Card XIV, 47/-50/

What is the total number of participants?

$$\bar{X} = 43.0 (17.2), N = 5 (100 \text{ NAP}; 1 \text{ NA})$$

$$M_e = 50 (15-60)$$

Card XIV, 51/-54/

What is the total number of participants who are hourly or non-exempt?

$$\bar{X} = 36.5 (21.6), N = 4 (100 \text{ NAP}; 2 \text{ NA})$$

$$M_e = 45 (15-60)$$

Card XIV, 55/56/

What is the proportion of participants who are hourly (non-exempt)?

100	00	No service
0		1%-25%
0		26%-50%
1		51%-75%
2		76%-97%
1		98%+
2	99	NA

322 Chess Club

Card XIV, 57/

Is this activity made available through this site?

14	1	Yes
92	2	No

Card XIV, 58/59/

Who provides this activity?

92	00	Not offered
1	03	Management
8	05	Employee Social Organization
0	07	Union
2	11	Other
3	99	NA

Card XIV, 60/-63/

What is the total number of participants?

$$\bar{X} = 19.8 (17.3), N = 11 (92 \text{ NAP}, 3 \text{ NA})$$

$$M_e = 12 (4-52)$$

Response
Distributions Punch Response Categories

Card XIV, 64/-67/

What is the total number of participants who are hourly or non-exempt?

\bar{X} = 8.8 (13.2), N = 11 (92 NAP; 3 NA)
 M_e = 3 (0-45)

Card XIV, 68/69/

What is the proportion of participants who are hourly (non-exempt)?

92	00	No service
4	01	No hourly (non-exempt) participants
1		1%-25%
3		26%-50%
0		51%-75%
3		76%-97%
0		98%+
3	99	NA

399 Other Recreational Activities

Card XV, 5/

Is this activity made available through this site?

28	1	Yes
78	2	No

Card XV, 6/7/

Who provides this activity?

78	00	Not offered
10	03	Management
11	05	Employee Social Organization
2	07	Union
0	11	Other
1	14	Management and other
4	99	NA

Card XV, 8/-11/

What is the total number of participants?

\bar{X} = 71.2 (60.6), N = 18 (78 NAP; 10 NA)
 M_e = 60 (8-200)

Card XV, 12/-15/

What is the total number of participants who are hourly or non-exempt?

\bar{X} = 34.6 (26.4), N = 17 (78 NAP; 11 NA)
 M_e = 30 (0-80)

Response
Distributions Punch Response Categories

Card XV, 16/17/

What is the proportion of participants who are hourly (non-exempt)?

78	00	No service
2	01	No hourly (non-exempt) participants
1		1%-25%
7		26%-50%
1		51%-75%
5		76%-97%
1		98%+
11	99	NA

411 Picnics (for everybody)

Card XV, 18/

Is this activity made available through this site?

38	1	Yes
66	2	No
2	9	NA

Card XV, 19/20/

Who provides this activity?

66	00	Not offered
22	03	Management
8	05	Employee Social Organization
0	07	Union
2	11	Other
1	15	Management and Employee Social Organization and Union
7	99	NA

Card XV, 21/-24/

What is the total number of participants?

$\bar{X} = 564.1$ (864.2), $N = 34$ (66 NAP; 6 NA)
 $M_e = 200$ (50-4000)

Card XV, 25/-28/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 370.3$ (612.0), $N = 31$ (66 NAP; 9 NA)
 $M_e = 150$ (0-4000)

Response
Distributions Punch Response Categories

Card XV, 29/30/

What is the proportion of participants who are hourly (non-exempt)?

66	00	No service
1		1%-25%
4		26%-50%
15		51%-75%
10		76%-97%
1		98%+
9	99	NA

412 New Employee Luncheon

Card XV, 31/

Is this activity made available through this site?

4	1	Yes
102	2	No

Card XV, 32/33/

Who provides this activity?

102	00	Not offered
1	03	Management
1	05	Employee Social Organization
0	07	Union
1	11	Other
1	99	NA

Card XV, 34/-37/

What is the total number of participants?

102	0000	No service
1		50
1		730
1		800
1	9999	NA

Card XV, 38/-41/

What is the total number of participants who are hourly or non-exempt?

102	0000	No service
1		45
3	9999	NA

Response
Distributions Punch Response Categories

Card XV, 42/43/

What is the proportion of participants who are hourly (non-exempt)?

102	00	No service
0		1%-25%
0		26%-50%
0		51%-75%
1		76%-97%
0		98%+
3	99	NA

413 Annual Banquet

Card XV, 44/

Is this activity made available through this site?

30	1	Yes
76	2	No

Card XV, 45/46/

Who provides this activity?

76	00	Not offered
20	03	Management
5	05	Employee Social Organization
0	07	Union
1	11	Other
4	99	NA

Card XV, 47/-50/

What is the total number of participants?

$\bar{X} = 409.5$ (486.2), $N = 24$ (76 NAP; 6 NA)
 $M_e = 215$ (40-2300)

Card XV, 51/-54/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 248.3$ (271.1), $N = 22$ (76 NAP; 6 NA)
 $M_e = 141.5$ (20-761)

Response
Distributions Punch Response Categories

Card XV, 55/56/

What is the proportion of participants who are hourly (non-exempt)?

76	00	No service
1		1%-25%
2		26%-50%
7		51%-75%
12		76%-97%
0		98%+
8	99	NA

414 Christmas Party

Card XV, 57/

Is this activity made available through this site?

58	1	Yes
48	2	No

Card XV, 58/59/

Who provides this activity?

48	00	Not offered
31	03	Management
13	05	Employee Social Organization
1	07	Union
2	08	Management and Employee Social Organization
1	10	Management and Union
2	11	Other
4	14	Management and other
4	99	NA

Card XV, 60/-63/

What is the total number of participants?

$\bar{X} = 419.9 (657.9)$, $N = 48 (48 \text{ NAP}; 10 \text{ NA})$
 $M_e = 225 (0-4000)$

Card XV, 64/-67/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 194.9 (206.5)$, $N = 45 (48 \text{ NAP}; 13 \text{ NA})$
 $M_e = 150 (0-1000)$

Response
Distributions Punch Response Categories

Card XV, 68/69/

What is the proportion of participants who are hourly (non-exempt)?

48	00	No service
4	01	No hourly (non-exempt) participants
1		1%-25%
7		26%-50%
20		51%-75%
12		76%-97%
1		98%+
13	99	NA

415 Sunshine Club

Card XVI, 5/

Is this activity made available through this site?

41	1	Yes
64	2	No
1	9	NA

Card XVI, 6/7/

Who provides this activity?

64	00	Not offered
17	03	Management
6	05	Employee Social Organization
2	07	Union
8	11	Other
2	14	Management and other
1	16	Employee Social Organization and other
6	99	NA

Card XVI, 8/-11/

What is the total number of participants?

$\bar{X} = 100.9$ (100.5), $N = 11$ (64 NAP; 31 NA)
 $M_e = 75$ (0-345)

Card XVI, 12/-15/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 81.3$ (113.5), $N = 9$ (64 NAP; 33 NA)
 $M_e = 47$ (0-345)

Response
Distributions Punch Response Categories

Card XVI, 16/17/

What is the proportion of participants who are hourly (non-exempt)?

64	00	No service
3	01	No hourly (non-exempt) participants
0		1%-25%
0		26%-50%
2		51%-75%
3		76%-97%
1		98%+
33	99	NA

416 Welcome Wagon

Card XVI, 18/

Is this activity made available through this site?

3	1	Yes
102	2	No
1	9	NA

Card XVI, 19/20/

Who provides this activity?

101	00	Not offered
1	03	Management
1	05	Employee Social Organization
0	07	Union
1	11	Other
2	99	NA

Card XVI, 21/-24/

What is the total number of participants?

102	0000	No service
1		50
3	9999	NA

Card XVI, 25/-28/

What is the total number of participants who are hourly or non-exempt?

102	0000	No service
1		45
3	9999	NA

· Response
Distributions Punch Response Categories

Card XVI, 29/30/

What is the proportion of participants who are hourly (non-exempt)?

102	00	No service
0		1%-25%
0		26%-50%
0		51%-75%
1		76%-97%
0		98%+
3	99	NA

499 Other Integrative Activities

Card XVI, 31/

Is this activity made available through this site?

27	1	Yes
79	2	No

Card XVI, 32/33/

Who provides this activity?

79	00	Not offered
9	03	Management
9	05	Employee Social Organization
1	07	Union
1	10	Management and Union
1	11	Other
1	14	Management and other
2	16	Employee Social Organization and other
3	99	NA

Card XVI, 34/-37/

What is the total number of participants?

$\bar{X} = 106.4$ (84.1), $N = 18$ (79 NAP; 9 NA)
 $M_e = 100$ (10-300)

Card XVI, 38/-41/

What is the total number of participants who are hourly or non-exempt?

$\bar{X} = 76.5$ (70.0), $N = 18$ (79 NAP; 9 NA)
 $M_e = 57$ (0-270)

Response
Distributions Punch Response Categories

Card XVI, 42/43/

What is the proportion of participants who are hourly (non-exempt)?

79	00	No service
1	01	No hourly (non-exempt) participants
0		1%-25%
5		26%-50%
6		51%-75%
4		76%-97%
2		98%+
9	99	NA

Response
Distributions Punch Response Categories

Organization's Environment--Clientele

Card XVI, 44/45/

What are the categories of clientele for this organization's major product (largest gross sales) or service?

11	03	Individual
1	05	Household
14	07	Other industry
13	08	03+05
4	10	03+07
2	11	Government
1	12	05+07
1	13	Institutions
5	15	03+05+07
1	16	03+13
2	17	03+05+11
4	18	05+13
14	19	07+11
2	20	07+13
2	21	03+07+11
1	22	03+05+13
2	23	03+07+13
1	25	05+07+11
1	26	03+05+07+11
1	28	03+05+07+13
8	31	07+11+13
1	32	03+05+11+13
3	34	03+07+11+13
1	36	05+07+11+13
10	39	03+05+07+11+13

Card XVI, 46/-60/

What is the SIC classification (3 digits) of each category indicated above?

46/-48/ Individual

47	000	No clientele in this category
45	998	Individual
14	999	NA

49/-51/ Household

64	000	No clientele in this category
31	880	Household
11	999	NA

52/-54/ Industry

31	999	No clientele in this category
6	1xx	
8	2xx	
11	3xx	
?	4xx	

Response
Distributions Punch Response Categories

52/-54/ (cont.)

4	5xx	
0	6xx	
2	7xx	
1	998	Not applicable
41	999	NA

55/-57/ Government

55	000	No clientele in this category
23	910	Federal government
28	999	NA

58/-60/ Institutions

68	000	No clientele in this category
8	571-861	Institutions
2	998	Not applicable
28	999	NA

Characteristics of Individual and Household Clientele

Card XVI, 61/
 Sex of Clientele

42	0	No individual/household clientele
9	1	Primarily male
19	2	Primarily female
35	3	Undifferentiated
1	9	NA

Card XVI, 62/
 Age

44	0	No individual/household clientele
46	1	Primarily adult
3	2	Primarily children
13	3	Undifferentiated

Card XVI, 63/64/
 Socioeconomic Status

44	00	No individual/household clientele
0	03	Upper upper
0	05	Upper middle
3	07	Middle middle
0	11	Lower middle
4	12	05+07
0	13	Lower lower
9	15	03+05+07
4	19	07+11
1	22	05+07+11
2	23	03+07+13
2	24	11+13
21	25	05+07+11

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Response
Distributions Punch Response Categories

Card XVI, 63/64/ (cont.)

1	26	03+05+07+11
8	31	07+11+13
5	39	03+05+07+11+13
2	99	NA

Card XVI, 65/

Number of classes (from above):

45	0	No individual/household clientele
3	1	
10	2	
41	3	
1	4	
5	5	
1	9	NA

Card XVI, 66/67/

Are the clients primarily:

43	00	No individual/household clientele
4	03	Urban
5	05	Suburban
0	07	Rural
14	08	03+05
1	10	03+07
36	11	Undifferentiated
1	12	05+07
1	14	03+11
1	99	NA

For All Clients:Organization's Environment--Market

Card XVI, 68/

Where is the major product (service) primarily sold?

21	1	Delaware Valley
12	2	Northeast and Middle Atlantic States
29	3	Throughout the United States
43	4	Throughout the United States and abroad
1	5	Not locally, but in other parts of the U.S.
0	6	Not in the United States, only abroad

Response
Distributions Punch Response Categories

Card XVI, 69/70/

Through what channels is the major product (service) marketed?

33	03	Marketed directly to consumer
20	05	Sold to consumer through a wholesaler
18	07	Sold to other industries
5	08	03+05
2	10	03+07
13	12	05+07
14	15	03+05+07
1	99	NA

Card XVI, 71/72/

What are the primary media through which information about the product (service) is communicated?

3	03	General newspaper
14	05	Specialized trade journal
1	07	Radio/television
7	08	03+05
18	10	03+07
2	11	Direct mail
1	12	05+07
8	13	Point of sale
2	14	03+11
7	16	03+13
13	17	05+11
11	18	05+13
4	20	07+13
1	23	03+07+13
1	24	11+13
4	29	05+11+13
0	31	Door-to-door
1	34	03+31
1	42	11+31
1	46	03+05+07+31
1	47	05+11+31
9	99	NA

Card XVI, 73/

Do any employees of the organization in this site or representatives of the organization (e.g., agents, dealers, salesmen, service personnel) interact directly frequently with the public in the course of their work?

61	1	There are no (0-10%) employees or representatives of the organization who interact with the public
6	2	There are some (11-40%) who do
37	3	There are many (41%+) who do
2	9	NA

Response
Distributions Punch Response Categories

Card XVII, 5/-12/

What two services, currently in existence, do you feel have the most positive effect on employee morale?

5/-8/ First service named

3	0000	No service
1	11xx	Retail services
27	12xx	Manual Food Services
5	13xx	Mechanical Food Services
1	15xx	Craft Services
19	17xx	Commercial Services
9	3xxx	Leisure and Recreation
6	51xx	Educational-Informational Services
13	52xx	Health Services
8	6xxx	Transportation
4	7xxx	Miscellaneous
10	9999	NA

9/-12/ Second service named

11	0000	No service
1	11xx	Retail Services
7	12xx	Manual Food
5	13xx	Mechanical Food
1	14xx	Clerical Services
1	16xx	Cleaning Services
15	17xx	Commercial Services
1	18xx	Agent Services
15	3xxx	Leisure and Recreation
3	51xx	Educational-Informational Services
13	52xx	Health Services
9	6xxx	Transportation
1	7xxx	Miscellaneous
23	9999	NA

Card XVII, 13/-24/

What additional services to employees or the community, if any, do you anticipate providing in the near future?

13/-16/ First service named

49	0000	No service
2	0x	General Community Affairs
2	3x	Education
2	4x	Environment
1	5x	Housing
2	6x	Minority
1	8x	Youth
1	9x	Miscellaneous Community Services
3	18xx	Agent Services
2	2xxx	Family

Response
Distributions Punch Response Categories

Card XVII, 13/-24 (cont.)

10	3xxx	Leisure and Recreation
2	51xx	Educational-Informational Services
8	52xx	Health Services
1	6xxx	Transportation
1	7xxx	Miscellaneous
19	9999	NA

17/-20/ Second Service named

59	0000	No service
2	0x	General Community Affairs
1	3x	Education
2	4x	Environment
1	6x	Minority
2	9x	Miscellaneous Community Services
2	17xx	Commercial Services
1	18xx	Agent Services
1	2xxx	Family
5	3xxx	Leisure and Recreation
1	51xx	Educational-Informational Services
2	52xx	Health Services
27	9999	NA

21/-24/ Third Service named

62	0000	No service
2	0x	General Community Affairs
1	6x	Minority
1	9x	Miscellaneous Community Services.
1	17xx	Commercial Services
1	18xx	Agent Services
1	3xxx	Leisure and Recreation
1	4xxx	Religious, Communal, Political
1	52xx	Health Services
35	9999	NA

Card XVII, 25/

Does this company compare its personnel practices (hours, wages, working conditions, benefits and services) with other firms in the same industry?

6	1	No
51	2	Yes, in this region only
47	3	Yes, nationwide
2	4	Other

Response
Distributions Punch Response Categories

Card XVII, 26/

Does your company belong to the Philadelphia Survey Group or any other specific data gathering organization (other than Chamber of Commerce)? How often do you use their services?

38	1	Don't belong to such a group
34	2	Belong and use a few times a year
20	3	Belong and use monthly
7	4	Belong and use weekly
5	5	Other
2	9	NA

Principal RespondentCard XVII, 27/
Age

12	1	Under 30
66	2	31-50
28	3	51+

Card XVII, 28/
Sex

100	1	Male
6	2	Female

Card XVII, 29/
Position

51	1	Highest (1st or 2nd layer)
54	2	Middle (3rd or 4th layer)
1	3	Lowest (5th layer or below)

Card XVIII, 30/
Length of Service in this position

31	1	Under 2 years
23	2	2-5 years
50	3	Over 5 years
2	9	NA

Card XVIII, 31/
Length of Service in the company

12	1	Under 2 years
16	2	2-5 years
77	3	Over 5 years
1	9	NA

Response
Distributions Punch Response Categories

Card XVII, 72/73/
 Interviewer ID

31	01
34	02
9	03
15	04
16	05
. 1	06

Card XVII, 74/75/
 Coder ID

1	00
3	01
11	03
20	05
47	06
24	07

Card XVIII, 5/6/
 Packet Coder ID

5	01	
2	02	
3	03	
2	05	
34	06	
37	07	
23	99	NA (No packet)

Packet
 General Coding Instructions

no category. . . .998
 no answer. . . .999
 less than five . .997
 996+996
 specific information . . .000

Packet

Card XVIII, 8/*

Does the total number of employees indicated fall within the category coded in Card I, 32/?

80	1	Yes
1	2	No, there is a variation of less than 10% from the number entered in the schedule that caused a change in the category. Number of employees refers to this site only
0	3	No, there is a variation of more than 10% that reflects seasonal employment and/or other labor market conditions. However, the number refers to employees at this site only
1	4	No, the number is smaller (by more than 10%); it includes only a part of the organization at this site
0	5	No, the number is larger (by more than 10%); it includes employees working outside the site but in the same region
1	6	No, the number is larger (more than 10%); it includes employees of the total organization

NOTE: If 1 or 2 above, proceed.
 If 5 or 6 above, code 9's for all items in packet
 If 3 or 4, refer to interviewer

Card XVIII, 9/-11/

Total Number of Employees (IN TENS)

 $\bar{X} = 103.0 (132.1), N = 82 (1 NA)$ $M_e = 50 (18-755)$

Card XVIII, 12/-14/

Number of Non-Exempt Employees (IN TENS)

 $\bar{X} = 68.3 (88.3), N = 76 (7 NA)$ $M_e = 35 (1-448)$

Card XVIII, 15/-17/

Number of Exempt Employees (IN TENS)

 $\bar{X} = 24.1 (31.4), N = 75 (1 NAP; 7 NA)$ $M_e = 11 (1-195)$

*Total N for all packet items following is 83.

Card XVIII, 18/-20/

Number of salaried employees (IN TENS)

$$\bar{X} = 42.5 (51.0), N = 77 (2 \text{ NAP}; 6 \text{ NA})$$

$$M_e = 22 (2-257)$$

Card XVIII, 21/-23/

Number of hourly employees (IN TENS)

$$\bar{X} = 54.9 (77.3), N = 72 (7 \text{ NAP}; 4 \text{ NA})$$

$$M_e = 25 (0-360)$$

Card XVIII, 24/-26/

Number of Operative Personnel (IN TENS)

$$\bar{X} = 31.2 (52.9), N = 62 (1 \text{ NAP}; 20 \text{ NA})$$

$$M_e = 15 (0-276)$$

Card XVIII, 27/-29/

Number of Office-Clerical Personnel (IN TENS)

$$\bar{X} = 23.7 (32.7), N = 61, (22 \text{ NA})$$

$$M_e = 9 (1-148)$$

Card XVIII, 30/-32/

Number of Technical Personnel (IN TENS)

$$\bar{X} = 15.1 (30.0), N = 56 (4 \text{ NAP}; 23 \text{ NA})$$

$$M_e = 4 (0-160)$$

Card XVIII, 33/-35/

Number of Employees Under 30 (IN TENS)

$$\bar{X} = 30.8 (40.7), N = 48 (35 \text{ NA})$$

$$M_e = 15 (3-239)$$

Card XVIII, 36/-38/

Number of Employees ages 30-44 (IN TENS)

$$\bar{X} = 43.3 (79.1), N = 48 (35 \text{ NA})$$

$$M_e = 19 (5-488)$$

Card XVIII, 39/-41/

Number of Employees ages 45+ (IN TENS)

$$\bar{X} = 57.9 (113.4), N = 48 (35 \text{ NA})$$

$$M_e = 16.5 (2-679)$$

Card XVIII, 42/43/
Average Age of Total Labor Force

$$\bar{X} = 38.4 (6.1), N = 53 (30 \text{ NA})$$

$$M_e = 38 (24-54)$$

Card XVIII, 44/-46/
Number of Male Employees (IN TENS)

$$\bar{X} = 64.5 (102.1), N = 77 (6 \text{ NA})$$

$$M_e = 29 (8-507)$$

Card XVIII, 47/-49/
Number of Female Employees (IN TENS)

$$\bar{X} = 29.9 (33.0), N = 77 (6 \text{ NA})$$

$$M_e = 18 (1-152)$$

Card XVIII, 50/-52/
Number of Employees with college degree (IN TENS)

$$\bar{X} = 15.3 (18.5), N = 49 (2 \text{ NAP}; 32 \text{ NA})$$

$$M_e = 9 (1-95)$$

Card XVIII, 53/-55/
Number of Employees with education beyond secondary school (IN TENS)

$$\bar{X} = 26.5 (32.1), N = 30 (50 \text{ NA})$$

$$M_e = 14 (1-138)$$

Card XVIII, 56/-59/
Yearly Rate of New Hirings (by sex) (per hundred employees)

56/57/ Males

$$\bar{X} = 19.7 (16.8), N = 69 (14 \text{ NA})$$

$$M_e = 16 (1-69)$$

58/59/ Females

$$\bar{X} = 23.2 (20.6), N = 69 (14 \text{ NA})$$

$$M_e = 18 (0-96)$$

Card XVIII, 60/-63/
Yearly Rate of Voluntary Separations (by sex) (per hundred employees)

60/61/ Males

$\bar{X} = 15.0$ (13.6), N = 63 (20 NA)
 $M_e = 10$ (1-70)

62/63/ Females

$\bar{X} = 19.6$ (18.2), N = 64 (19 NA)
 $M_e = 12.5$ (1-77)

Card XVIII, 64/-67/
Yearly Rate of Lay-offs (by sex) (per hundred employees)

64/65/ Males

$\bar{X} = 5.1$ (14.1), N = 68 (15 NA)
 $M_e = 0$ (0-96)

66/67/ Females

$\bar{X} = 3.9$ (8.1), N = 67 (16 NA)
 $M_e = 0$ (0-40)

Card XVIII, 68/-71/
Yearly Rate of New Hirings (by salaried status) (per hundred employees)

68/69/ Salaried

$\bar{X} = 12.4$ (12.7), N = 57 (1 NAP; 25 NA)
 $M_e = 8$ (0-64)

70/71/ Non-Salaried

$\bar{X} = 19.1$ (19.3), N = 46 (13 NAP; 24 NA)
 $M_e = 14$ (0-89)

Card XVIII, 72/-75/
Yearly Rate of Voluntary Separations (by salaried status) (per hundred employees)

72/73/ Salaried

$\bar{X} = 10.2$ (12.3), N = 55 (1 NAP; 27 NA)
 $M_e = 6$ (0-63)

74/75/ Non-Salaried

$\bar{X} = 13.7$ (14.0), N = 47 (12 NAP; 24 NA)
 $M_e = 9$ (0-58)

Card XIX, 5/-8/

Yearly Rate of Lay-offs (by salaried status) (per hundred employees)

5/6/ Salaried

$$\bar{X} = 1.3 (4.8), N = 63 (1 \text{ NAP}; 19 \text{ NA})$$

$$M_e = 0 (0-29)$$

7/8/ Non-Salaried

$$\bar{X} = 6.7 (15.3), N = 53 (11 \text{ NAP}; 19 \text{ NA})$$

$$M_e = 1 (0-96)$$

Card XIX, 9/-15/

What absentee categories are recorded?

<u>Category</u>	(1)	(2)	(3,9)
	Yes	No	NA
9/ Sickness	58	5	20
10/ Excused Without Pay	50	13	20
11/ Excused With Pay	41	21	21
12/ Unexcused Without Pay	43	20	20
13/ Unexcused With Pay	23	38	22
14/ Personal leave	52	10	21
15/ Other	21	42	20

Card XIX, 16/-36/

What are the yearly rates of absenteeism for each category?
CODE IN TENS (DAYS LOST PER 100 EMPLOYEES)

16/-18/ Sickness

$$\bar{X} = 53.6 (21.6), N = 26 (3 \text{ NAP}; 54 \text{ NA})$$

$$M_e = 48 (17-100)$$

19/-21/ Excused Without Pay

$$\bar{X} = 9.1 (7.7), N = 15 (7 \text{ NAP}; 61 \text{ NA})$$

$$M_e = 9 (0-30)$$

22/-24/ Excused With Pay

$$\bar{X} = 17.3 (23.9), N = 13 (10 \text{ NAP}; 60 \text{ NA})$$

$$M_e = 5 (0-80)$$

Card XIX, 16/-36/ (cont.)

25/-27/ Unexcused Without Pay

 $\bar{X} = 6.7 (5.4), N = 9 (11 \text{ NAP}; 63 \text{ NA})$
 $M_e = 5 (1-15)$

28/-30/ Unexcused With Pay

 $\bar{X} = 0.5 (1.2), N = 6 (13 \text{ NAP}; 64 \text{ NA})$
 $M_e = 0 (0-3)$

31/-33/ Personal Leave

 $\bar{X} = 15.8 (36.8), N = 18 (4 \text{ NAP}; 61 \text{ NA})$
 $M_e = 3.5 (0-160)$

34/-36/ Other

 $\bar{X} = 40.8 (42.5), N = 22 (10 \text{ NAP}; 51 \text{ NA})$
 $M_e = 26 (0-135)$

Card XIX, 37/-72/

What is the number of male and female employees with the following lengths of service? CODE IN TENS

37/-39/ 1-4 Years of Service (Males)

 $\bar{X} = 15.2 (17.7), N = 47 (36 \text{ NA})$
 $M_e = 10 (2-90)$

40/-42/ 1-4 Years of Service (Females)

 $\bar{X} = 15.7 (23.5), N = 45 (2 \text{ NAP}; 36 \text{ NA})$
 $M_e = 8 (1-113)$

43/-45/ 1-4 Years of Service (TOTALS)

 $\bar{X} = 27.6 (31.1), N = 51 (32 \text{ NA})$
 $M_e = 18 (2-169)$

46/-48/ 5-14 Years of Service (Males)

 $\bar{X} = 16.4 (22.3), N = 46 (37 \text{ NA})$
 $M_e = 8.5 (0-113)$

49/-51/ 5-14 Years of Service (Females)

 $\bar{X} = 7.7 (10.2), N = 44 (2 \text{ NAP}; 37 \text{ NA})$
 $M_e = 4.5 (0-44)$

Card XIX, 37/-72/ (cont.)

52/-54/ 5-14 Years of Service (TOTALS)

$$\bar{X} = 29.4 (46.2), N = 50 (33 \text{ NA})$$

$$M_e = 14 (0-296)$$

55/-57/ 15-24 Years of Service (Males)

$$\bar{X} = 16.0 (30.8), N = 46 (2 \text{ NAP}; 37 \text{ NA})$$

$$M_e = 6 (0-127)$$

58/-60/ 15-24 Years of Service (Females)

$$\bar{X} = 4.3 (6.9), N = 46 (37 \text{ NA})$$

$$M_e = 2 (0-42)$$

61/-63/ 15-24 Years of Service (TOTALS)

$$\bar{X} = 22.1 (34.2), N = 48 (2 \text{ NAP}; 33 \text{ NA})$$

$$M_e = 8.5 (0-135)$$

64/-66/ 25 Years or More of Service (Males)

$$\bar{X} = 42.4 (159.7), N = 41 (7 \text{ NAP}; 35 \text{ NA})$$

$$M_e = 4 (0-996)$$

67/-69/ 25 Years or More of Service (Females)

$$\bar{X} = 27.4 (155.1), N = 41 (7 \text{ NAP}; 35 \text{ NA})$$

$$M_e = 2 (0-996)$$

70/-72/ 25 Years or More of Service (TOTALS)

$$\bar{X} = 42.6 (150.4), N = 47 (4 \text{ NAP}; 32 \text{ NA})$$

$$M_e = 6 (0-996)$$

Card XX, 5/-28/

What is the minimum weekly gross pay, the maximum weekly pay and the average weekly pay for salaried and hourly workers and for exempt and non-exempt workers? For salaried and exempt workers, the maximum pay reported should reflect the highest salary category excluding the chief executive and above. CODE IN TENS.

5/6/ Hourly Minimum (Tens of dollars per week)

$$\bar{X} = 11.9 (3.5), N = 60 (13 \text{ NAP}; 10 \text{ NA})$$

$$M_e = 11 (7-22)$$

7/8/ Salaried Minimum (Tens of dollars per week)

$$\bar{X} = 12.1 (4.5), N = 61 (4 \text{ NAP}; 18 \text{ NA})$$

$$M_e = 10 (7-30)$$

Card XX, 5/-28/ (cont.)

9/10/ Exempt Minimum (Tens of dollars per week)

$$\bar{X} = 18.1 (8.1), N = 58, (25 \text{ NA})$$

$$M_e = 17 (9-72)$$

11/12/ Non-Exempt Minimum (Tens of dollars per week)

$$\bar{X} = 10.3 (4.2), N = 64 (19 \text{ NA})$$

$$M_e = 9 (7-37)$$

13/14/ Hourly Maximum (Tens of dollars per week)

$$\bar{X} = 21.3 (5.1), N = 61 (13 \text{ NAP}; 9 \text{ NA})$$

$$M_e = 21 (10-40)$$

15/16/ Salaried Maximum (Tens of dollars per week)

$$\bar{X} = 62.0 (24.8), N = 61 (4 \text{ NAP}; 18 \text{ NA})$$

$$M_e = 58 (18-96)$$

17/18/ Exempt Maximum (Tens of dollars per week)

$$\bar{X} = 67.7 (22.8), N = 60 (23 \text{ NA})$$

$$M_e = 62.5 (20-96)$$

19/20/ Non-Exempt Maximum (Tens of dollars per week)

$$\bar{X} = 23.1 (6.3), N = 62 (21 \text{ NA})$$

$$M_e = 23 (13-50)$$

21/22/ Hourly Average (Tens of dollars per week)

$$\bar{X} = 15.7 (3.6), N = 48 (13 \text{ NAP}; 22 \text{ NA})$$

$$M_e = 15.5 (9-25)$$

23/24/ Salaried Average (Tens of dollars per week)

$$\bar{X} = 24.8 (8.7), N = 44 (4 \text{ NAP}; 35 \text{ NA})$$

$$M_e = 23.5 (12-57)$$

25/26/ Exempt Average (Tens of dollars per week)

$$\bar{X} = 30.9 (12.4), N = 52 (31 \text{ NA})$$

$$M_e = 28.5 (14-96)$$

27/28/ Non-Exempt Average (Tens of dollars per week)

$$\bar{X} = 15.4 (4.8), N = 52 (31 \text{ NA})$$

$$M_e = 14.5 (9-40)$$

Response
Distributions Punch

Card XX, 76/77/
Interviewer ID

31	01
28	02
5	03
8	04
10	05
1	06