

KNOWLEDGE AND SKILL REQUIREMENTS IN CLERICAL WORK

by

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ABSTRACT

The focus of the thesis is on a comparison of management job descriptions with accounts of knowledge and skill requirements in clerical work, using a set of eleven dimensions. Three jobs occupied by women are investigated. The organizations vary from a small, private-interest office to a large public bureaucracy. Case one is an administrative clerk from a trade association. The second case is a clerk-stenographer from a planning department of a municipality. The final case is an accounts payable clerk from a linen supply company. Data for analysis come from interview and observation records. The emphasis of the investigation is on the ingenuity with which these employees carry out their work. It was found that the clerks require more skills than are officially recognized. In all cases management underestimated the skills required, and the contribution the women make to the organization. Official job descriptions are a product of rationalistic practices, and yet it is argued that they are also expressions of patriarchal ideology.

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Chapter I: INTRODUCTION

Research Problem And Context

My research problem is to compare management job descriptions with accounts of the actual knowledge and skill requirements of jobs. Do clerks have to have less, more, or the same skills and knowledge as those recognized by management? The result of the research is an account of the working knowledge required in office work. I will show that women's office jobs require more skills than are officially recognized. This work should contribute to a greater appreciation of the skills and knowledge that women bring to their work every day.

When hiring women, management obtains the use of capacities not all of which are recognized in official job descriptions, and perhaps also not paid for in wages. Comparisons between formal job descriptions and the actual working knowledge provide tentative evidence of the extent to which there is exploitation. I will try and make women's work visible, to describe its structure, to give recognition to the work that women do every day in the office, by attempting to identify important features of the working knowledge required for office jobs.

The participation rate of women in the paid labour force is increasing steadily. In 1986, 55.9 per cent of women fifteen years and older worked outside of the home in Canada (Connelly & McDonald, 1990:7). Approximately thirty-three per cent of those women were concentrated in clerical positions (Canada, Census, 1988a:1-1). The feminization of office jobs is fundamental to the evolution of this occupational category. In turn, technological innovations are dramatically affecting clerical jobs. Therefore, it is worthwhile to try and determine the skill and knowledge requirements that women bring to the office setting. It is vital that we gain some understanding, given the lack of empirical research and neglect in studying women's experiences. Women's knowledge has not been recognized as much as

men's. In contrast, industrial sociological research well documents the work that men do. Women's work tends to differ systematically from men's. Women work both inside and outside the home, whereas men work predominantly in the public sphere. Second, a larger proportion of women's labour is devoted to the production of "use-values". In general, the work of women is de-valued and unrecognized. There is a wide range of knowledge that has gone unnoticed and unvalidated within the office setting. Office work is frequently characterized as "unskilled" and "womens' work", but very little research has examined the knowledge and skill requirements of clerical jobs. Looking at the social relations in the office contributes to a more comprehensive understanding of women who work in the paid labour force.

I shall examine the social relations within an organization. Both men's and women's lives are structured by social relations that manifest the experience of the dominant gender and class. Office workers create and produce work on a daily basis within exploitive social relations. Under the wage agreement office workers are paid by management in return for their capacity to work. The sale and purchase of labour power from the point of view of management is a contract between free agents, and it is an assumed relation of equality. Work relations, however, are exploitive because the value of office clerks' work surpasses what they receive in wages. The remainder of the value produced is appropriated and converted by management into "capital". The unequal relation is particularly apparent when management hires female workers. Women's wage labour takes place under different circumstances than men's, in part because women are generally paid lower wages and confined to fewer occupational categories. Most women who work for pay do so in job classifications such as secretary or receptionist that often involve a great deal of responsibility, but are underpaid. Working capacity incorporates the skills, knowledge and judgment necessary to complete the work. Karl Marx used the concept of "labour-power" to describe working capacity under capitalism (Marx, 1906:185-196). Working knowledge, however, is not only the working capacity that is exploited, but it is also the source of ingenuity. The

structure of working knowledge, then, is central to the employment relation. Women who process information in an organization contribute to a process of control over themselves.

I will describe the modern office and the nature of clerical work, before reviewing literature that considers definitions and measurements of "skill". A brief overview follows with a consideration of skill in clerical work. On the basis of the literature review, I formulate conclusions that will assist in my research question of comparing management job descriptions with accounts of what knowledge and skill requirements are in clerical jobs.

Using a selection of cases and tasks I will determine what is required for doing the work. If it is found that what women bring to their work surpasses formal job descriptions, then a basis exists for trying to un-do exploitive work relations. At the very least, identifying characteristics of women's work experience may result in constructing a more representative human understanding. This research is of interest because women are not only oppressed in the home, but also in other workplaces. The problem is of interest because women's experiences have been distorted and misrepresented, or ignored by sociologists. It is necessary to try and understand the social relations of everyday life rather than producing research that focuses on the unusual, the exotic. It becomes increasingly difficult to neglect the social circumstances of fifty percent of the population, or present the life experiences of men as if they equally apply to women, because they do not. We must expose social inequalities if we are to begin to understand them. Office jobs will continue to be labelled unskilled if no evidence exists to suggest otherwise. The assumptions for de-valuing women's work will continue. Any research that opens the possibility for improving the circumstances of women is worthwhile. What I am suggesting is that we recognize the value of knowledge women accumulate and pass on. This project may contribute to demystifying clerical work and appreciating the value and contribution clerks make to their organization.

Chapter II: THE OFFICE, AND THE NATURE OF CLERICAL WORK

The Modern Office in Canada

Office work is concerned with processing information. There are three factors that define office work: the organizational structure, the technology, and the division of labour. The rise of corporate capitalism and the institutionalization of bureaucracy have contributed to the reorganization of the office. During the late nineteenth century clerical work was dominated by men, but it underwent a shift in sex composition from exclusively male, to predominately female. Davies (1982) and Lowe (1987) are among writers that provide a historical account of this transition. From 1900 to the 1930's office employment rose dramatically (Kanter, 1977:26; Lowe, 1987:2). The office tasks for which women are hired today only remotely resemble the work performed by male bookkeepers of the past. The small office of bookkeepers at the turn of the century has given way to massive bureaucracies.

The growth of office employment and work rationalization have accompanied one another. Managements' power to assign work tasks, choose among the available technologies, and control the division of labour, allows for maintaining some control over the working knowledge required of employees.

The Organizational Structure

There are numerous definitions of an office and the work that goes on within it. C. Wright Mills provides a vivid image of the modern office, and the people who inhabit it:

In the enormous file of the office, in all the calculating rooms, accountants and purchasing agents replace the man who did his own figuring. And in the lower reaches of the white-collar world, office operatives grind along, loading and emptying the filing system; there are private secretaries and typists, entry clerks, billing clerks, corresponding clerks -- a thousand kind of clerks; the operators of

light machinery, comptometers, dicataphones, addressographs; and the receptionists to let you in or to keep you out (Mills, 1956:x).

People in the same office often know each other, at least by name, and the usual office day is seven and one half hours. The office has a centralized management with its own job to do. Management is responsible for assigning and distributing work. The work done by the office staff serves the interest of management. Clerical workers are administrative devices for management. Nevertheless, an office may take a variety of forms, as Mills explains:

The office may be a bundle of papers in a satchel in the back of somebody's car; or it may be a block square, each floor a set of glass rabbit warrens, the whole a headquarters, for a nation-wide organization for other offices, as well as plants and mines and even farms. It may be attached to one department, division, or unit tying it to another office that acts as the command post for all the offices in the enterprise as a whole. And some enterprises, near the administrative centers of the economic life, are nothing more than offices (Mills, 1956:189-190).

Regardless of the size of the office, it is a place where information is received, recorded, arranged, and given out. Office work, then, is about the recording, transforming and processing of information about administrative or business transactions within an organization.

The modern office is the administrative apparatus of an organization. It consists of two major groups. The first group are the managers, professionals, and technical personnel. A second group, much lower in status, are the clerical and service personnel (Kanter, 1977:4). Clerical workers are known for processing paper and keeping records. They are frequently referred to as white-collar workers. Crozier (1965) provides a general description of white-collar employees:

It is not the type of relationship to an employer or any juridical notion which determines current usage of the term "white-collar employee," but rather association with those professions where the task executed and the place and the conditions in which it is accomplished are close to those of several characteristic groups such as office employees (Crozier, 1965:7-8).

He further discusses four trends that characterize the evolution of white-collar employees during this century:

their enormous increase in size, the reduction of their economic advantage compared to the blue-collar group, the progressive feminization of the group, and the profound transformation of the tasks that are assigned to it (Crozier, 1965:9).

Clerical work includes a variety of white-collar jobs. Bank tellers, billing clerks, accounts payable clerks, accounts receivable clerks, computer operators, receptionists, secretaries, order entry clerks, customer service representatives, typists, mail clerks, are all clerical workers. The clerical workforce performs a wide range of office tasks such as filing and correspondence, reception, mail distribution, account recording, stenography, and typing. There is a profusion of fairly routine clerical tasks such as typing, filing, and sorting information. The jobs often are characterized by a great deal of repetitious, fairly tedious, and detailed information handling. Other positions, however, involve work that is much more general, for instance a private secretary in a small office. These jobs function to support management and professional work in an organization.

Changes in administrative structures and processes have affected office working conditions, technology, and job content. Large corporate and government bureaucracies have centralized planning, coordination, and information processing in the office. Offices, large or small, are generally organized hierarchically. The exceptions are the few Canadian examples of workplace democracies, and even within these settings it is disputable whether in practice they too are arranged hierarchically. Power and authority lie in the hands of management. Within this hierarchy, distinctions are made on the basis of status, position, and title. One's rank, however, does not always correspond to salary or skill level.

The modern office, unlike the office setting described in Dickens' novels, is organized into departments and functional areas headed by managers, and there is extensive use of office machinery. Many of today's offices are regulated by elaborate systems of administrative controls presided over by managers. The trend of modern office management is toward

standardization, and eliminating uncertainty wherever possible. The quest for uniform methods, measurement of employee effort and operating costs, simplified methods, and rigid work procedures were part of the "scientific" approach to office management that has had lasting effects.

The bureaucratic, multi-departmental office has a specialized division of labour with more regimentation imposed on work activities than in smaller office settings. Job classification systems have been used to create a finely tuned bureaucratic hierarchy. Classification plans are used to outline responsibilities and requirements for every job position, establish a standard salary scale for each job class, and specify avenues of promotion while delineating lines of authority. A relatively small number of higher-level positions in the hierarchy imply a much larger number of lower positions. Modern organizations in both public and private sectors are often divided with specialized staff functions, a head or central office, and operating departments that are organized functionally and geographically. Smaller offices have escaped the effect of scientific management to a greater extent than larger organizations. Most offices are not unionized.

Women Who Work in Offices in Canada

The nature of clerical work is heavily bound up with the feminization of the occupation. Managerial and clerical jobs are largely sex-segregated occupations. Once in the office as clerks, women tend to become trapped regardless of their formal educational achievements. Promotion into a managerial career is still unlikely for most female clerks. Clerical occupations are an example of a "job ghetto" because the jobs have a high concentration of women, who largely receive low wages, and have limited advancement opportunities. Where men are likely to get promoted from clerical work and find "better" positions, women are not. Because only a small fraction of people employed in this area are men, I refer to clerical work as "women's work".

Most women are employed in traditional women's occupations. Some 2,260,130 persons worked in clerical and related occupations in 1986. Of that total number of persons, 483,555 were male and 1,776,570 were female (Canada, Census, 1988:1-1). Within the female paid labour force 32.9 per cent work in clerical occupations, in contrast to 6.7 per cent of men in the male labour force. In 1985, full-year, full-time women workers earned on average 65.5 per cent of what men earned. In clerical work for 1985, women's average income was \$19,995 in comparison with \$30,504 for men (Connelly & McDonald, 1990:33).

The three occupations in which most women were employed in 1971 and 1981, were secretary, bookkeeper and salesperson (Connelly & McDonald, 1990:7). In 1971, 55 per cent of employed women were in clerical, sales, and service occupations, in contrast to 58.1 per cent in 1986. These occupations had the largest gains in women workers in a period of fifteen years (Connelly & McDonald, 1990:22-23). The largest concentration of women in the labour force in 1983 was in clerical occupations. During that same year one in three employed women held a clerical position in comparison with just one out of sixteen men. Five of the nine largest occupations of women identified in the 1981 Canadian Census, including the top two, secretaries and stenographers, and bookkeepers and accounting clerks, were clerical in nature. Between 1971 and 1981, the two leading occupations were also the ones that grew the most: almost 200,000 more women were employed as bookkeepers and accounting clerks; and secretaries and stenographers grew by 128,000 (Canada, Statistics, 1985).

Clerical workers are relatively well educated, with an average of twelve to thirteen years of formal education. Many office workers have post-secondary training, particularly in the area of business, and it is not unusual for clerical workers to have university degrees.

Young women are especially likely to be engaged in clerical work. The largest group of clerical workers, 52.9 per cent, was twenty-five to forty-four years of age, followed by 25.8 per cent who were fifteen to twenty-four years old, and 20.3 per cent who were forty-five to sixty-four years of age (Silver, 1989:32). Sixty-one per cent of the female labour force was

married in 1986, and 39.4 per cent of all women in this group do not have husbands or partners present and are presumably self supporting, and 18.5 per cent of women in the labour force are single parents (Connelly & McDonald, 1990:13).

Jobs Defined by Technology

Changes in technology and the organization of work affect many jobs. Computers are increasingly utilized in office work. Clerical workers may use terminals or computers to fill in forms, enter text using word processing packages, access customer accounts to answer questions, and the like. Computers allow for the storage of huge quantities of information, and an incredible range of tasks. The microprocessor is a technological invention that has major implications for the future structure of the workforce. Microelectronics is a term for the development of transistor technology that integrates electrical components into a single "chip" of semi-conductor material. The computerization of office work is the subject of heated controversy, because microelectronics effects the nature of jobs, particularly clerical work, where office staff is predominately engaged in information handling. As computer technology becomes more sophisticated, many jobs women hold may become jeopardized. Persons with conventional typewriting and shorthand skills are being gently pushed aside in favor of a new breed of word processor or computer operators.

Microtechnology enhances the ability of employers to raise productivity and lower costs and to control the work that workers do (Braverman, 1974: Marglin, 1974: Edwards, 1979). It allows for the extension of scientific management to the office, and the further segmentation of tasks. The microcomputer and other forms of office technology are likely to effect work autonomy, defined as the extent to which workers are free to direct the manner and pace of their work. The computer sometimes incorporates the ability to monitor a clerk's rate of work.

Technology has played a central role in restructuring the means of administration and in changing job requirements in clerical work. Technology also has implications for the division of labour and the consequent social relations within the office.

The Division of Labour

The division of labour defines the scope of people's jobs. Management decides how to divide and distribute tasks. Detailed job descriptions are a feature of contemporary management. A standard method of coordinating and integrating a diversity of tasks performed in large organizations is a departmental structure. Each department performs a specialized function, such as billing. Large organizations divided into functional departments often have a multitude of clerks who are responsible to the supervisor of the group. There is often a two-tier hierarchy of clerks and supervisors, making the "career ladder" for women short. Office work is more specialized, fragmented, and standardized the larger the organization.

Frequently in the literature there is the reference to the "proletarianization of clerical work". C. Wright Mill's definition is as follows:

a shift in middle-class occupations toward wage workers in terms of: income, skill, prestige or power, irrespective of whether people involved are aware of these changes (Mills, 1956:295).

The argument is made that clerical work is coming closer to resembling factory work (Braverman 1974; Feldberg and Glenn, 1977). According to Feldberg and Glenn (1977:58), "jobs are organized around manual rather than mental abilities, tasks are externally structured and controlled, and work relations are depersonalized".

Despite scientific management and sophisticated technology, office conditions rarely match those of the factory. The nature of the production process, the work group organization, status differences, and relations with management make the supposed similarity

problematic. Methods to achieve greater administrative control are more limited in the office than in the factory. Tasks become more specialized as more sophisticated technology, hierarchical structures, and rationalized work procedures are put into practice.

Chapter III: LITERATURE REVIEW

Two different types of research have addressed the study of working knowledge. One branch considered deskilling tendencies, while the other provided ethnographies on one or a few individual workers. Studies of office jobs generally have examined deskilling. Both the meaning and measurement of skill vary across the spectrum of research. In order to describe and analyze the working knowledge of clerical work it is necessary to review how other researchers have defined and measured skill. The result is to formulate a conception of skill that takes into account the influence of gender, and the work activities in office settings. The work of Harry Braverman (1974) is of particular interest given the monumental impact it has had in the field, including his notion of skill and his analysis of clerical work. It is worthwhile to briefly review the central assumptions and major criticisms of the deskilling debate.

The main proponents of the deskilling hypothesis were Karl Marx and Harry Braverman. Marx argued that entrepreneurs in a highly competitive market are under pressure to increase productivity by reducing labour costs. Three alternatives exist for increasing productivity: i) getting people to work harder through coercion; ii) re-organizing work through the division of labour; and iii) changing technology. Marx argued that these efforts towards increasing productivity lead to a reduction in skill requirements (Marx, 1906:368-394).

Braverman (1974) proposed that managers reduce skill requirements in part to obtain greater control over employees and the organization of the workplace. He identified technological change and techniques of scientific management as central to work rationalization. Scientific management and the redesign of jobs separate the conception of work from its execution. The office becomes more factory-like in the twentieth century. Deskilling has contributed to the proletarianization of clerical work, where the class status of clerical workers comes to resemble that of the manual proletariat (Braverman, 1974:293-358).

Defining and Measuring Skill

There is dispute over the meaning and measurement of skills. Both Braverman (1974) and Marx (1906) utilized a definition of skill bound up in craft mastery, where human fulfillment requires a combination of mental and manual skills. Skilled tasks are those where conception and execution are united. The craft-artisan ideal integrates these two qualities. Under capitalism, conception and execution of work becomes fragmented. Most people today have more skills than are required to do do their jobs. A central theme in Braverman's work is the degradation of craft work into detailed tasks, as work becomes independent of craft tradition and workers' knowledge.

Marx and Braverman's conception of skill is problematic for a number of reasons. Researchers who adopt a craft conception of skill, and apply it to the study of clerical work, ignore that, prior to 1900, bookkeeping work such as writing in ledgers and copying was both tedious and monotonous. Operating a typewriter is no more routine than copying items by hand. The introduction of office machinery perhaps offered a relief to drudgery. Even during the nineteenth century specialized tasks were already developed. Many workers were not artisans and their work was dull and repetitious. Moreover, the working conditions were far less tolerable in comparison to today's working conditions, and workers' wages today are generally higher than in the past. Nineteenth century male bookkeepers engaged in work similar to today's managerial functions rather than clerical work. Today, literacy is taken for granted as a requirement of most jobs. It appears Braverman and Marx painted an overly idealistic, romanticized version of the skilled craftsman (Form, 1980; Beechey, 1982). The disappearance of crafts during industrialization did not mean jobs are deskilled (Elger, 1982; Lee, 1982; Beechey, 1982; Form, 1987). Industrialization may have created as many skills as it destroyed (Beechey, 1982; Form, 1987).

In a study of male craft compositors in the newspaper industry in London between 1979 and 1981 Cockburn (1983) argued that press owners introduced computerized

technology in part to dismantle the craft workers collective organization. But a deskilling theory did not fully encompass the complexity of the composers' experience. She identified skill as a political tool used by the workers to promote their best interests such as job security and high wages. Cockburn's study of craft composers provides evidence that skill classifications are complex.

Feminization of office work in the first half of the the century in Canada has resulted in gender segregation, so that non-supervisory and non-professional work in offices is overwhelmingly the sphere of women, and the jobs with more responsibility and pay tend to be the exclusive domain of men. The past literature has tended to neglect the gender-specific character of ordinary clerical work which is necessarily a compelling part of the context of this research. Gaskell (1983) questioned Braverman's definition of skill because he neglects the possibility that gender roles may influence skill classifications. Gaskell argued that managing skill definitions is a political process. The work of women is de-valued and considered unskilled because they have not been represented by strong collective organizations. Craft unions have struggled to maintain a definition of their work as skilled, hence skill has to do with the existence of apprenticeship that leads to licensing (Gaskell, 1983:23). Enforcing apprenticeship rules and excluding women were tactics to preserve the skilled status of jobs (Gaskell, 1983:16-23; Cockburn, 1983:151-190; Cockburn, 1987:244-249). When women first began working in clerical positions they were employed in offices where it was difficult to change the individualistic nature of the work to form collective organizations to promote their interests. Additionally, clerical workers who worked in the isolation of small offices were likely to attribute their situation to the peculiarities of the firm rather than their structural position (Davies, 1982). Women's subordinate position, their temporary jobs, and their self-image associated with the role of wife and mother, made it difficult for clerical workers to formulate and convey a conception of their work as skilled (Hartman, 1978; Beechey, 1982; Lowe, 1987: 170). Much of the classic works about the office neglected gender relations in discussions about skill (Mills, 1951; Crozier, 1964; Braverman, 1974).

Skill classifications are dependent on gender. The jobs that women do are often not recognized as requiring skill perhaps because it is women that do them. Housework and office work are examples. A double standard exists for the skill required in "men's" as opposed to "women's work". Phillips and Taylor (1980) find skill classification has little relation to the training and ability required for jobs, when gender is taken into account. Possibly some clerical jobs are identified on the lowest technical grade not solely on the basis of technical content, but because these jobs are occupied by women (Crompton & Jones, 1984). Phillips and Taylor (1980), Cockburn (1983), Gaskell (1983), and Cockburn (1985) indicated that social definitions of skill disadvantage women. Thus, jobs may be labelled skilled even if their content is not. Craft workers retained their organizational base and used their shared identity to collectively enforce a special position for themselves within the production process. Cockburn's study of the printing industry in England described one example where printers engaged in strategies to defend their status as "skilled". It concluded that unions exert political control over a range of skills (Cockburn, 1983:152-163). The exclusion of women from male unions in part denied women the possibility of politically effective job classifications (Hartman, 1979; Cockburn, 1983; Gaskell, 1983; Cockburn, 1985).

Management might also attach, create or maintain skill labels to reduce the power and cohesion of the working class. Radical labour market theorists have argued that it is in management's interest to maintain an organizational hierarchy that reflects skill differences. The divide-and-rule principle achieves control through compliance as workers engage in individualistic striving within the internal labour market (Edwards, 1979; Gordon, 1982). Management classified some jobs as skilled to divide the working class and weaken its ability to fight management (Aronowitz, 1973). Jobs might be defined as skilled irrespective of the technical skill content of the particular work tasks (Hartman, 1979; Cockburn, 1983; Gaskell, 1983; Crompton & Jones, 1984). Work content may play a minor part in labelling a job as skilled.

Studies that considered the influence of management in creating and maintaining skill labels are important. A comparison of official job descriptions with actual working knowledge may reveal that management has underrated the abilities necessary to complete the work. By implying a lack of skill in job descriptions that are usually occupied by women, management has the opportunity to de-value women's work in order to pay them low wages. Still other studies, however, directly examined working knowledge.

Kusterer's (1978) study challenged Braverman, saying that a second sphere of knowledge is created by workers, independent of managements' knowledge even in so-called "unskilled work". Working knowledge is informally learned and is often unrecognized outside of the workplace. Nevertheless this unrecognized know-how among workers is indispensable to performing required work. According to Kusterer, workers only learn about aspects of the workplace that affect their jobs directly. He used the dichotomy of "basic" and "supplementary working knowledge". Basic knowledge involves procedures for completing various routine work. It is referred to as basic working knowledge because it is in constant use in completing tasks. This kind of knowledge becomes so internalized that it guides habitual work activities without the conscious effort of experienced workers. For example, a typist often has the ability to carry on a conversation with another person at the same time he or she is typing. In contrast, supplementary knowledge is used to overcome obstacles to routine work, to avoid disruptions or to solve problems that interfere with work activities. This knowledge is used sporadically and applied consciously in order that the worker resume or continue assigned work. Because supplementary working knowledge is applied to overcome more difficult problems, it is the more creative of the two types of knowledge.

Kusterer found machine operators in a paper-product factory had to have an understanding of quality standards, machinery, materials, and the organizational relations of production in order to do their jobs. Operators had to know how to conduct themselves to assure that other workers would provide assistance and cooperation when needed. These operators were not passive machine tenders. They had to keep machines functioning and

overcome errors and exceptions in routine work tasks in order to achieve quality production (Kusterer, 1978:45-62). The supplementary knowledge of bank tellers included maintaining accuracy, and avoiding shortages or overages in banking transactions. Tellers' supplementary knowledge of managing money, paperwork, and customers went beyond basic skill requirements (Kusterer, 1978:75-83). It is for this reason Kusterer found the label "unskilled" problematic.

Tension exists, however, between formal job descriptions and what clerical workers actually have to know to do their jobs. Workers' knowledge is not easily classified as either basic or supplementary. The two types of knowledge often overlap. Kusterer's (1978) study reveals the importance of investigating the knowledge that is actually needed to complete office work. A study is required that considers the skills needed by women who occupy low paying clerical positions.

An upgrading thesis rejects the notion of decreasing skill levels. Jobs become more complex as automation eliminates routinized work. Workers acquire greater control over their work, and work is more complex and interrelated. Increases in educational levels and changes in the occupational structure support this thesis (Kerr et al., 1960; Jaffe & Fromkin, 1968; Bell, 1973).

Not only is the meaning of "skill" widely disputed, but so is consensus about how to measure skill. In order to make comparisons between official job descriptions and the working knowledge determined in this study, it is necessary to devise some type of measurement system. A review of the research provides insight into how to formulate a system of dimensions for measuring skill. Skill is measured at three levels: the overall occupational structure, the organization, and in the work process as it is experienced by the individual. Empirical research on skill changes often employed one of two approaches. Aggregate studies measured variations in skill, and case studies looked at change in an occupational or industrial sector or a firm (Spenner, 1983). Studies of skill at the aggregate level used statistics for the total labour force at the national or firm level. It is a drawback of

Braverman's analysis that he treated his findings as if they were applicable to all workers at all possible levels of inquiry.

Educational levels or wage rates of an occupational group are used to measure skill (Spenner, 1983). Structural functionalists identified jobs with the highest incomes, education and prestige as requiring the greatest degree of skill. But, it is problematic to use any of these variables for directly assessing skill levels. For instance consider the variable of education. Women in the paid labour force on average are more educated than men, but "women's" jobs are generally characterized as demanding less skill (Gaskell, 1983:12-13).

Form (1987) used complexity as the criterion for determining skill. In his formal definition, he evaded the issue of how we understand the meaning of complexity. What is interesting is not using the notion of complexity to account for the number of tasks required for a job as Form did, but additionally how the tasks are structured, and linked to one another, and the extent of knowledge required for any particular activity.

The American Dictionary of Occupational Titles (DOT) is frequently used in aggregate studies (Spenner, 1983). Occupational skill is measured using worker trait data, where the skill measures refer to requirements of occupations, and not characteristics of the workers. DOT has fifty-two traits for thousands of occupational titles (Myles, 1990:8). The DOT can be used to study job content and compositional shifts, but it is associated with a number of problems (Miller et al., 1980; England, Chassie & McCormick, 1982; Hunter and Manly, 1986). One limitation with worker trait measures is that they are not useful in identifying changing skill requirements of individual occupations (Myles, 1990:8). In an American study, Dubnoff (1978) used 1960 DOT measures for the largest 295 occupations to obtain a skill change index. Analyzing shifts in the high and low skill scores of 1900 and 1970 he found evidence of downskilling among women in lower clerical occupations where clerks work with data and people. Form's re-analysis of the information found no evidence to support up-grading or down-grading for these years (Form, 1987). A criticism is the assumption that occupations do not change in complexity. Another problem with the DOT is the possibility that systematic

sex bias affected the skill ratings of jobs (England, Chassie & McCormack, 1982). Similar to DOT is the Canadian Classification and Dictionary of Occupations (CCDO) where worker traits are used to measure the task requirements of occupations. According to Hunter and Manly (1986), some of the task requirements of occupations are inadequately represented in this classification system. England, Chassie and McCormick (1982), and Hunter and Manley (1986) utilize categories to describe skill, but the content validity of these classifications is questionable, and they are not applicable across job categories to determine skill levels sufficiently. This research, however, is useful for examining changes in the spectrum of occupational categories, but too general for a focused analysis of working knowledge.

Myles (1990) considered sex differences in the skill level of jobs using Canadian census data from 1961 to 1981. He used five measures of skill: specific vocational education (SVP), general educational development (GED), cognitive ability, routine activity, and responsibility. The first measure is a scale ranking of an occupation's requirements based on training time needed to perform the work. The GED is a ranking of occupations on a six point scale based on language, mathematical, and general reasoning requirements. Myles used the factor of cognitive complexity to refer to the degree to which jobs require quantitative abilities. Routine activity was defined in reference to the degree to which a few tasks are performed repeatedly, and the degree of to which a job involves working under instructions. Responsibility as a skill measure was used to refer to the extent to which work involves supervision (Myles, 1990:9).

In his analysis, Myles made three general conclusions. Within the three occupational sectors investigated, service, white collar, and blue collar, men are more likely to be employed in higher skilled jobs than women. Second, Myles asserted that for the years investigated, upgrading occurs for women in all three occupational groups, whereas the skill distribution for men remains relatively stable. Third, he concluded that across the entire occupational structure, sex differences in skill declines between 1961 and 1986.

Skill change may occur through changes in work content. Research into skill change requires the assessment of content and composition shifts. Composition shifts are the creation or disappearance of jobs of given skill and the distribution of persons in those jobs. Case studies may indicate changes in work content, but they generally do not uncover compositional shifts (Spenner, 1983). The examination of skill changes in the occupational structure is problematic because new occupations appear and others vanish. The way occupations are classified has varied over time. For example, census data are problematic because occupational classifications have changed (Form, 1980).

Fleishman and Quaintance (1984:322-326) used a psychological approach to determine skill. A taxonomy was created that defines abilities and task functions. The highly refined psychological characteristics of the work, with a focus on information processing, do not make it completely suitable for examining the structure of working knowledge. The categories are too refined. Still, the research identifies the need to develop a system of categories or dimensions in order to assess skill and knowledge. Their work recognizes the diversity and array of individual abilities.

Skill and Clerical Work

As my research problem focuses on skill and knowledge in office jobs, it is necessary to provide a brief overview of work in the field. Some studies examined whether deskilling occurs in clerical work, but did not focus directly on the skill and knowledge requirements. Davies (1982) studied clerical work in the period from 1870 to 1930 in the United States. By 1930, two classes of clerks had emerged. The largest group performed mechanized tasks that were specialized and routine, and there was an overall deskilling trend.

Feldberg and Glenn (1983) examined the impact of office automation on jobs. They concluded that automation has changed occupations. Automation reduced the number of workers required to carry out tasks, but growth and shifts in the economy have led to an

expansion in clerical jobs. At the level of occupational structure, it is difficult to sort out a variety of factors that may influence skill requirements. In contrast to Jones and Crompton (1984), they did not find an overall trend towards deskilling and the degradation of work. The introduction of the word processor increased pay and promotion opportunities with the possibility of skill upgrading. The computer allowed the typist greater control over quality.

Feldberg and Glenn also analyzed the reorganized job of a customer service clerk. One person now performed activities once carried out by several people. The clerk completed all work tasks such as complaints and inquiries for service requests. Before the introduction of computers, customer inquiries were separated into various departments. Jobs now involved a broader scope but were more closely supervised (Feldberg and Glenn, 1983:71-74).

In a study of a large corporation Kanter unproblematically associated clerical work with a lack of skill when she said: "The relatively low-level and easily learned skills required in most universal technical aspects of a secretary's job (e.g. typing, telephone-answering) posed a problem for the secretary who wanted to achieve recognition for herself in order to keep, let alone improve, her job" (1977:91). She assumed that secretaries are low in skill because they are replaceable.

A study referred to by Lowe as conducted by "Cambridge researchers" found that many office jobs are skilled and demanding. It was concluded that women are paid low wages regardless of their job content (Lowe, 1987:13-14). An ethnographic study of a clerical worker conducted by Zimmerman, appears to support the notion that the job examined required extensive abilities (Zimmerman, 1970).

The deskilling argument assumes the office is like a factory. A typing pool is an example where office conditions do resemble factory work. Lowe asked why the analogy is inappropriate. "Paper pushing" is an abstract activity that often lacks a visible product. It is difficult to quantify the output of an office clerk in comparison to machine operators. Thus,

the degree of control that management is able to exert is limited within the office setting (Lowe, 1987:136).

The notion that the office is becoming more like a factory assumes that clerks were tied to machines once the foundations of the modern office were set in place. One has to consider the use of office technology by workers who perform a variety of tasks. Form's (1987) review of automation studies indicated that deskilling varies by occupation and industry. United States labour force information suggested that clerks have more task discretion and self-pacing than the majority of manual workers (Lowe, 1987:177). In contrast, Rotella claimed American offices of the 1930s are like factories with a specialized division of labour and continuous work processes (Rotella, 1981).

Crompton and Jones (1984) studied three large office bureaucracies to determine whether deskilling occurs in non-manual work. They identified "control" as the predominant criterion for assessing deskilling. Ninety per cent of the low level office jobs were identified as giving workers no control. Crompton and Jones determined that extreme task specialization is facilitated by the introduction of the computer (1984:51,210).

Crompton and Reid suggested that modern technology may deskill certain jobs, but new skills are also created. They examined the effect of the computer on clerical work. The knowledge and skills of the office clerk began to be undermined by the advent of office technology such as the Hollerith punch-card processor. Clerks no longer required knowledge of the whole process because it was removed from the employee and vested in machines (Crompton & Reid, 1982).

Conclusion

The role of gender has not been fully recognized in discussions of skill and knowledge requirements. One should not conduct research into clerical work that has frequently been defined as a "female job ghetto" without taking gender into account. The meaning of skill

appears to be bound up in the sexual division of labour. A sexual division of skill may be maintained through such factors as the social valuation of paid work, union-negotiated skill classifications, and the attitudes of men and women to a sexual division of labour. Skill categories are partially determined on the basis of gender, particularly given the feminization of an occupational category. The classic studies of office work did not explore the influence of gender and patriarchy (Mills, 1951; Lockwood, 1958; Crozier, 1964). By comparing job descriptions with on-the-job know-how, it is possible to identify whether management is getting knowledge and skills that are not paid for in wages.

Nevertheless, the concept of skill remains elusive, and there is a lack of consensus about what skill actually is. Skill is not easily measured. If skill is multi-dimensional, it becomes difficult to define it quantitatively. Both Braverman (1974) and official job descriptions do not provide enough information about knowledge and skill requirements, perhaps because skill is so difficult to specify. Two different types of research address the study of working knowledge. The first employs a uni-dimensional notion of skill that considers deskilling tendencies; the second provides ethnographic accounts of the work of one or a few individual workers. The conception of skill is dependent upon the approach taken. I am going in the direction of an analytical effort characterized by eleven knowledge and skill requirements, but keeping in mind the deskilling argument, the problems with the conception of skill, and the work of ethnographers.

The employers' interests are served by formal job requirements that delineate work tasks at the expense of neglecting the problem of coordinating and integrating work that is frequently tacit. A comparison between official job descriptions and actual abilities necessary to carry out the work will assist in identifying the skill and knowledge involved in office work. Given the complexity of "skill" and the infancy of research into working knowledge, the use of descriptive categories appears most fruitful. Thus, in my investigation I have developed descriptive categories that are viewed as reflecting what is required in the nature of clerical work.

Chapter IV: METHOD AND RESEARCH PLAN

Data for my analysis come from a study of women's work in offices and households. Three assistants helped in locating office sites for the research, and negotiated access. Field work was conducted at sixteen different office sites in 1986 and 1987. Organizations ranged from a one-person office to large corporate organizations with a diversity of specialized departments. Their operations include a copying service, trade association, office equipment firm, cable company customer service, municipal engineering and planning, linen supply and restaurant supplies, and a public utility. Employers were from both the private and public sectors. Offices ranged from those without computers to those with complex computer systems. Consent to participate in the research was obtained from management and employees. Field workers observed the work of fifty-eight non-supervisory office workers. Information was gathered on the organization of the office, the office layout, the personnel, and technology that included forms used in work activities, procedures, and office equipment. A general description of the work process for each office was recorded.

During the fieldwork, researchers observed the work activities and produced detailed and lengthy notes. They recorded a minute-by-minute account of what people did. The hired research assistants may or may not have been fully acquainted with the work they described. It was not always self-evident what clerks were doing, and was especially difficult for observers where jobs involved the use of computers. If the field workers had difficulty comprehending the work process, they asked the worker to clarify the tasks. The researcher's observation is an interpretation in the form of a written record. They are not standardized beyond the note-taking of minute-to-minute accounts of the work. The observers were not given lengthy instructions to follow. Observations were made for one working day. The work was observed for one day in order to obtain a general idea about the nature of the work, and to avoid a further disruption of work activities. The observation of a single day was not on the basis that

the work was presumed routine or that one-day allows for a perfect picture. The observers dictated activity records from their notes onto tapes, and a typist later transcribed the tapes into computer files. A copy of the edited activity record was sent to each person whose work it described, along with a request for an interview.

Half of the observed individuals granted interviews. The interviewer was the same person who observed the work, and who brought to the interview a task list of the work performed on the observation date. Most interviews were done in the interviewees' homes. The interview lasted a maximum of four hours and some were divided into two sessions. All sessions were tape recorded. Respondents were shown the task list created by the field worker. They were asked to make any changes, improvements, or clarifications regarding the work. Respondents were requested to indicate other tasks or job requirements associated with the job but not observed by the field worker, given that the observation was of a single day. The interviewer went through the task list and asked the respondent to discuss the knowledge, skills, and judgment necessary to perform each task. At the closing of each interview the respondents discussed their work history and education. The tape recordings were later transcribed. Research assistants used the interview and work activity records to formulate new task lists. For each job studied, all interview and work activity information was combined in computer files according to specific tasks.

I shall examine required skill and working knowledge by utilizing a selection of data with a focus on a few problems. Information on official job descriptions was provided by the employers. The field workers collected official job descriptions, although it was not part of the study. There were approximately seven job descriptions available, from which I selected three cases. I chose jobs on the basis that they are quite different from one another, are not from the same organization, are representative of organizations of varying sizes, are occupied by women, and have detailed official job descriptions.

All of the job positions chosen for investigation are held by women. The first case is an administrative clerk at a trade association. Case two is a clerk-stenographer at a city

planning department, and the final case selected for study is an accounts payable clerk at a linen supply company. The trade association represents a small organization, followed by the medium-sized linen supply company. The municipal office is an example of a relatively large organization. The official job descriptions are used to compare official job requirements with skills and knowledge that are crucial for the job according to the following analysis.

I shall utilize all of the data for providing descriptions of the cases of office work that I will analyze. The data for analysis derive from interviews and activity records. In each clerical job, I will choose some tasks or combination of tasks from the interviews, activity records, and task lists to examine.

I have developed a system of eleven dimensions which I am going to use for making comparisons. The following is a numbered list of these categories.

Eleven Dimensions of Knowledge and Skill Requirements

1. Regulating and Maintaining Social Relations
2. Coordinating Different Tasks
3. Knowledge of the Organization and Other People's Jobs
4. Beginning Work After an Interruption
5. Exceptions
6. Keeping Tasks in the Correct Sequence
7. Knowledge of Office Technology and Operating Equipment
8. Techniques a Clerk Uses to Do the Job Better
9. Working Within Formally Recognized Work Procedures
10. Stepping Outside of Formally Recognized Work Procedures
11. A Day's Work as an Accomplishment

The eleven categories or dimensions were arrived at on the basis of important shared characteristics of clerical jobs. There is a commonality across all three jobs on these dimensions. These descriptive categories serve to give direction to examining the skills and knowledge required in clerical work. I believe that the descriptive categories are useful because of the nature and complexity of the work, and because the research is guided to investigate a relatively unstudied phenomenon in which I am attempting to identify some of its important features.

It is necessary to provide a brief explanation of what each of these categories mean. The first dimension is "regulating and maintaining social relations". I am addressing the capacity to control or maintain some characteristic of encounters in the relation in question. There are three different kinds of social relations in these jobs: clerk-clerk, clerk-client, and clerk-superordinate. Regulating and maintaining social relations involves the meaning that individuals give to a situation, that is socially constructed and shared. Within the office setting, it involves impersonal relationships where the interaction is based on rules and procedures that pertain to business practices. Regulating and maintaining social relations also include the actions of clerks to ease tensions and restore emotional balance in interactions. The requirements include methods used to control interactions that are unwritten, unregulated, scheduled or organized. Activities include cooperation and communication. This dimension has been adopted in order to discuss how clerks go about working within the context of other people.

The second dimension is "coordinating different work tasks". This category largely has to do with the way work tasks are organized and scheduled. Each of the clerks do a number of separate tasks that somehow have to be put together during the course of the work. This category differs from the sixth dimension largely on the basis that coordinating work involves more than one task. "Knowledge of the organization and other people's jobs" has to do with how the clerk fits into the organization as a whole, and what she has to know about the rest of the organization in order to carry out work tasks. Because clerks are often moved throughout the organization, they must know something about other people's jobs. The fourth category, "beginning work after an interruption" involves starting a task after a disruption where the work was stopped and the clerk had to attend to another matter. "Exceptions" are problems or obstacles that interfere with routine work. Exceptions also include having to respond to unusual circumstances that arise during the course of the work. For instance, relief work might be characterized as an exception to the job if it is done infrequently or not expected as part of the job. The sixth dimension, "keeping tasks in the

correct sequence", refers to keeping the activities in the correct order. "Knowledge of office technology and operating equipment" is another category. Technology involves knowledge of techniques that includes tools and machines used in office procedures. A standardized office form is considered technology. "Techniques a clerk uses to do the job better" includes any way the clerk improves the way work is done or how she has improved the job itself. The ninth and tenth categories are, "working within formally recognized work procedures" and "stepping outside of formally recognized work procedures". Formally recognized work procedures involve methods for carrying out work tasks that are in keeping with "official office rules". The tenth dimension has to do with working around or overlooking the "official rules" in order to get the work accomplished or improve how the work is done. The final dimension "a day's work as an accomplishment" is about what it takes in order to successfully complete a day on the job.

For each case I shall describe the organization and show a task list and the official job description, before conducting the analysis of the job. First, I will describe the organization, staff, and general work procedures. The description will enable one to better visualize the work that goes on, and how the individual's job fits into the organizational hierarchy. For example, in the case of the accounts payable clerk I describe briefly the work of a linen supply firm. There is a connection between work that is completed in the office with work carried out in other parts of the organization. It is beneficial to discuss the jobs by taking the entire picture of the organization into account rather than a portion of it. Within each of the offices, jobs are connected with other jobs. For instance, one job might encompass a part of an overall work process, and another job may fulfill still another part. Jobs are structurally linked with one another. Clerks are surrounded by other staff members who may require information, request a particular file, and the like. The work done by these women is connected with the work of other employees. They interact with co-workers and members of the public as a requirement of their jobs. Furthermore, clerks are sometimes moved throughout an organization, such as engaging in relief work.

Because the purpose of this thesis is to compare official job descriptions, set by management, with the knowledge and skill requirements necessary for the job, it is useful to know something about the organization, staff, and work process. Knowledge of this information becomes helpful during the process of making comparisons and analyzing each of the jobs.

After a discussion of the organization, I will provide a description of the job as it will lend itself useful to the purpose of inquiry. In order to determine the knowledge and skill needed for a job, it is crucial to know what are the duties and functions associated with the job in question. It ought to be determined what the clerk does, what are some exceptions to the work, under what circumstances is the work carried out, how often is a task performed, the importance of a task to the job, and the like.

Job descriptions begin with a task list. The list provides an overall summary of the job. In each task list, the most important and frequently occurring tasks are listed first, followed by tasks that are performed less frequently. Sometimes a task that is part of the job, but was not observed by the field worker is recorded near the bottom of the list. The nature of the jobs often made it difficult to strictly adhere to a standard method of constructing task lists. Tasks such as coordinating work are often listed near the end of a list even though coordinating duties were crucial to the job.

After a description of the job that includes a task list, the official job description is displayed because it is used in making comparisons. It is important to read the official description for the purpose of comparing it with skill and knowledge requirements determined in the following analysis. I will select a task dimension and examine the observation and interview data for the knowledge, skills, and judgment necessary. The same process is followed for each dimension and case. In the final part I draw general conclusions from the analysis of the three cases.

None of the official job descriptions resemble the knowledge and skill required for these jobs. The information is clearly lacking in each of the official job descriptions on the

dimensions studied. Therefore, I am predominately going to discuss requirements with the comparison that the information is omitted from the official job description. If there is something for which to compare between the official job description and the knowledge and skill requirements, it will be discussed. Overall the official job descriptions particularly omit such characteristics as the regulation and maintainance of social relations, the coordination and integration of work, and knowledge of the organization and other people's jobs. These characteristics are associated with all three jobs investigated.

Chapter V: AN ADMINISTRATIVE CLERK

Office Organization

Janet (all names are fictitious) is an administrative clerk at a trade association. The organization acts as a central agency in the interest of small contractors by providing its members with a variety of services. The association predominantly sells literature pertaining to the industry, produces weekly bulletins, sponsors courses, and offers plan rooms and a bid depository. The depository serves as an office where sealed bids from trade contractors are deposited to be given to general contractors who are designated recipients of bids. The employees in this office accept bids as members deliver them, and send them to the appropriate general contractor. Member firms are entitled to use the plan room facilities in order to view plans and make bid deposits. Architects send drawings to this association for viewing by trades and suppliers. The architect who produces the specifications makes a decision whether or not the job is subject to the bid depository system and which trades are included. Drawings are placed on view at this office to be seen by contractors and suppliers. Trade contractors perform a specialized service in the construction of a building such as painting, plastering or glazing. The general contractor in turn takes all these specialized trades and combines their work to construct a building. Suppliers use the drawings to see whether or not their product is specified, and, if not, will endeavour to have the architect give them an opportunity to bid their product as an alternate. During this period any errors in the drawings or specifications are noted and given to the architect, and corrections to be made will result in the publication of addenda.

The office staff controls who visits the plan rooms. Only members have access to project materials. All individuals visiting these rooms must give their membership cards to any of the office staff, and sign a register at the reception counter. The staff accepts and later returns cards. Plans and specifications are exhibited for members to use in order that they

may survey the quantities of material and labour required to furnish their portion of the project. Each plan and specification is numbered, and they are kept on metal racks attached to the walls. Members have the opportunity to make photocopies of items borrowed from either the office or the plan rooms. One of the plan rooms has two photocopiers. In addition, the office staff will page members in the plan rooms when telephone calls come in for them. A telephone is provided for members to use at the reception counter. The office staff also maintains a coffee vending machine for members. Projects may be booked out overnight. Staff supervises the borrowing of all materials. The day after a job closes, the project material is removed. Tender closing day will see all the trades with completed bids. These will either be submitted through the bid depository, if specified, or be given directly to the general contractor. The plan rooms and bid depository in this organization provide a service for individuals and firms in the construction industry. Without access to drawings, fewer bids would be received and costs would be higher. The organization's rules and procedures ensure that drawings, specifications and addenda are well maintained and accurately displayed and listed, thereby reducing the possibility of bidding errors.

In addition to the administrative clerk, the office staff includes a receptionist, two plan room clerks, a membership co-ordinator, an office manager, a plan room supervisor, an accountant, and a printer. The vice-president and president also work in the office. The highest position on the basis of salary and prestige accorded to a woman in this office is the office manager, Helen. Jobs that accord the most authority are all occupied by men such as the accountant, vice-president, president, and supervisor of the plan room. All the other positions are held by women, and are characterized by typical clerical tasks, for instance typing and filing. In this office the clerks have to meet certain deadlines, but it is expected that they will decide how and when the tasks are carried out in order to comply with time constraints.

Janet engages in many of the same work activities as other staff members. The core office tasks are divided among the clerks. For instance, the receptionist predominantly operates the switchboard and answers telephone calls. Clerks are moved throughout the

organization. They are expected by management to fulfill the requirements of several jobs. At the beginning of this study, the association employed a membership co-ordinator. By the time Janet was interviewed about her job, the position of the co-ordinator was left vacant, and the tasks associated with this position were temporarily dispersed among the remaining clerks.

I describe other people's work in detail because Janet is required to do their work, from time to time. The detail is relevant to the examination of the requirements for her job.

Providing members with information related to construction projects, and accepting and distributing bids are general functions in this office. The clerks are responsible for checking the two largest newspapers to make certain that this office has the drawings and specifications for all current construction projects open for bidding. If this information is lacking, they telephone the offices of the design authorities for such projects to request that this material be sent to this office. Once bidding is closed, the staff has to send all the materials back to the senders unless instructions are to throw these items out.

This office also accepts the mail for other offices in the building. Postal workers deliver the mail, and the two plan room clerks, Megan and Holly, sort it. They are responsible for distributing the mail that is to be delivered to their satellite offices by placing materials in the appropriate mail boxes. One of the clerks takes the mail to the office upstairs.

Megan and Holly are responsible for distributing the plans and specifications once they have been delivered to this office. Before distributing the items, the clerks type a job card sheet which is kept in a binder. Two white file cards and a job card are placed in the plan rooms for each project. The information typed onto the sheets in the binder, and on the file cards is used to answer telephone inquiries about any particular project. The job cards, kept on racks in one of the plan rooms, contain information that enables members to locate materials related to projects.

Plan room clerks keep a record of photocopier users so that members are billed for this service. Megan and Holly maintain the amount of paper in the paper trays and toner in the photocopy machines.

To ensure that the plan rooms and bid depository office are supervised by staff at all times, the supervisor and the two plan room clerks work closely together. For example, if the bulletin has to be typed, the supervisor might answer general inquiries from members at the reception counter, while one of the other clerks types. Janet does relief work for the plan room clerks, the receptionist, and the membership co-ordinator.

Much of Janet's work is similar to tasks completed by the membership co-ordinator named Linda, and receptionist: answering the telephone, sorting, filing, waiting on customers, mailing, and typing. She explains the benefits of membership to prospective members either in person or by telephone. Periodically Linda organizes membership campaigns. Part of the job involves answering most of the customer inquiries and complaints. Linda puts together general information inserts for membership kits. Other work activities involve creating bulletins, trade awards, and educational services of interest to persons working in the construction industry, maintaining files on all members, and keeping lists of prospective members. She is a resource staff person for the association's Membership Committee. She prepares meetings, researches new membership services, attends meetings and produces the minutes.

Christine, the receptionist, answers telephone calls using the office switchboard. Central to the job is answering inquiries of other employees, customers, and members. Outside calls are connected to persons working in the organization such as tenants and members who are in the building. Sometimes Christine pages other employees on a intercom system. She takes messages to people. Occasionally she distributes long distance slips to the offices of the president, vice-president and office manager. The receptionist opens, sorts, and distributes mail throughout the day. She completes a variety of forms such as invoices for document sales, waybills for the association's mail, bid envelopes, and membership orders. The receptionist greets individuals who come in off the street, and is partially responsible for selling documents. Related to this job is taking money and making change for customers who pay for items. When Christine is not answering the phone, she is usually typing. Using an

electric typewriter, she produces mailing labels, notices of meetings, membership cards, newsletters, flyers for social events and standard business letters. Tasks that she does less frequently are obtaining signatures on cheques from the president, and keeping track of members that attend meetings. Another aspect of the job is billing tenants monthly for typing, photocopying, rent, postage, long distance calls, courier service, course preparation and registration, and sending flowers for special occasions. Christine makes the office coffee. She arranges for hotel bookings for members who attend meetings, as requested by the office manager.

Job Description

I now turn to describing the job of the administrative clerk. Janet's most important task is posting cheques into the account receivable program on the computer. She also spends much of her time mailing and typing. The task list provides an overview of the administrative clerk's job.

The Administrative Clerk's Task List

1. Posts cheques into the accounts receivable program on the computer
- 2a. Types - letters
- 2b. Types - addresses and phone numbers of staff members
- 2c. Types - bulletins
- 2d. Types - projects
- 3a. Answers telephone - transfers calls/puts callers on hold
- 3b. Answers telephone - takes messages
- 4a. Mail - separates envelopes to put through postage machine
- 4b. Mail - sorts, weighs and handles everyday outgoing items
- 4c. Mail - puts outgoing items through postage machine
- 4d. Mail - staples letters to the covers of directories and stuffs envelopes
- 4f. Mail - fills out waybills
- 4g. Mail - wraps directories
- 4h. Mail - puts items into mailbag and puts bags in one location
- 4i. Mail - puts office mail in cubbyholes
- 4j. Mail - gets mail bags
- 4k. Mail - finds total and balance for outgoing postage
- 4l. Mail - sends postage meter to Post Office
5. Waits on members and non-members, and sells documents
6. Opens new accounts and assigns account numbers

7. Takes cheques to bank for deposit
8. Detects errors
9. Operates photocopier
- 10a. Gives information - in person
- 10b. Gives information - by telephone
- 11a. Obtains information - in person
- 11b. Obtains information - by telephone
12. Cross-checks information
13. Sorts items
14. Files
15. Completes cheques
16. Prints documents on computer printer
17. Proof-reads
18. Gets directions/instructions
19. Completes and processes invoices
20. Staples
21. Discusses work related issues between employees
22. Answers customer inquiries regarding invoicing
23. Operates the computer and uses word processing packages
24. Copes with exceptions
25. Maintains lists of companies that are members
26. Coordinates tasks

A useful method of describing Janet's job is to describe some of the tasks she performs, and the office technology that she utilizes. Not only does she fulfill the requirements of her own job, but also those of other positions within this office. Her main daily task is posting cheques into the accounts receivable program on the computer. Once cheques have come in by mail, Janet puts them into an alphabetizer, before posting them into the computer. She piles cheques, cheque stubs, and invoices beside her. She brings up the accounts receivable program on the computer by typing in the appropriate command, and begins by keying in the command "Cash Entry" or "Cash Transactions". Then she types in the account number listed on the invoice or in the accounts receivable book. Once the account number is on the screen, Janet types in the cheque number and date, along with today's date and the cheque amount. The information keyed into the computer derives from the pile of materials beside her: cheques, cheque stubs, and invoices. If the amount is for two invoices she must type them in separately. The system is set with a balance forward and open item system. These are two different sets of accounts, but the office staff is asked to integrate the two systems into the open file. If, for instance, Janet comes across an old account still

showing a balance forward, she has to type the amount in separately. If, however, the account is new, then Janet types in the entire cheque amount for one or more invoices.

She refers to the detailed trial balance for customers that is completed monthly. An adding machine is used to calculate whether a payment is added correctly. As she completes the task, she records the date of payment on a detailed trial balance sheet with a pen. Once the cheque information is entered into the computer, Janet keys in "Print Cash Batch" in order to obtain a print-out sheet. Following is an excerpt from the observation record that refers to the task of posting cheques into the account receivable computer program.

- 2:10 She sits down in front of the computer and calls the accounts receivable program. She keys in cash entry and cash transactions. Janet will now post these payments as cheques into accounts receivable. Janet refers to the detailed trial balance for customers sheet which is done once a month and contains six columns with the following information: customer's name, invoice date, 30-60 days, 60-90 days, over 90 days and total. She checks off the date paid on a sheet as she goes through the cheques. Those invoices for this month will not appear on this read-out of the detailed trial balance for customers. As Janet goes through the cheques, she puts them into a pile face down beside the computer. After she punched in the information she puts the cheque stubs in the garbage. She looks up on the aged trial balance sheet if the company has paid an outstanding balance.
- 2:15 She uses an adding machine, which is to the right of the desk to see if a partial payment was added correctly.
- 2:20 She continues at the computer, entering cheque information. If incorrect information is put into the computer, the computer will beep.
- 2:40 Janet has done thirty-five entries.
- 2:44 Janet punches in 'edit cash transaction', as she has entered a mistake. This is batch #37. She goes to accounts receivable and corrects the transaction.
- 2:47 Janet returns to enter cash transactions. This is batch entry #40. Janet continues as before checking off the date of payments on the list that is the detailed trial balance sheet. She records the date of payment on this 'detailed age trial balance for customers' sheet.
- 2:55 She is now going to use a different format for a new customer.
- 3:16 She punches in 'post cash transaction'.
- 3:34 Janet goes upstairs to finish printing out the corrected sheet for today's invoice entries at the computer.
- 3:35 Janet presses 'Print Cash Posting Journal'. This function will print the present cash posting journal and allow it to be purged. While the printer is printing, Janet goes to the accountant's office, which is next door, to discuss a cheque which did not balance with company X, as the accountant looks after this account. Janet returns to the computer room. When the report printing has been completed, she tears off the sheets and puts her initials on them and files them in the desk drawer where the computer is.

Typing is the second general task that Janet does. She usually types three different documents: letters, bulletins, and projects. On the day that Janet was observed she was

typing addresses and phone numbers of staff members. She also brought a list of members' addresses and telephone numbers up to date. These activities were exceptions to her routine typing demands. A number of tenants occupy the building, and Janet also does typing for them. She types letters on the computer and stores them on floppy disks. She also keeps a record of time spent on this activity, because tenants are charged an hourly rate for this service.

Janet types bulletins on the computer. Any new jobs that come in are listed in computer files. The task is also one of updating information, such as changing closing dates. The bulletins have a specific format which Janet is expected to follow. Once the information is keyed into the computer, she produces a printed document using the computer printer. Printing requires compressing the information into a few pages by using a computer command. Projects cards used in the plan room are also typed by the administrative clerk. For this task Janet uses the typewriter rather than the computer. Proof-reading is another task that Janet does as part of her job, but it is particularly important to typing.

Janet answers the telephone and operates the switchboard before the receptionist arrives in the morning and during the receptionist's lunch break. The switchboard has fifty lines. She transfers calls, puts calls on hold, and takes and gives messages. When Janet takes a message, she fills out a pink slip with the caller's name, organization, telephone number, and the name of the person to whom the message is sent. Afterwards she puts the slip of paper into a message compartment. It is a fast-paced task often carried out in conjunction with other activities, for instance running items through the postage machine or packaging directories. The following is a four minute account of Janet's work in responding to telephone calls.

- 1:23 The phone rings, the call is for the accountant, she puts the call through and returns to working on directories.
- 1:24 The call returns back to this main switchboard as the accountant has not answered his phone. Janet puts the call through once more to the accountant. There is no answer at the accountant's office. She takes a message slip with the name of the person, company, and telephone number. She puts it into the message compartment at the right of the receptionist's desk.

- 1:25 The phone rings, this time Janet brings a pile of envelopes to the receptionist's desk and sits down and answers the phone. The call is for an upstairs tenant. Janet takes a message and puts the message in the cubby hole message box to the right of her desk. Janet separates envelopes to prepare for putting them through the postage machine.
- 1:26 A phone call for the president. He is not in, back in one half hour. Janet takes a message for him, recording the name and phone number of the caller and leaves the message on the counter to her left where the president picks up his messages.

Janet is responsible for processing the outgoing mail. It is possible to further divide this activity into various components. Janet separates envelopes and puts them through a postage machine. This task is frequently time-consuming, and may take up most of the day. She sorts, weighs, and handles outgoing items daily. For example, Janet weighs a piece of mail on a scale and posts it through the postage machine. A postage meter sheet is used to record the postage. Thus each item is weighed and the total postage is recorded. All outgoing items are run through the postage machine. An excerpt from the activity record describes Janet posting pieces of mail.

- 9:10 She turns on the copytron postage machine at the back counter against the wall. She feeds one pile of envelopes through the postage machine, holding the pile in her left hand as she feeds it through the postage machine. She lets two envelopes go through the machine and come out on the tray at the left hand side. As Janet put this first pile of envelopes into the machine, she checks to see that they are feeding evenly through the machine. She puts the whole pile through and turns off the machine.
- 9:12 She sets the machine at \$1.78 and runs two envelopes through. They are okay and she runs the pile through. They drop onto the tray on the counter on the left hand side. She resets each time the machine stops and finishes the second pile.
- 9:24 She runs a fifth pile of envelopes through the postage machine.

The weekly bulletins and newsletters are weighed separately in order to determine how much money is spent on them per month. Any drawings from the plan room that are mailed back to architects are sent third class, while all other pieces of mail are mailed first class. It is her responsibility to find the total and balance for all outgoing mail. For this procedure Janet uses a calculator or an adding machine. The total on the calculator is supposed to correspond to the total on the postage machine.

At the time that directories are sent out, Janet staples letters to the covers of directory packages. It is her job to wrap the directories. She fills out waybills for sending items by courier. Each courier's waybill is slightly different. There is a time limit for handling the

outgoing mail because the courier arrives at the office at 4:45 p.m. Janet puts items into mail bags and stores them for the courier to pick up. Mail bags are not to exceed sixty pounds, and Janet has to determine how many bags to order from the Post Office for large mailing jobs. Lastly, Janet sends the postage meter to the Post Office, when necessary, with a cheque completed by the accountant. This task involves completing postage meter component forms. Janet keeps a record of how much money the machine was set at, how much money was used, and how much more money is required in the postage machine to mail the association's outgoing items. When the postage meter comes back to the office, she signs a receipt. Janet predominately performs work activities of preparing outgoing mailing items, but she also puts incoming office mail into staff's designated cubbyholes.

Janet waits on members and non-members at the reception counter. One aspect of this task is that she sells memberships (there was no membership co-ordinator at the end of the field work). All staff members were obliged to do this work until a new membership co-ordinator was found. Janet explains the benefits of membership to prospective individuals. Another part of receiving clients is selling documents. When a customer requests a document, but is unsure about its title or specifics, there is a list of documents that Janet reads directly to the customer. There is also a document order form that lists the documents that this association sells, and which a customer completes for ordering items. All the documents are located on shelves, and it is Janet's responsibility to find requested materials. At other times members want to buy bid depository envelopes. Still other customers use the association's photocopy service. Janet completes invoices for items sold, and uses a calculator for determining the cost of the sale, tax, and the total price. She first must determine if the customer is a member or non-member because members are charged at a lower rate. Janet asks the customers their names, and how they are paying: cash, cheque or charge. If the customer pays by cash or cheque, the clerk does not record his or her address. If the purchase is charged by a member, Janet fills out an invoice with the invoice number, the company name, the date, the documents sold, the account number, the cost of the

documents, and the tax amount if there is one. A document sales sheet indicates which items are taxable or non-taxable. Janet signs the invoice and asks the customer to sign under "received by...." The invoice has four copies; two copies are given to the customer, and two copies remain in this office for record purposes. The following day all the cash sales from the day before are totalled.

Another task is opening new accounts and assigning account numbers. Janet looks through the membership list that is updated monthly containing the names and addresses of members. She finds the place in the alphabet for a new company to be listed, and chooses a new account number. The new account is recorded on the membership list and in the computer files. The account number is usually given to the membership co-ordinator, when there is one. In the following excerpt from the activity record Janet opens a new account.

3:00 Janet begins to open an account. This morning Linda gave Janet a copy of the membership form for her to enter into the computer. Janet punches in the customer maintenance menu to add new customers.

A similar task is maintaining lists of companies that are members. This job is usually done once a month. Janet makes address changes or deletions when necessary. The procedure involves making editing changes on the association's membership files. In order to change an address, Janet types "Customer Maintenance - Edit" or "Modified Customer" on the computer keyboard. She types in the most recent address into the computer file while deleting the previous one. A member cannot be deleted from the customer files unless the account has a zero balance. Janet has to purge everything on such an account by pressing the computer option for "Purging Accounts". Then, she deletes the account. Any changes that Janet makes to the computer files are also recorded on a sheet for address changes and deletions. Once changes are made to the records, she gives the updated information to all other staff members that require it.

Janet takes cheques to the bank for deposit. First she stamps the cheques with a standard "for deposit to" stamp. She attaches the tape from the adding machine to the

cheques for putting into the bank deposit book. The tape indicates who the cheque is from, the amount of each cheque, and the total amount of all the cheques. Janet keeps a record of the date and the amount of the bank deposit.

She is also responsible for answering customer inquiries in person or by telephone. Members frequently make inquiries about invoices. For example, people will telephone for a copy of an invoice. Janet looks through the files for the particular form, makes a photocopy, and sends it to the address of the person who requested it. At other times Janet is asked to reveal the status of a particular account.

All staff members use office equipment. Janet uses a calculator, adding machine, electric typewriter, photocopiers, coffee machine, printer, microcomputer, computer software, postage machine, and telephones. Some of the less sophisticated pieces of technology include staplers, pens and three-hole punches. Forms are other examples of technology: Janet completes waybills, invoices and long distance record forms. Janet uses the photocopier for making additional records of documents. She has found that the photocopier is useful for producing mailing labels. In order to obtain a written copy of information entered into the computer, Janet uses a computer printer.

Central to office jobs is giving information and materials, and receiving or obtaining information and materials. The methods of transmission are direct speech, telephone, letters, photocopies, fax or telex machines. These general tasks are at the core of Janet's work, particularly as her job is embedded within a complicated network of information processing. In some cases Janet does one part of a whole task while co-workers complete other parts. Therefore, Janet's work depends on other people's work and vice versa. One example is accounting for the association's members. The membership co-ordinator sells a membership, and gives Janet a copy of the membership form to enter into the computer. Once the information is entered into the computer files it can be utilized by other office workers such as the accountant.

A similar task is getting directions and instructions. The association is a hierarchical organization. Part of her job is to give directions, but more often than not she gets directions and instructions. Typically it is the office manager, accountant, vice-president, or president that give orders to her. The following are two excerpts from the activity record that illustrate getting instructions from a superordinate.

- 9:58 The office manager talks to Janet, near Janet's desk. The manager gives her a list of the staff and would like Janet to get the addresses and phone numbers of the various staff members and put them on the computer.
- 4:00 The president arrives and gives Janet two sheets to be reduced and copied.

Discussion between employees is part of office work. The conversation may be related or unrelated to the job. Sometimes Janet requires the assistance of another employee to finish a task. The following are three excerpts from the activity record.

- 11:17 There is a friendly conversation between Janet, the office manager, and the printer. The office manager is stapling, the printer is stuffing envelopes, and Janet is taping the envelopes.
- 1:31 Janet asks the office manager if we'll be moving Friday. The office manager answers probably Monday. During renovations in the main office, Janet and Linda, the membership co-ordinator, will be working in an upstairs office.
- 4:42 There is a conversation between Christine, the receptionist, Janet, and the accountant concerning a missing invoice.

Sorting and filing are tasks that Janet does every day. For example, Janet sorts through cheque stubs before she enters the information on the accounts receivable program. Associated with the task of mailing is sorting through pieces of mail. Sorting is putting information into categories. Sorting is completed both manually and on the computer. With the introduction of computers, information is additionally filed electronically rather than just manually. I will now consider the official job description.

The Official Job Description

The official job description is determined by management. I use the term official job description, formal job description and management's job description synonymously. Official job descriptions appear to have two functions. They actually describe tasks, and second, indicate requirements for performing tasks. Not all of the descriptions, however, list requirements. Some of the documents have been slightly altered in order to protect the anonymity of the organization.

The Official Job Description

Administrative Clerk

1. Word Processing
 - bulletins: social, education or general information inserts (back up: Trade Awards)
2. Addressograph
 - bulletin envelopes weekly
 - envelopes, etc. for special needs as required
3. Accounting Clerk
 - aid accountant in preparing month-end run;
 - data input for in-house receivables/payables program
 - update receivables files (new members, deletions, changes of address, phone number, etc.)
 - filing/keeping "pinks" in numerical order
 - bank deposits
 - cash sales entries
 - receivables entries
 - answering members inquiries re: invoices/statements etc.
4. Mail
 - putting mail through postage machine daily, bagging and preparing mail for courier pick up to take it to Post Office
 - keeping record of all Tenants'/Internal Trades' mail costs for invoicing at the end of the month
5. Switchboard/Document Sales Relief
6. Plan Room/Bid Depository Relief
7. General Administrative Help to Senior Staff Members
8. Various Clerical Duties as Required

Analysis of Case One

Working knowledge is making things work to a design that is being remade on a daily basis. Management's official job description that accounts for the requirements of the administrative clerk's job addresses eight tasks. They are narrowly defined and separated from the context of other demands. For instance, one of the tasks for the job is mailing. It does not refer to requirements.

Regulating and Maintaining Social Relations

The administrative clerk's work activities and working knowledge depend upon the presence, behavior, and requirements of other employees and customers. For example, Janet's job involves direct contact with plan room clerks, the office manager, the receptionist, and customers from off the street.

Regulating and maintaining social relations is a typical aspect of clerical work that is seldom officially recognized by management. There are several kinds of relations and activities that are relevant. The kinds of relations include clerk-clerk, clerk-superordinate, and clerk-client. The dimension is used to address some characteristic of encounters in the different kinds of relations. These relations may take the form of cooperation, communication, work flow, and taking over someone else's job.

Some of the requirements include the ability to speak and write clearly with a understanding of the technical character of the work, including its vocabulary. Requirements also include conformity to the informal social norms of the office, compliance with official rules, and compliance with orders and instructions from people in superordinate positions. Because office work is often characterized by a flow of information processing where one clerk takes on one segment of an entire task, any office worker has the potential for bringing

work to a standstill. Janet has to know where her job fits into the overall work process. She is obliged to do her job competently and as accurately as possible in order for other employees to get their work done. If for instance, Janet did not know how to enter cheque information into the association's computer files, then the accountant would not be able to finish his work.

Through a process of learning the unofficial office rules, Janet has determined what is unacceptable conduct on the job. Central to work relations is knowing what not to do on the job. The ability to work in the context of the office's working relations is not fully recognized in management's official job description.

A characteristic of office jobs is often providing services for other employees, discussing work-related issues with co-workers, and responding to inquiries from the public. The "social" skills that are necessary for clerical work are important. For instance, Janet might locate a file for the president, discuss with another clerk the status of a membership, or provide information about bid depository procedures to a member waiting at the front counter. For each kind of interaction, whether clerk-clerk, clerk-superordinate or clerk-client, there are a host of informal rules that Janet is expected to comply with.

During a short interval Janet has to recognize that signing authority is needed for some items, coordinate the walk to the accountant's office with paying attention to a customer, listen to the telephone ring, and check on an invoice. This dimension is made clear in an excerpt from the activity record:

9:53 The next job for Janet is stuffing directories into envelopes at the main counter in the centre of the room. She takes a pile of envelopes and puts the flaps back together in a pile so as to make the stuffing of the envelopes easier. She finds one envelope has sealed and uses her fingers to unseal it. She leaves the pile of envelopes on the counter. Janet asks the membership co-ordinator, "Did you get the paper from construction company X?" Linda says "No". Janet gets the message from her desk and gives it to Linda at her desk. This message concerns membership and Linda handles memberships at this time.

Although Janet herself was not able to fully express that regulating and maintaining social relations is central to the work during the interview, she did, however, identify "people skills" when asked what are the important skills needed to perform the job.

Cooperating with other staff members is critical for completing required work. A clerk only learns how to conduct herself on the job by working alongside other employees, and by performing functions with the assistance of others. A course or manual does not provide this knowledge. Janet probably learned how to do some aspect of relief work from the plan room clerks, Megan or Holly, or Christine the receptionist. For instance, Christine probably showed Janet how to operate the switchboard, and tips on what to do, and what not to do if the work is to get done. When Janet was asked about learning how to operate the computer and the software programs, she said: "that's what I found, usually someone else helping me." All of the clerks in the office do what is frequently referred to as word processing, but none of them had taken a course on how to do this reasonably complex activity. Through regulating and maintaining social relations clerks acquire a stock of working knowledge such as how to do word processing.

Janet has to convey to others some acceptable level of competence, unofficially agreed upon by the office staff, if she is going to obtain the cooperation of others. If she were to exude a lack of competence to her co-workers, it is unlikely that they would make themselves helpful. More importantly, Janet would not be able to do her job in its entirety. She was responsible for preparing and mailing some eight hundred directories within two days. Because she was faced with the prospect of completing such a large task, other workers took it on themselves to help Janet when they had the opportunity. The following is a selection from the activity record that describes how staff members worked together to help Janet finish one of her required tasks.

1:10 Janet, the office manager, and the printer are all working on directories at the counter. They discuss the splitting up of the job. The office manager staples the two pages to the front cover of the directory, then piles them to her right. The printer stuffs them in envelopes and puts them to his right. Janet uses the tape gun to close the envelopes.

There is talk of a further mailing job this week, approximately six to seven hundred blue booklets to prospective customers.

During the interview Janet answered questions regarding the operation of the computer, and using its word processing packages. She revealed during the discussion the importance of completing the work as best as possible without always relying on the assistance of the staff. Janet indicated the importance of trying to understand something by oneself before asking for help. A worker who continually asks for help without thinking a problem through may lose the respect of the other employees. It may become detrimental to the person who is considered too quick to look for assistance because other employees become less reluctant to work on problems.

The following is a segment from the interview about learning how to use the computer. She reveals the importance of trying to solve a problem on one's own before asking for help in order maintain an acceptable working relationship.

I'm not sure how you accomplish it, but I notice the difference in some girls is that if they hit a (wrong) button, they'll freak out and phone me -- I guess because I've done it the longest, so they'll just, I can't even say that it's a matter of trusting. I think each person is different with that, really. It seems silly but if you can just realize that it's a machine and it's mostly going to do what you tell it to do. Sometimes it does weird things though, especially ours, but it's just a matter of sitting there with it, feeling comfortable, knowing that it does this. Once you learn the procedure -- one thing that is good about it is if you take notes, to go according to your notes until you're sure of it. Some of the girls in the office they've been going through their notes for two years now, and if they don't have their notes they can't do it which isn't very good really.

The work procedures of giving, obtaining, and receiving information that is at the core of clerical jobs reveals the importance of regulating and maintaining social relations. Deadline pressures seem to pull people together into a cooperative team. The slack periods in the office give the workers a chance to relax and enjoy each others company through informal conversation. Although informal conversation is not an official requirement for the job, getting along with other workers ensures that others will cooperate to provide their assistance when needed.

Additional requirements are dealing with task dependence, managing task sequence, and knowing the characteristics of other people. Occasionally, Janet types letters for tenants. The knowledge and skill of typing letters is not fully accounted for by the activity itself, but includes the regulating and maintaining of social relations necessary for getting the job done. Each tenant has an individual preference for the presentation and content of a letter.

The dimension of regulating and maintaining social relations is central to answering the telephone. For instance, during the interview Janet identified what she believed she needed to know in order to answer the telephone:

You have to have a pleasant type of voice character, knowing how to talk to people, not being rude with them.

Janet has developed what one might call a "customer typology". She first has to determine whether or not the caller has any business with the company. If the caller does not, the telephone conversation is ended. Furthermore, she has to determine the sex of the caller and whether the person is a child or adult. A child is probably not going to have any business reason to call this trade association. Answering the telephone involves a process of elimination and setting limits that give direction for making choices. To create compatible work relations requires attention and a sensitivity to others and the ability to establish and maintain conversations. In order to accomplish the task of waiting on members Janet has to keep the conversation going.

Another requirement of maintaining and regulating social relations is monitoring the emotional states of others. The formal job description does not account for monitoring the emotional states of others whose activities are connected with the task at hand. It includes exercising patience when the manager urgently needs a letter typed.

A requirement for monitoring the emotional states of others is sensitivity. Handling customer requests is one example. An excerpt from the interview conveys in part what is required for assisting individuals over the telephone.

People do phone and they ask for information, and could you send it out. So in something like that, whether it be trade contractors or a membership kit or anything - a golf tournament, or a registration form for classes - you would need to get from them their address and their name and then you could send it out to them. That type of thing would be handled right over the phone, getting the information for just mailing it out, and then just send it to them basically.

During a brief telephone conversation, Janet has to obtain all the necessary information from the customer in order to send requested materials. She has to direct callers to respond clearly and accurately to questions that she poses. It is her job to take control of the conversation rather than allowing the customer to do so, to ensure the conversation remains on topic, is directed to the particular inquiry, and is as brief as possible. The entire task requires a sensitivity to the emotional states of other people.

Similar skills are necessary for communicating with representatives of courier services. Janet had to handle an irate courier who wished he had been told about a large amount of mail bags when the service was contacted. During the interview, she reveals her ability to monitor the emotional state of a courier:

You would mostly have to be somewhat sensitive towards a person's situation, knowing that it is usually the last pick-up of the day and he has to be a certain place at a certain time, and then realize that he hadn't been told, but also knowing that we had contacted the office ahead of time. I stand sure of myself and yet listen to what he has to say. I don't treat him like it's all their fault, and absolutely not ours. They're people that you're dealing with, right, and need, so it's mostly a matter of training and how to deal with people and using your own judgment. At the same time, if it's five o'clock, you want to go home and you're supposed to meet someone at 5:30, then you have to be very careful, I guess. That happens alot, where you need to be somewhere, and so you say well I need to be somewhere as well, this isn't my fault. It has been a problem on your half, so if you can try to work it out with the particular person, the problem is still there that he needs a truck to come back and pick it up. So you'd have to look at each situation and choose the right words.

If Janet was not very proficient at interpreting other person's emotions, it is unlikely that she would be successful within the position of Administrative Clerk.

The importance of monitoring the emotional states of others is central to the activity of answering the telephone. Janet refers to this requirement during the interview:

It was mostly a choice of words and how to put people on hold and to ease them off in the right type of way that a person's busy and really just doesn't want to talk to them, right. Getting the right kinds of words to use and as well as learning how to have the patience with each person.

An unofficial job requirement associated with the task of answering the telephone is protecting people in other positions. With her ability to monitor the emotional states of others, she additionally screens calls for other employees.

Later in the interview she again discusses how crucial it is to be able to "read" other people when working the telephones:

So, again, it is always a matter of trying to keep the person on the other end of the phone happy and realizing too what the person on the other end might be feeling.

One of Janet's tasks is selling documents. Clearly, the job is more demanding than mentioned in the official job description where sales experience is not described as a requirement for the job. Janet is not only a clerk, but also is called upon to act as a salesperson. Selling involves interpreting the emotional states of others. When the employee is trying to make a sale, she neutralizes objections of people who do not want to buy anything. She takes it upon herself to convince a prospective customer, whether on the telephone or in person, that the individual needs the services offered by this office. When a client points out the reasons why a membership is not beneficial, Janet has to take control and manipulate the situation by neutralizing his or her objections. She must be able to take a customer's negative comment and turn it into a more positive one. In sales, the clerk has to be able to control the interaction in such a way as to serve the interest of this organization. For example, Janet might explain to an individual the advantages of buying a membership.

Techniques for dealing with people at the reception area include looking into members' eyes and maintaining eye contact. Janet has to know how to read and interpret body language and facial expressions. For instance a smile or a frown are indicators for structuring the encounter. A person who is frowning may complain about the service. Her

role as the employee makes it imperative that she seize the initiative in an interaction in order to achieve control. If she is to allow herself to lose control, the business relation is out of her hands, and the other person directs the way the interaction unfolds.

Another method of dealing with members is greeting the individual directly. The greeting conveys to the member that she is an employee who is responsible for offering assistance. Regular members are apt to feel more at ease, comfortable, and enjoy coming into the office if Janet extends initial welcomes. These techniques contribute to success on the job, but are not official job requirements.

I will summarize a number of requirements under the dimension of regulating and maintaining social relations. The clerk is required to understand and utilize basic accounting terminology, for instance that pertains to accounts receivable. Furthermore the clerk must possess a general knowledge and ability to communicate terms used by persons in the construction industry, for instance vocabulary that architects utilize in their field. Still other requirements are anticipating others' expectations and needs, coping with task dependence and sequence, and knowing the characteristics of other people. The clerk is required to monitor, interpret, and respond to the emotional states of other people. A comparison of these requirements with the official job description reveals that management only describes a few of the tasks necessary for the job, and does not recognize these requirements as relevant to the work. By omitting this dimension from the official job description, the job appears less complicated.

Regulating and maintaining social relations and its associated requirements are not cited in the official job description. The job description created by management lists tasks, but does not indicate requirements. I have obtained information about the regulation and maintenance of social relations through activity records and interviews. This dimension was used to uncover the various kinds of relations and their associated requirements. The most obvious excerpts from the interview and activity record related to this dimension were cited as examples to illustrate the social abilities needed for the job. The person who produced the

official job description may not have examined the job as closely, but may have indicated what he or she believed was involved in doing the work. Management perhaps never even observed the work. The person may have formulated a description of what conceivably an administrative clerk does. If this is the case, then, it is unlikely that it would be apparent to management that regulating and maintaining social relations is a crucial job requirement. Possibly the description was created for the purpose that both management and the worker occupying the position have some agreed upon conception and standard for the job, given that the description outlines tasks and omits requirements, and is not very extensive in its description. Still, these requirements may remain unapparent to management. The dimension is useful because it makes these requirements visible; there is more to the job than is officially recognized. It is perhaps assumed or taken for granted that these requirements are necessary. By omitting requirements indicated under this dimension, management is engaging in a process of de-valuing the skills and abilities that a person needs for this job. Management might have to pay a clerk more if it were acknowledged that regulating and maintaining social relations and its associated requirements are a necessary part of the work.

Coordinating Different Tasks

The job of the administrative clerk requires managing different tasks that are part of the whole job. Some tasks become intricately intertwined, such as answering the telephone and typing letters. One task was to send out approximately eight hundred directories to members of this association within two days. Therefore, she had to coordinate the next two days regular work with mailing directories.

It is Janet's job to post cheques into the accounts receivable program daily. Sometimes other employees are using the computer that she needs in order to complete this task. Therefore, she has to coordinate her time spent on the computer with other workers' projects. She uses the computer for tasks such as making address changes and adjustments.

There is a great deal of invoicing at the end of the month, and she has to put the invoices on the computer system. When she does not have access to the computer she records cheques manually, but later on she still has to enter this information electronically. Coordinating her work with the activities of others is a job requirement.

Not all tasks are performed daily and some are performed rarely. The job entails large mailings. Thus, tasks have to be carried out in conjunction with a prescribed cycle of events, organized in terms of priorities, and completed within the context of other workers who need to use the same equipment.

This office's business has predictable rhythms of activity, rhythms that run in daily, weekly, bi-weekly, monthly, and yearly cycles. Even the rate of people, whether members or not, tapers off just prior to closing time in the afternoon. Just before closing dates of bid depository jobs, the traffic of members picks up who want to give the office their bids or ask for information on depository procedures. To keep things moving requires that Janet continually attend to matters of scheduling and coordinating work activities. She has to match the pace of work to current task priorities.

There are a number of requirements associated with this dimension that I shall summarize. What is required for coordinating work is the ability to schedule tasks and organize duties in accordance with time constraints. Another requirement is the ability to organize the work with cycles of activities. Janet must also carry out tasks that are accorded a high priority, first, and leave less urgent tasks for later. The clerk is required to coordinate work procedures in accordance with other workers' schedules. The sequence in which tasks are carried out depends upon the priority assigned to them. She must be able to adjust the priority with which she balances the demands of telephone calls, filing, completing cheques, processing invoices, in addition to other tasks.

The official job description identifies parts of the job without discussing how the various parts fit together for a successful performance. The ability to coordinate work is equally important to the ability of actually doing the work. If she were unable to coordinate

and connect tasks, it would be unlikely she would produce the amount of work expected according to unofficial office norms, and would meet deadlines. The only statement in the official job description that might allude to the ability of coordinating work is, "doing various clerical duties as required". Management is accurate that the job requires a clerk to perform a variety of tasks. But, much of the skill associated with Janet's work is her ability to manage, schedule, integrate, connect, and coordinate tasks.

Knowledge of the Organization and Other People's Jobs

Janet has to know the organization and other people's jobs. In order to complete the work, Janet is required to know the hierarchy of positions in the organization, and the specializations. She has to know the names of people working in the office and the jobs they do. She also has to know functions within the organization, and whether a particular function or job exists, for instance membership co-ordinator.

She has to know about other people's jobs in order to do her job as the administrative clerk. If she is to relieve other workers, Janet has to have knowledge of other positions within the company. Occasionally she had to "cover" for the plan room clerks. Typing project information on a typewriter is usually the responsibility of plan room clerks. When asked about this activity, Janet responded:

I hardly ever type. I do now, just when I'm in the Plan Room covering. That's the only time I type, by just typing up projects. Otherwise, I never use a typewriter.

The ability to relieve one of the plan room clerks requires that Janet has a fairly extensive understanding of the work that plan room clerks do. Janet also substitutes for the receptionist before eight o'clock in the morning and during the receptionist's lunch break. When Janet was asked what she had to know about the other jobs in the office, she indicated

the importance of understanding all aspects of the jobs. She said: "One thing I think that is the best thing for me to know about other people's jobs is what they're expected of, because if I don't see that at all, then it makes it harder".

I shall now consider that a clerk is required to have knowledge of the organization. It is necessary for her to know what this organization does and the services it provides. Janet must also know where employees are at any one time. For instance, if a member wants to discuss a matter with the office manager, Janet must know the whereabouts of this employee. She must have an understanding of employees' areas of expertise and specialization. Janet is required to comply with orders and instructions from persons in superordinate positions.

The task of answering the telephone requires much more than picking up the receiver and responding with a specified introduction. In order to answer the telephone Janet requires knowledge of the organization. She has to know who within the organization to direct calls. If a caller requires information, Janet has to determine which office member will provide the best, most accurate information. For example, if a caller wants information on the benefits of membership, then Janet might transfer the call to the membership co-ordinator.

The importance of having knowledge of the organization is revealed during the interview:

Usually there is someone you can pass it [the call] on to. For providing information about the Association, you would need to know a certain amount about the Association. If people called, wanting to know about a particular job, you would need to know if anyone phoned about a job, they would need to be transferred to the Plan Room. If somebody was phoning about joining the Association: at that point we would always take a message and say that the person who is in charge of membership is out for lunch, would you phone back, or . . .

Because the company rents office space to tenants, Janet has to determine whether a call is for this organization or one of the tenants. The categorization process is necessary for determining to whom to direct callers.

The official job description only identifies some of the administrative clerk's tasks, and does not describe that she is required to have knowledge of the organization and the

requirements of other jobs. The knowledge that Janet must possess exceeds that of her specific job, and encompasses the work carried out in different jobs and departments.

Admittedly, the official job description describes that Janet is responsible for relief work. The description, however, neglects to mention what is required in order to act as a substitute in another job. The requirements, for instance, of judgment and adaptability are not listed. The knowledge and skill that are required are not specifically identified. The result is a lack of acknowledgement about the further complexity of the work. The problem is serious given that clerks are moved from one position to another.

Beginning Work After an Interruption

Interruptions from the demands of others are typical and frequent in clerical jobs. What is required is the ability to begin work after an interruption. Janet has to follow a program for any given activity such as posting cheques into the accounts receivable program on the computer. She also has to have a scheme for switching between tasks and task elements. Janet is required to ensure that the whole task gets completed within the constraints and requirements of the organization.

Interruptions are characteristic of answering the telephone. Numerous calls are being received while the person answering the telephone is responding to any one call, such as providing detailed instructions of making bid deposits. What follows is a description of how Janet has learned to cope with interruptions when working the switchboard:

The more the phone rings, you learn instead of picking up the phone as its ringing, to pickup everyone and say "could you hold please?" --"(Association name), could you hold a minute please?"-- and then that deals with the pressure of telephones continually ringing while you are talking to one person.

The following excerpt from the activity record is an example of an interruption that Janet had to cope with. As she was preparing directories for mailing, Janet was asked to attend to a telephone call.

10:10 Janet continues stapling the two sheets (one white and one yellow) to the front cover of the directories. Then she puts the directory with these two sheets of paper into the envelope and puts the stuffed envelopes on a pile on her left on the counter. Janet is called to the phone by Christine, the receptionist. She picks up her phone at her desk and says Janet speaking. This call is regarding an order from a company yesterday. Janet speaks to Christine regarding an invoice from the company. The customer has been rerouted to another branch office. She takes an invoice form from the counter near her desk and writes VOID across the invoice. She puts this invoice back on the counter between Christine's and Janet's desks. This item will get filed later.

In order to cope with interruptions on the job, a clerk is required to remain calm, and not become overtly anxious or flustered. The requirements include an internalized understanding of official and unofficial rules to the point where it is almost possible to perform tasks unconsciously, without having to constantly attend to how procedures are followed. Another requirement is anticipating that interruptions are frequent and must be accounted for in the scheduling of work.

Exceptions

Instructions are never complete and things happen that are out of the ordinary. The notion of an exception implies there is a regular program of action. Within office work, the program is supplied, at least in part, through the authority relations of the organization. Formal and informal instruction provide such programs or program elements. Programs of action are typically incomplete, and exceptions occur for which programs of action have to be invented. Dealing with exceptions in work activities is not a job requirement formally recognized by management. Her ability of diagnosing and solving problems is not considered central to her job, given the job description, but is nevertheless a crucial skill. Following prescribed rules and regulations does not reflect how Janet copes with unusual circumstances, because she often has to work outside of formally recognized rules if she is going to solve problems or deal with exceptions. One of the requirements is getting the work done even when something does not go according to plan.

Janet follows a standard pattern of events for posting cheques into the accounts receivable program on the computer, but exceptions to the typical sequence of events are frequent. Janet has to know what to do when unusual circumstances occur. An example is when her total for a pile of cheques entered into the computer is different from the amount showing on the monitor. She generally solves the discrepancy by following one of two approaches that she has formulated through experience. Janet either adds the cheques again or prints "cash postings" which lists the amounts posted so that she compares the cheques with the list to detect the discrepancy.

During the interview Janet indicated how she handles unusual circumstances associated with posting cheques into the accounts receivable program:

And you say oh -- I put \$1.50 instead of \$15.00 for that one [cheque]. Usually what I do first is I'll subtract the total on the screen or the cash or vice versa, and see what the difference is, and see if it's something very obvious. If not, you go to the Cash Posting and compare them. Then you would go into Edit Cash Entry and you would have to change that, go to the batch which it will show you on the Cash Postings and that was Batch No.8 that you put in. Then you would just change that amount, go back into Cash Entry, it has the old amount and that can really throw you off. It through me off quite a few times.

Mailing out directories is a major task, but it is not something she does frequently. As part of this work procedure, there were a number of things she had to do: labelling envelopes, using the postage machine, stapling sheets to the directories, handling the mail bags, and giving the mail to the courier. During that time the postage machine did not run smoothly. It kept stopping, and she kept making adjustments. In order to reset the machine, she had to know how to open the machine lid properly, and use two levers to pull out envelopes that became jammed. The excerpt from the interview is about fixing the postage machine.

You need to lift it [the lid] up and then there's two levers to pull an envelope out. At the very front as it's going through into the machine, you'd have to lift up a lever at the top of the machine as well as one that you would flick back which lifts up a rubber stopper that helps the envelopes flow through. So again that's the type of thing that you wouldn't be trained for at a school or anything like that. You would get trained on the job how to do that. Also there is an

adjustment for the thickness of paper. So at that particular time, we would have to adjust it a few times, to make sure that is how thick it should be for the envelope to flow through like that.

This passage from the interview reveals the knowledge required in coping with machinery breakdowns.

Doing relief work is an exception to Janet's regular work procedures. In order to do this task she requires knowledge of other employees positions. For instance, in order to relieve one of the plan room clerks, Janet has to know what to do in order to fulfill the requirements of this job. Janet also filled in for the receptionist.

The knowledge necessary to carry out routine functions of the job is crucial, but equally important is the knowledge necessary to effectively handle different types of problems that arise that can potentially interfere with this routine work. Janet is perhaps correct in her assessment that: "In the office, I feel also it's a matter of learning as you go about doing, how to go about every situation". What is central to dealing with exceptions is the requirement of exercising judgment. Official rules do not begin to account for all the possible events that may occur, and Janet must be able to attend to problems when they arise.

Keeping Tasks in the Correct Sequence

Janet must keep the distinctive elements of an entire task in order within the context of interruptions and exceptions if she is going to complete the work. One task is given a higher priority than another. Sorting mail is an example of a task that is done every day. Other tasks demand immediate attention, such as serving customers.

She follows a specific sequence of events in order to complete a task. One example is posting cheques into the accounts receivable program on the computer. Because the task must be completed daily in order to keep up with the invoicing process, she has to determine when to do it, and how long it will take in conjunction with other demands that have to be

met. Janet has to know how to coordinate work activities, and complete tasks in the correct sequence. The organization that makes her work a successful performance is probably a combination of great complexity for which there is no method of reporting the responses to things that happen. A requirement is dealing with task dependence and sequence.

Knowledge of Office Technology and Operating Equipment

Technology is knowledge of techniques. Clerical workers who use machinery require discretion and judgment. A clerk must use discretion, judgment, and interpretation when working with standard office tools and machinery. Janet for example has to know what to do when equipment malfunctions or breaks down.

Some of the technical skills and knowledge necessary for the job is conveyed when Janet discusses the task of typing letters using the computer:

You need training for that. You need to know how to use a word processor, what kind of keys to use to make it go to the next page, and back to a page, to delete . . . you know the basics of the computer -- how to move around on it. For that, you usually have some kind of training ahead of time and then can be trained specifically for this, what this key does, and short cuts.

She requires knowledge of the purposes and rules of the tools and machinery she is using without knowing the internal dynamics or the reason why it works. What a clerk has to know, is how to put her understanding of the equipment to use in work activities.

One example of applying her own interpretation and judgment where using office technology is keeping address and telephone numbers of staff and association members. If these lists were typed manually on a typewriter, updating them would become too time-consuming. Instead, Janet made use of the editing features of computer software, and typed the lists on the computer. She used her own judgment to determine how best to complete this task. This knowledge is acquired on the job, and is not provided in formal training, or a handbook of official rules and office procedures. For instance, Janet says in the interview:

That's why we need to do it [a list of staff addresses and telephone numbers] on the computer. You wouldn't have to type it over every time.

In order to produce letters and bulletins she has to know something about operating the particular office typewriter or computer keyboard. For instance, each piece of equipment

used for typing is slightly different, and has its own specific characteristics which requires some adjusting by the user. During the interview Janet remarked:

Your return key might be in a different place or the tab key, or the capital lock. And that is different on almost every keyboard. Your numbers, your alphabet is always the same. The place of your function keys might change as well.

What is required is the ability to adjust to different office equipment.

Janet used her interpretation of rules pertaining to how the postage machine operated in order to post envelopes. She realized from experience that envelopes had to be separated first individually before they would go through the machine even though this process was not supposed to be necessary, given the machine's design.

She has to know what to do when the equipment breaks down. The following is a description of Janet exercising her judgment in coping with the malfunction of the postage machine:

9:31 The machine jams. She lifts the lid slightly, and resets the machine. It jams again. She lifts the lid slightly.

The rules built into tools and machinery are incomplete and leave many things open for discretion. The computer specifically is unlike any other piece of office machinery. It is complex and is used for many different tasks, whereas other equipment such as the photocopier is not. Knowledge of how machinery works allows Janet to adapt the equipment to her own use, adjusting it and customizing it, in a way that perhaps was not intended by its design. For example, when Janet has to take cheques to the bank for deposit, she uses the adding machine not just to add numbers, but to keep a record of the cheques deposited.

A requirement is linking ends with means, and using technology in ways that may not have been intended by the designer. Discretion and judgment are required. This encompasses the ability of solving technical problems when machinery breaks down. All of these requirements are not described in the official job description. The description does, however, indicate tasks where equipment is utilized, although in some cases it is not always

mentioned. An example is word processing. Nowhere in the job description under word processing is it stated that the clerk know how to operate a microcomputer, utilize software, and create printed documents with a computer printer. Under the section "accounting clerk" the official job description implies, although does not explicitly state, that the clerk be able to use the accounting computer program for accounting work. In each of the tasks listed under "accounting clerk", with the exception of filing and making bank deposits, a microcomputer is utilized. The requirement of operating a computer is not, however, mentioned in the job description. The entire job description only indicates addressograph, accounting software, switchboard, and postage machine as technology used for the job. The list of technology that the clerk must know how to use is more extensive, the most complex machine is the microcomputer. Overall, the official job description does not fully recognize the knowledge required of office technology and operating equipment.

Techniques a Clerk Uses To Do the Job Better

The ways the clerk does the job better defines the next dimension. Janet's experience on the job has contributed to her ability to improve ways of doing the job. She has made changes in how she goes about doing her work to accomodate another member on staff, to make a change for another employee's sake, and because she has found it quicker and or better to do it another way. This applies to work procedures, the use of certain equipment, and how paper work gets done.

Time-saving techniques or short cuts are methods of doing a job better, particularly from management's point of view. During the interview, Janet described a way of improving the procedure for completing a plan holder list.

One thing, for instance, I know when we do a phoning for the Plan Holder list. What a lot of the girls do sometimes is they'll take the list over the phone and handwrite it, and after they get everything all done, they'll type it up. What I have done is when I'll type it right off the phone, rather than writing it all down; I save the step of handwriting it which I found myself saves an awful lot of time,

writing it by hand and typing it over again. . . .So that's what I have found I'll do is type it right off the phone.

Thus, she completes a task by eliminating the number of steps it takes to produce the same piece of work.

From experience on the job, Janet has acquired a working knowledge of what equipment to use for a specific task, and more importantly how to use technology in order to reduce the time spent on work activities. Janet lays envelope flaps together in order to make it easier for stuffing them. To reduce the time required to post cheques into the computer's account receivable program, Janet places a batch of cheques in an alphabetizer. The alphabetizer is a device for putting items into alphabetical order faster than if the process were done manually.

The official job description does not take into account the changes that are made to a job over time, and the changes that an individual makes to the job itself. From time to time, methods are introduced for improving the job. Janet, for instance, uses word processing software packages to save time typing letters. The computer provides her with the opportunity of making faster editing changes to documents than was previously possible with electric typewriters. Knowing how the software works is essential for doing shortcuts. Any formal training courses in utilizing word processing packages do not account for the working knowledge of using a particular program in the context of a particular office, for a particular task.

The shortcuts that Janet has learned are a part of her working knowledge. For instance, she produces letters for tenants using a variety of time-saving techniques. Once a letter is completed she prints it on the printer and gives it to the particular tenant. If the tenant requests any changes to the letter, Janet has already saved the letter in a computer file. She can bring up the letter back on the computer and make any changes using edit commands of the word processing program.

Shortcuts, then, are techniques used for doing the job better. Janet was asked, "How long did it take you to feel comfortable with what you were doing on the computer?" Janet replied, "It probably took me, to really feel perfectly comfortable with it, close to six months, say. And the thing is, you always learn something, there is still something else to learn. There are little shortcuts you pick up as you go along."

Combining tasks can improve the job. Because fast typing has become so habitual, for Janet, she can answer the telephone while typing.

Janet is supposed to follow a specified procedure for answering the telephone by saying "good morning" or "good afternoon", followed by the name of the organization. She has found through experience that it is better to ask all incoming callers to stay on hold before responding to any one call in particular. By doing so, Janet does not become flustered by the sound of the telephone ringing, and does not give the impression to callers that the office is closed, or the receptionist is not answering the telephone.

Her own way to handle problems has contributed to doing the job more efficiently. She tries to remain patient, and not become frustrated when problems arise. She has found it more useful to try and solve a problem on her own first, before looking for other people's help. Janet finds that this approach is most useful when working on the computer. Because her method has been so successful, other clerks often ask her for computer assistance. What is required, then, is the ability to work independently, and not to rely on others.

Another method that Janet has found for doing the job better is taking notes on procedures. During the interview she said: "Once you learn a procedure -- one thing that is good about it is if you take notes, work according to your notes until you're sure you've learned it."

Cross-checking is a method of doing the job better because it reduces the frequency of errors, and becomes a problem solving method once errors do occur. The range of possibilities is large. When checking the accuracy of numbers, Janet rarely just compares two figures. There is an additional component. When she sits with a pile of documents and goes

through them, she is often apt to find a discrepancy. Then an additional judgmental process is gone through that surpasses the process of identification.

Double-checking is like cross-checking. The process is a comparison of pieces of information more than once to see whether information is correct. Janet might read through a list of cheque amounts, and then re-read the same list to ensure it is correct. When one takes into account cross-checking and double-checking, activities such as doing invoices becomes much more complex.

Janet has improved the job and the way she accomplishes her work. I shall summarize some of the requirements that are not listed in the official job description. She accomodates other employees, takes notes, uses short cuts, cross-checks work, and combines tasks, and exercises judgment. Both discretion and judgment are required for success on the job.

Working Within Formally Recognized Work Procedures

Each office has its own unique formally recognized work procedures. Any formal job description only touches on the working knowledge that employees have to learn if they are to avoid dismissal. The office rules and regulations are not likely to be fully accounted for in any employee handbook. It is through the experience of work that the employee identifies standard and acceptable methods of doing the job.

Janet has a working knowledge of routine procedures. Knowledge of routine procedures is in constant use during the performance of work tasks. Because the standard procedures become so thoroughly internalized they guide work activity without conscious effort on the part of the worker. For example, Janet is able to type letters while discussing a work procedure with a co-worker. There are expected patterns of customer behavior and behavior of others in the work organization with whom she must interact in the performance of her job.

A requirement is interpreting information. The association bulletins have a specific format which Janet is expected to follow. One might infer that the task is merely an exercise in the process of elimination, choosing the appropriate menu items on the computer. But, Janet has to interpret what information to type where, and what information to omit. In this sense, she is more than an "automaton".

It is part of her job to type and print bulletins. In order to put the bulletin through the system of mailing, bulletins must be paginated. Pagination involves reducing the document's number of pages. Janet has to know how many lines to put on a page before it is paginated. Thus, she requires knowledge beyond the task itself.

The formal job description outlines a list of eight general tasks that the administrative clerk is expected to accomplish. Upon closer examination of the work, however, Janet is expected to know how to complete about twenty-six general tasks. Thus, the official job description not only falls short of the actual tasks the clerk has to complete, but also the knowledge and skill required for routine work procedures. The official job description basically describes tasks, and does not make reference to requirements. A summary of some of the necessary requirements not listed include: the ability to speak and write clearly with an understanding of the technical character of the work, including its vocabulary, conformity to informal social office norms, compliance with official rules, and the ability to anticipate other people's expectations and needs.

Stepping Outside of Formally Recognized Work Procedures

Working knowledge is a source of control. Management's knowledge and description of Janet's job does not identify the degree of know-how necessary in order to accomplish the work, the degree of judgment she must use, and the degree of responsibility she must exercise. But, an investigation of this clerical job reveals the importance of the worker's judgment. Completion of the work depends upon the know-how of the clerk. It may be

possible to break a job down into its component tasks, but it is the worker who judges which is the "the best way" to do the job. Any strict adherence to official office rules would not make it possible to accomplish the work, because there are too many exigencies that the rules did not anticipate.

A Day's Work as an Accomplishment

I shall make some conclusions about this case that pertains to finishing a day's work. It is necessary to examine how a day is constituted. In many cases events are repeated, but in others they are not. How finely the job is chopped up into pieces describes the structure of that job. The larger the organization, the more specialized jobs are. This office is relatively small and Janet completes a numbers of tasks and a diversity of functions. In order to discuss a day on the job, one has to consider the division of labour within the structure of that job. Repetitiveness may mean that a work cycle is short and is repeated often. Specialization, in contrast, reduces the number of work functions associated with the job. Presumably, the more specialized a job, the fewer tasks it contains. Routinization implies that the same task or task components occur in the same order, without much variation. The degree of specialization and routinization on the job, nevertheless, determines the amount of working knowledge an employee must possess. Specialization lessens overall working knowledge, but the knowledge required to deal with exceptions is also lessened with increasing routinization.

Braverman (1974) associates specialization with repetitiveness. If one were to consider a job where five tasks are repeated, and in two of those tasks the work cycle is short, then one might infer that the job is indeed both specialized and routine. But, if upon closer examination, however, the tasks all involve a number of components, as in the case of the administrative clerk, one perhaps finds an exception to Braverman's argument. The administrative clerk at this trade association is the least specialized of the three jobs considered. Her job is perhaps only more specialized in comparison to a clerk working in a

one room, small office. But, in comparison to clerks working in a billing department of a large corporation, Janet's job is neither specialized nor routine. There is a lot of content within the administrative clerk's job without much repetition. The job is complex and the demands made on the clerk are high. One example is taking messages. In one sense the task includes writing a message on a pink pad of paper. But, if one takes into account all the methods of fulfilling this requirement, taking messages becomes much more complicated. Janet's working knowledge provides her with the means to interpret her own work activities. She knows the effect of her work on the overall work process, other employees whose work fits in before or after her in the work flow, the goals of the organization, and the members who use the services that clerks like herself are engaged in producing. The knowledge that Janet possesses contributes toward defining the work in question within the organization, but it appears not to be recognized by management or others outside of the office.

A day on the job involves the skill of transforming information. The photocopier is technology that Janet uses to duplicate information, but not to transform it. Similarly, form letters that provide information for members does not include transforming information. But, in order to type invoice information into the computer, Janet has to transform the information from the material document into a format used on the computer. She does not just reproduce information, rather she actively changes it. In a factory it is possible to identify what gets produced, for example t-shirts or safety pins. But office work has another dimensional quality. A clerk works to create a document on the computer terminal, for example a letter. The letter is typed. The addressing of an envelope implies typing an envelope. The letter inside the envelope with its correct postage, each involves a different task and working knowledge. The notion that clerical work is unskilled because it merely involves reproducing information misses the activity of clerks who have to work within the context of creating new meanings.

The task of posting cheques into the accounts receivable program includes more than the concrete methodical activity. Janet seems to know who the cheques are from, and

whether there is a problem case that she recalls from past experiences. This is a habitual process that Janet does not think about in a day's work, but does all the time.

What is central to her job is that the relatively large number of different things she does makes this a less specialized job, in comparison to, for instance, a clerk working in a specialized department of a large firm. In theory a clerk might be expected to follow standard rules and procedures associated with a few number of tasks, but upon a closer observation it appears there is usually more to doing the work. Knowledge of the materials, the office machinery, the customers, and other employees enables this clerk to have some control over the work environment because of what she knows. The work situation determines the content of the working knowledge necessary on the job, and this know-how becomes a means whereby the clerk is able to affect the work situation. Most of the time Janet is able to bring off the day's work with respect to the constraints of timing and pacing, and scheduling work tasks. A requirement is the ability to monitor her flow of work with the concern that it be completed in a specified time. She has to complete a day on the job with her knowledge that sometimes things go awry, that she is accountable to others in the office for their efforts to manage the course of the work, that she must accomplish assigned tasks with minimal disruptions, and that she must control departures from routine procedures. None of these requirements are indicated in the official job description. The description underestimates the skill and knowledge requirements necessary for a day on the job, for instance what the clerk has to bring to the work in order to make it a successful performance.

Chapter VI: A CLERK-STENOGRAPHER

Office Organization

Case Two is from the large planning department of a municipality. Of the over one hundred employees, about one-third are planners, technical workers, and administrative persons. The office considered here is concerned with development permits. Case Two is a clerk-stenographer I call Paula. It is important to describe the general work activities in the office before describing the tasks that the clerk-stenographer does, and the technology that she uses on the job.

This office operates on a four day work week. The department is organized hierarchically. At the pinnacle is the supervisor, followed by the assistant supervisor, and Paula the clerk-stenographer. The two positions at the base of this hierarchy are those of clerk-typists, one of which is filled by a woman I call Laura. The supervisor is a man, and women fill the remaining jobs. The clerical workers in this department work with the development planners who are all men. Development planners are accorded more responsibility in comparison to plan checkers.

The core function of this office is to issue development permits. A number of plan room checkers investigate development projects submitted by applicants to ensure that zoning and development by-laws are met. Each applicant is assigned to a plan checker. If a proposed development meets the specified requirements and neighboring property owners do not strongly object, then a development permit is issued by a plan checker. The process generally takes a minimum of several weeks. If an applicant is refused a development permit, it is possible for the person or firm to appeal to the Board of Variance. All of the work activities in this office are related to current applications that are being processed or past permits that have already been granted.

The clerical workers perform several functions. They answer inquiries about applications or permits. They transfer callers to their assigned plan checker, distribute applicants' messages to the plan checkers, and arrange appointments for applicants who wish to discuss their applications with the supervisor or assistant supervisor. By using index maps and bound volumes of the permit applications that have been issued by this office, they locate and photocopy information related to permit applications approved over past decades. Persons make requests by telephone or in person at a service counter. The clerks type, record, and distribute all correspondence related to development permit applications. They also type and distribute reports and inter-departmental memos issued from plan checkers and supervisors. Clerks are responsible for stamping the date when plans are received and the date of approval. They indicate whether or not an application is granted.

To determine the status of any permit application form being processed, Paula the clerk-stenographer enters various code numbers related to the permit application form into a mainframe computer. By calling up certain files, it is possible to locate the stage of any particular application. Once the permit has been approved, information about the property site address and the development permit number is recorded in the computer. It is possible to obtain information about a particular address when requests are made as to whether a permit has been issued.

The tasks performed by the staff working in this administrative office are not directly connected to the work performed by the development planners at the zoning counter. The clerks take messages for, and distribute mail to, these planners. They also assign plan checkers to applicants and prepare the accompanying data sheets and forms. The list of documents processed in this office are lengthy. The office staff is expected to process over forty-one different types of forms.

Job Description

The following is a task list of the job that was constructed from the data obtained in field work. It provides a brief outline of the job. Following the list, I shall discuss the job in greater depth.

The Clerk-Stenographer's Task List

- 1a. Types memos and letters using typewriter
- 1b. Types information onto forms using typewriter
- 1c. Types letters and reports using typewriter and dictaphone
- 1d. Erases previously typed letters from typewriter memory
2. Types information related to the Board of Variance meeting using computer
- 3a. Records dates and other information related to letters in mail book
- 3b. Records information entered into computer on log record forms
4. Makes photocopies of letters and reports
- 5a. Distributes documents for this office and other departments into work baskets and file boxes
- 5b. Delivers mail and documents to employees in this office
- 5c. Attaches copies of letters to clips on message board
6. Files documents
7. Accepts mail for plan checkers and supervisors
- 8a. Answers telephone - takes messages for plan checkers and supervisors
- 8b. Answers telephone - transfers calls to other employees and departments
- 8c. Answers telephone - gives information to clients and other employees
9. Gives information related to permit applications to other employees, clients and other members of the public (in person and by telephone)
10. Receives clients at the front counter
11. Sorts letters and other documents
12. Stamps letters and plans
13. Double-checks information in permit application files and other documents for completeness
14. Calls clients to give information
15. Puts letters into envelopes and attaches address labels
- 16a. Proofreads typed materials and detects errors
- 16b. Corrects errors on plan checkers' data sheets
17. Enters and runs data on computer
18. Meets with supervisor
19. Puts area planners' numbers on 'Information Quick' computer print-out sheets
20. Cancels refund forms
21. Prepares duplicating requisitions for forms
22. Gives information and assistance to other employees in person
- 23a. Calls other employees to give and get information
- 23b. Pages supervisors and plan checkers by telephone
24. Gets information from other employees in person
25. Gives supplies to other employees

26. Gets directions
27. Gives directions
28. Organizes social events
29. Obtains signatures for letters from plan checkers
- 30a. Takes notes using shorthand at meetings in other departments
- 30b. Takes dictations from supervisor using shorthand
31. Coordinates tasks
32. Operates office equipment
33. Books appointments for supervisors and plan checkers in person and by telephone
34. Notifies other employees of, and explains changes made to office procedures
35. Gets office supplies from central stores
36. Updates bylaw and guideline books
37. Orders files from other departments

A brief description of some of Paula's tasks provides a basis for examining the skills and working knowledge required for the job. She completes thirty-seven general tasks. First, she types. The work activities associated with typing vary slightly by the specified requirements. Letters and memos are typed on an electric typewriter. Because she completes many letters, in several drafts, she uses the memory function on the typewriter.

Paula also types information onto forms, using the typewriter. She is responsible for typing the staff number and plan checker's name on overlay sheets. The plan checkers or a clerk in the zoning department contact Paula to fill out a requisition to have more forms printed. The following is an excerpt from the activity record.

5:27 Paula goes to the top drawer of a metal cabinet under the desk behind the clerk-typist's desk and removes a copy of a new 'development permit applications filed from' form. She closes the drawer. She goes to the typewriter and puts this form in. Paula removes the handwritten copy of this form prepared by a plan designer from the top tier of the work basket to the right of the telephone. She puts this on a document holder. She sits. She types the required information on the form.

The typewriter is utilized for producing letters and reports in conjunction with a dictaphone. One aspect of this task is erasing previously typed letters from the typewriter memory when a record is no longer required. The following passage describes Paula working at this task.

5:17 Paula goes to her desk. She puts a second tape in her dicataphone. She puts her headphones on. She sits at the typewriter. She removes a sheet of paper from the cupboard under her desk to the left of the typewriter. She puts this in the typewriter. She pushes the footpedal. She types from the tape.

There are some activities that she does every two weeks or once a week. For instance, every two weeks Paula keys in information on the computer terminal pertaining to Board of Variance meetings.

Part of the job is record keeping. Paula records dates and other information related to letters in a mail book. Information entered into the computer is listed on a log record form. Every time the clerk enters a command into the computer it has to be recorded manually on a sheet of paper. This job is carried out in conjunction with working at the computer terminal. The passage from the activity record that follows describes Paula engaged in this task.

4:38 Paula goes to her desk and picks up some plan checker assignment notices that have been placed in the top tier of the work basket to the right of the telephone. She also picks up a computer print-out with the information that must be entered in the Information Quick file. She opens the top drawer behind one of the clerk-typist's desk and takes a copy of the (report name) log record form. She types the staff numbers and permit application numbers from the print-out. She types another set of commands and calls up the Information Quick file. Paula types a command and the system asks her for a piece of information from the print-out. She types the first item and then, using a pencil, records this item under the appropriate heading on the (report name) log record form. Paula enters the command. The system requests a second item. Paula enters this item as it printed on the print-out. She then records it under the appropriate heading on the form. Paula types a third command. The system requests the item to be typed in. She locates it on the computer print-out and types it in. She records it on the form.

Paula makes photocopies of letters and reports. She puts documents for this office and other departments into work baskets and file boxes. She delivers mail and documents to employees in this office. A related activity is attaching copies of letters to clips on message boards.

Another task is filing documents. The regular filing system that Paula maintains is based on permits filed numerically by permit number. Generally the correspondence that comes through this department is in reference to a particular address with a particular development permit on it. Sometimes Paula receives correspondence that is related to a

specific subject but not an address site, where items are filed alphabetically by subject. Filing is thus based on an alphabetical and numerical system. Among the items filed are council reports that are kept for two years.

Paula accepts mail for plan checkers and supervisors. A more frequent task is answering the telephone. She takes messages for plan checkers and supervisors. She sometimes transfers calls to other employees and departments. She gives information to clients and other employees. In this two-minute account Paula answers telephone calls and takes messages.

- 5:11 Paula answers another call. She tries to contact a plan checker but there is no answer. She asks the caller if she can take a message. Paula writes a message on a form.
- 5:12 Paula answers another call. The caller wants to speak to a plan checker. Paula tells him that this individual is with the supervisor right now. She asks if she can take a message. Paula writes the message on a form as the caller speaks.
- 5:13 Paula ends the previous call. She picks up a message form, goes to the supervisor's clip and attaches the form to it. She goes to her desk and picks up another message form. She takes this form to the message board and puts it on the appropriate peg.

Central to the job is giving information related to permit applications to other employees, clients, and the public, in person and by telephone. Clients frequently telephone about the status of their permit application. Sometimes she has to explain to a customer how to complete a permit application form. At other times clients at the front counter are waiting for an appointment with a plan checker. Paula pages plan checkers when people with appointments come into the reception area. She locates employees for clients, and when she is able, attempts to solve permit application problems.

The following excerpt from the activity record describes the task of waiting on clients at the front counter.

- 4:12 Paula wheels to the front desk and puts the sheets on the desk. The client is still waiting for the supervisor. Paula goes to the counter to talk to this individual. She asks, "Can someone help you?" Paula looks at his set of plans and discusses the type of problem to be discussed with the supervisor. Paula replies, "Let me see what the assistant supervisor has to say about this". She goes to the assistant supervisor's office.
- 4:16 Paula goes to the office. She goes to the counter and tells the client that the assistant supervisor will be out to see him.

She has to sort letters and documents, and stamp letters and plans. Sometimes she calls clients to give information. Callers might request information, and Paula telephones them back once she finds the requested information. For example, a caller might want to know who owns a particular site.

A routine task is putting letters into envelopes and attaching address labels. But a more demanding activity that Paula does is proof-reading typed materials. She proof-reads and corrects work done by the clerk-typists in the office. She reads every letter sent out of this department. Therefore, the task takes up a large part of her working hours. She stated during the interview that over the last three months, the office averaged thirty to thirty-five letters per day. Each of the letters had to be proof-read by her, and if necessary corrected and re-proof read before the letter actually went out. A related task is correcting errors on plan checkers' data sheets. Paula has to determine why an error has occurred, and make corrections on the print-out. An individual in Data Entry will make the final corrections. If print-outs do not have errors they are given to plan checkers. If, however, the sheets have errors, Paula corrects them and takes them to the filing registry. The following is an excerpt from the activity record where Paula works at correcting errors on plan checkers' data sheets.

- 2:26 Paula finds a print-out with an error. She is unable to locate the source of the error. She goes to the terminal on the zoning counter. She types the application permit number. She checks the information on the screen and discovers that an incorrect staff number has been entered by a plan checker.
- 2:27 Paula goes to her desk and uses a red pencil to make the correction on the print-out.

Paula enters and runs data on a mainframe computer system. Each day, she enters the names of plan checkers when new applications have been assigned to them. Usually once a week, Paula enters all the updated information for the Development Permit Board. She makes any necessary changes to scheduling. Corrections are made to the plan checkers' print-outs, which they receive every second week. She types reports and prints them to obtain weekly statistics about the number of permit applications that have been processed.

Another work activity is meeting with the supervisor. She does not have a regularly scheduled meeting, but she tries to meet with him every morning. The meetings are designed so that she checks his diary and makes sure that his meetings are scheduled for the day, or if meeting times need to be changed. She tells him what regularly scheduled meetings he must attend. Paula is responsible for judging how long a meeting is going to take, and how many he is going to be able to fit into a day. Both she and the supervisor discuss problems in the department.

Paula puts area planners' numbers on 'Information Quick' computer print-out sheets. The last two pages of this print-out contain the numbers of development permits that have been entered. Paula takes these last two pages to the map room. She identifies which planners belong to each of the project numbers listed by looking the information up in a book. Then, Paula prints the planners' numbers on these last two sheets, and sends the sheets to Computing Services for printing. After she has done this, she takes the last sheets to the outgoing mailbox under the front counter. The pages will be delivered to the area planners upstairs in the Planning Department. The other pages of the print-out are kept in a file in Paula's bottom desk drawer until the next print-out arrives.

Another employee might ask her to cancel a particular form. For example, Paula sometimes cancels refund forms. She has to locate a requested file from the shelves and write cancelled across it with a pen. Another activity is preparing requisitions for printing certain forms used by plan checkers. At other times she completes a requisition for standard form letters that plan checkers use for drafting letters, but this is not done very frequently. Paula usually orders batches of one hundred forms when she completes a standard requisition form. On the form she fills out the name and number of the project and indicates the size of the requested form.

She has to give information and assistance to other employees. The clerk-typists may ask Paula questions about their work, for instance how to correct an error on a permit. The assistant supervisor might want information such as where to find a letter. A related work task

is calling other employees to give and get information by telephone. The following are examples from the activity record.

- 8:45 Paula goes to her desk and sits. She makes a call to the city clerks' office. She is checking the procedures for delivering a council report. She asks, "If I deliver this right now, do I need a memo for it?"
- 10:17 Paula ends the call. A plan checker comes to Paula's desk with a problem. They discuss the information in a letter that an applicant has sent. The checker leaves. Paula takes a binder with the mail record in it from a shelf located above her desk. She is trying to find when this letter was received. There is no record of this letter in the mail record. Paula puts a telephone call to Permits and Licenses to find if they have a record of this letter. She puts the letter aside. She takes the computer sheets out of the top tier of a work basket to the right of her telephone.
- 12:01 Paula answers a call. An individual from another department wants to know if a plan checker's performance reviews have been done. She tells the caller that she will locate this information and ends the call. Paula takes the supervisor's appointment book and checks through it for this information. The plan checker who is being discussed arrives in the office. Paula asks, X, do you remember when you had your performance review? He does not. Paula locates the date in the supervisor's log of when this review was done. She tries to return the call but the line is busy.

Throughout the day Paula also pages supervisors and plan checkers by telephone. She uses a standard desk telephone for paging without a microphone. The following are three excerpts from the activity record.

- 10:26 Paula takes another call. The caller wants to speak to a plan checker. Paula tries to transfer the call. She is unable to. She asks the caller, "Can I take a message"? She begins writing the information that a caller gives about a site on a message form. She also records the date he has filed for a permit. Paula says to the caller, "Let me check if it has been up to the word processor yet". Paula puts the receiver down and goes to the middle shelf above clerk-typist's desk and checks the word processor log. She puts these sheets on the shelf and goes to the telephone under the message board. She tries to page the checker again. She goes to her desk. She asks the caller to call the plan checker. She gives the caller his office number. She ends the call. Paula takes the message to the message board and puts it on the appropriate peg.
- 2:14 Paula answers a call. She puts another caller on hold. She goes to the former call. She tries to transfer the caller to a plan checker but is unable to do so. She puts the receiver down and goes to the phone under the message board. She tries to page this plan checker. She returns and lets the caller know that she is unable to contact this individual. He leaves no message. Paula answers the caller on hold. An applicant wants to know the status of her permit application. Paula puts the receiver down and goes to her desk. She removes the refund audit copy file from the top shelf above Paula's desk. She locates the information requested by the caller. She puts the file on the shelf and goes to the telephone. She gives the caller the details of the refunds she has received.
- 3:19 Paula picks up the unbound permit application forms on the clipboard and goes towards the map room. A customer is waiting at the counter. She asks him what he wants. Paula goes to the telephone under the message board and pages a plan checker. Another customer has arrived. He wants to pick up a set of plans and a copy of a

development permit application form. Paula takes an envelope for this individual from the pick-up box under the message board. She goes to the counter and gives this envelope to the customer. He leaves. Paula takes the clipboard to the map room.

There are a number of related work activities that Paula does. One task is getting information from other employees in person. A second task is giving supplies to other employees. An example might be when another employee comes to Paula's desk and asks for a stapler or a pair of scissors. Another aspect of the work is getting or giving directions. Generally, Paula gets directions from employees located in superordinate positions, such as plan checkers or supervisors. Typically, she gives directions to the clerk-typists in the office, and to other employees about operating the office equipment.

Paula organizes social events. On the day she was observed at her job she was collecting money for a retirement party. The employee who was retiring had been working for the organization for twenty-five years. She requested money from the plan checkers and others working in the Planning Department. Paula completed a file regarding the party, and recorded information such as how many employees were willing to attend. She made a list of those persons contributing to the gift. The activity included calling up employees to tell them about scheduled dinner arrangements. Employees were asked to come by Paula's desk to sign a retirement card. On the observation date, this task took up a significant portion on her day.

Another work activity is obtaining signatures from plan checkers for letters. Paula also takes minutes, in shorthand, at meetings in her own and other departments. Furthermore, she takes dictations from the supervisor, using shorthand. The supervisor dictates letters very infrequently.

Operating office equipment is necessary if Paula is to complete her work. For example, the computer terminal in the office allows employees to locate permit application information and enter data. For instance, one program displays addresses of sites and the names of plan checkers assigned to them. Another program is used to display the information on each permit application form. A third program is used by staff to provide information on

addresses of sites and development application form numbers. This program is the starting point for locating information.

There are a few more remaining tasks. Paula books appointments for supervisors and plan checkers in person and by telephone. She gets office supplies from central stores. The supplies that Paula obtains include: pens, pencils, telephone message pads, scratch pads, files, file folders, and stationery with the organization's letter head. Occasionally, she updates bylaws and guideline books. She updates bylaws as amendments are made. Amendments are printed and sent to the employees who require them. It is Paula's responsibility to make sure the five sets of bylaw and guideline books are up to date at all times. A final task is ordering files from other departments.

The official job description follows. I shall then compare the official job description with the skill and knowledge requirements for this job using the eleven dimensions discussed earlier.

The Official Job Description

Class specification: Clerk-Stenographer III

1. The Nature and Scope of Work

This is moderately-complex stenographic and clerical work in taking and transcribing dictation on a variety of matters including a considerable volume of complex terminology; or the supervision of one or more subordinates engaged in routine clerical tasks. Employees of this class frequently act as secretary to supervisors where the supervisory factor is not present, they are responsible for performing more difficult clerical duties such as those involved in preparing non-routine correspondence, documents, and reports. In supervisory positions, the main responsibility is in assigning and reviewing the work of one or more subordinates doing a variety of office work where the introduction of new methods is occasionally necessary to facilitate the work group. Accuracy in all aspects of the work is essential as errors may cause considerable inconvenience to a superior and some financial loss to the city. The supervisory responsibility and the greater difficulty to the clerical work performed are the features which distinguish this class from Clerk-Stenographer II. Employees of this class ordinarily make independent decisions which are based upon a good understanding of departmental rules and regulations but unusual or difficult problems are referred to a superior. Usually the direction received is in the form of suggestions or general outline supplemented by detailed instructions on new assignments. The work is reviewed by a superior for accuracy and completeness and the work

methods are occasionally spot-checked for conformance with established practice.

2. Illustrative Examples of Work

Takes and transcribes dictation of a technical nature, composes non-routine letters, prepares or reviews such matters as extensions and articles listed on requisitions, sheets, vouchers, invoices, and forms; signs for the supervisor as authorized.

Assigns, reviews and supervises the work of one or more employees engaged in a variety of office duties.

Explains and interprets applicable rules and regulations which govern departmental operations.

Gathers information from a variety of source materials for such matters as articles, summonses, speeches, reports, documents, and statements.

Keeps varied clerical records pertaining to departmental or divisional operations and indexes and maintains alphabetical, numerical, and subject files of office records.

Checks elementary expense accounts; posts routine entries to a small set of departmental fiscal records; checks such accounts for accuracy and completion, makes decisions as to their final disposition.

Assists in the preparation of and types complex clerical records, statistical reports and tabulations for a wide variety of material.

Interviews callers, answers questions, makes and cancels appointments for a superior; and processes confidential matters.

Opens, sorts and reads incoming correspondence; proofreads and signs outgoing letters of a routine nature as authorized.

Performs related work as required.

3. Required Knowledges, Abilities and Skills

Thorough knowledge of business English, spelling, punctuation, and arithmetic.

Considerable knowledge of office practices and procedures.

Considerable knowledge of the applicable rules and regulations which govern departmental activities.

Ability to take and transcribe dictation of a technical nature with high accuracy and considerable speed.

Ability to understand and interpret oral and written instructions.

Ability to assign and supervise work of one or more employees engaged in a variety of office duties.

Ability to compose non-routine letters and memoranda without dictation.

Ability to successfully meet and effectively deal with the public in interpreting and explaining departmental rules and regulations.

Ability to make moderately-complex computations and tabulations and to develop skill in the operation of common office appliances.

Skill in typing and taking and transcribing of oral dictation with a high degree of accuracy and speed.

Superior clerical aptitude.

4. Desirable Training and Experience

Completion of the eleventh school grade including or supplemented by courses in stenography, typing and standard commercial subjects. Considerable

experience as Clerk-Stenographer II; or an equivalent combination of training and experience.

5. Required Licenses, Certificates and Registrations

None.

Analysis Of Case Two

Regulating and Maintaining Social Relations

The clerk whose work requirements are the subject of this chapter, has relations with her superiors and subordinates, with employees at her own level of authority, and with clients. Part of the requirements of her job is to regulate and maintain these relations. Each kind of relation entails its own knowledge and skill requirement. The requirements needed for this job closely resemble the requirements for the administrative clerk from the trade association. The two cases are in some respects remarkably similar: the substance of the work of these two clerks is related; both are concerned with some aspect of controlling building construction; both involve contacts with clients; both involve a critical relation to documents. Case Two differs because it is a large public bureaucracy, while Case One is a small and private-interest association. They also differ in that the administrative clerk had no-one over whom she has authority, while Case Two does. Unlike the previous case, there are no relations with employees at the same level as this clerk within the office, but with clerks of a similar level in other departments.

It is important to reassess critically this category, its meaning, and the criteria with which it is applied. The dimension is used to account for work and knowledge that depends upon the presence of other people. Through the course of her work, Paula is engaged in face-to-face interaction with other employees and persons from off the street. At other times, she interacts with people by telephone. There are several kinds of relations and activities. In this case there are not three, but four relations: clerk-clerk, clerk-superordinate, clerk-

subordinate, and clerk-client. The requirements of regulating and maintaining social relations are more extensive, in comparison to Case One, because another kind of relation is included. The relations, as discussed previously, may take the form of cooperation, communication, work flow, and possibly taking over someone else's job. I shall discuss these kinds of relations and necessary requirements, some of which are listed in the official job description.

Regardless of the type of relation, there are some core requirements under this dimension. The clerk must speak and write clearly with an understanding of the technical character of the work, including its vocabulary. In Case One, for instance, the clerk had to know vocabulary predominately related to accounts receivable and the construction industry. Paula is also required to understand and utilize language about development. In Case Two, however, the clerk must have an understanding of stenography that the administrative clerk did not require. Furthermore she has to know general sections of bylaws and be able to communicate specifics about such things as parking or landscaping. Both clerks are required to know terminology used in standard office procedures. When clients are confused about terminology used in the department, she is responsible for deciphering the jargon for them. The job requires the ability to switch from one vocabulary to another.

The official job description alludes to this requirement in the passage: "This is moderately-complex stenographic and clerical work in taking and transcribing dictation on a variety of matters including a considerable volume of complex terminology". The description appears to indicate a requirement of knowledge of "complex terminology". But it is unclear what this term means or what criterion is used to determine "moderately-complex stenographic and clerical work". Under the section on abilities, the official job description makes reference to this requirement: "Thorough knowledge of business English, spelling, punctuation, and arithmetic". The requirement listed in the official job description states, "The ability to take and transcribe dictation of a technical nature."

But, the language this clerk has to use is more complicated than is conveyed in the official job description. For example, Paula often has to decipher for people outside of this workplace the terms used in development and permit applications.

Similar to Case One, requirements for Case Two include conformity to the informal social norms of the office. An example might be participating in, or organizing social events. Paula organized a retirement party for an employee. Organizing social events may not be directly related to the job, but it keeps the spirits of the work group up, and contributes to the notion that people within the department form a type of work community where antagonistic relations brought about by the division of labour are reduced. This requirement is not taken up in the official job description. Another requirement in common to both cases is compliance with official office rules. Both cases are also required to anticipate others' expectations and needs.

Unlike the administrative clerk, this clerk acts as superordinate. She is superordinate to the clerk-typists. Paula has the authority to institute new work procedures, and modify or eliminate old ones. She is responsible for ensuring that subordinates follow assigned practices. Paula is required to assign and review the work of others. For example, she proof-reads all routine correspondence, documents, and reports. She is required to give directions and instructions, and get subordinates to comply with these requests. Paula has to be able to take initiative in work-related discussions with subordinates. She needs decision-making abilities in order to be successful in this kind of relation. This clerk requires creativity in improving the way work gets done, and getting other clerks to follow rules and procedures that are implemented.

Case Two, then, is required to have supervisory abilities. What is interesting is that even though Paula in part functions as a supervisor, the official job description describes the job as clerical despite the supervisory duties.

In clerk-superordinate relations, a requirement of both Case One and Case Two is compliance with orders and instructions from persons with more authority. Paula has to

comply with demands made from the supervisor, assistant supervisor, and plan checkers. Paula, for instance works closely with her supervisor, following his instructions to schedule appointments.

The secretarial part of the job implies clerk-superordinate relations. The clerk is required to have well developed secretarial skills. Secretaries have been described as "office wives". The metaphor conveys the personal nature of employment relations. Paula's role includes personal services such as fetching materials, and unofficially requires that she is subject to the whims of her supervisor. Loyalty to him is another requirement. These requirements are not listed probably because they are patrimonial. The official job description makes reference to the secretarial requirement, but the sensitivity required to meet this demand is underestimated.

In relations with other clerks, carrying out work tasks requires cooperation among workers doing different jobs, even though the formal division of labour encourages antagonism and competition. The requirement of cooperation on the part of workers is not identified in the official job description when it is central to office work. The same requirement applies to the first case. Through the course of her work, Paula built up relations of trust and cooperation among persons whose work assignments require frequent interaction: plan checkers, supervisors, and clerk-typists.

Clerks have to organize their work functions in conjunction with one another. This office operates on a four day work week, where three out of four days only two clerks work in this office. This schedule causes problems at times, for instance, when materials need to be photocopied. Paula and the other clerks have to work as a team where some employees remain in the office while others go upstairs to complete tasks. While one employee uses the photocopy machine upstairs, other employees have to be available in the downstairs office to look after persons who come to the reception counter, or to answer the telephones.

The work obligations of each clerk create an accepted norm within the office about "doing one's fair share". As in Case One, this clerk has to gain the respect of other people, particularly co-workers.

In addition to relations between employees, there are relations between clerk and client. In both Case One and Case Two, clerks are required to interact with customers or clients. Their work environment is affected by client behavior because they come in direct contact with the public both in person and by telephone. Paula has developed knowledge about customer or client behavior. She has created techniques for dealing with clients and has formed a "client typology", as did Case One, based on work experience. Both Case One and Case Two developed typologies in response to maintaining and regulating clerk-client relations. This case differs because the inquiries are not about memberships or services, but regarding permit applications.

I will consider the dimension of regulating and maintaining social relations with clients using the task of answering the telephone and taking messages. Paula has to determine if the caller is male or female, adult or child, and has any business with the organization. She must also identify whether it is an inside or outside call. She has to determine if the call is credible, and redirect or block callers when requested to do so by another employee or when she views it necessary. During the task she has to continually monitor the emotional state of the caller in order to obtain information, make the caller feel at ease, and the like. Calls that Paula takes are from either architects, other professional people or neighboring property owners who are concerned about their community. She has to use her judgment to determine into which category the caller fits, in part to determine to whom to direct the call.

There is a difference between taking messages for plan checkers, the supervisor, the assistant supervisor and the head plan checker. Because Paula acts as a secretary to a supervisor, she maintains the role of a buffer between him and the rest of the world. This person has his signature on much of the correspondence from this office, and as a result most callers request to speak to him. He may not have a clue what the caller is talking about so

Paula has to have some understanding of the status of permits in the system. She also has to have knowledge of bylaws. Thus, she has to try and answer a caller's question or redirect the call to another employee. Paula is responsible for screening calls to supervisors. She has to determine whether the person has to make an appointment to see a supervisor or whether some other employee will provide equally competent answers. Therefore, she is in charge of dispersing the work load among the employees in the department. Taking calls, then, requires an understanding of the positions and procedures in this organization. If Paula recognizes a caller from whom she has already taken a message, she simply states to the individual that the message was taken and she will make sure that the employee in question will respond as quickly as possible. Instead of creating a new message slip, Paula indicates the number of times an individual called. She uses her discretion whether to pass on a message. For instance, she said during the interview that a message would not be passed on if the caller is having a problem with an application and merely wants to argue a point that none of the employees in the office can help the person resolve. Her experience on the job has provided her with knowledge about who are problem architects or developers, and which developments are problem projects. Paula has learned to identify people by voice. In order to competently manage telephone calls, then, requires knowledge that goes far beyond picking up the receiver and speaking into it.

The clerk has developed methods to control interactions with clients such as permitting the individual to explain first fully what he or she has to say before Paula takes charge of how the interaction follows from that point on. One important technique is seizing initiative and beginning the encounter on a pleasant note to avoid a hostile interaction. She guides clients, whether architects, concerned citizens, or others, to divulge as much information as necessary in order that she can provide a useful response or direct the inquiry to another employee who can solve the problem. A client may have already asked for information about a permit application from a variety of sources in the organization before arriving at this office. Paula is aware of the frustration that clients encounter in dealing with a

large bureaucracy, therefore she is patient and reassuring to frustrated callers on the telephone or clients who arrive at the reception counter.

In both cases the jobs require the ability to monitor the emotional states of others. Each of the clerks handle this requirement differently in part because of their differences in personalities and judgment, and the structure of the jobs. For instance, Paula's work largely pertains to permit applications, whereas the administrative clerk's most important task is accounts receivable work. Case Two often has to work through problems that clients encounter in processing application permits.

Paula's method of controlling a situation is dependent upon why a person is upset or angry. She has to be able to get information from the person, which at times is difficult. Often people do not wish to speak to Paula, but rather an employee in a position with more authority. First, she finds out the problem. After determining the problem, Paula has to decide on priority, for instance whether only the supervisor can handle the situation or whether other employees can work through the problem. When the employee who ought to tackle the problem is unavailable, but the person is very upset, Paula might ask another employee to look after the problem temporarily until the appropriate employee is able to solve the problem or the upset person has calmed down. A significant part of the clerk's job is interpreting and responding to the emotional states of clients, as was required in the previous case.

Answering the telephone is a task that demands that the clerks in Case One and Two monitor the emotional states of others. Paula's approach varies slightly in comparison to Janet's. Paula has found that dealing with irate persons regarding permit applications and development projects is done best if she begins the telephone conversation as a listener. She allows people to say what they have to, because it makes individuals feel at ease. She has an understanding of the confusion and "dead ends" that people encounter when doing business with this organization. The working knowledge involved in answering telephone calls is made explicit during a discussion with Paula about taking messages during the interview.

It is awesome the number of people that will not give you information, you have to be able to deal with irate people, particularly. You have to be good at sort of, listening to start with, let them talk for 15 minutes and you find out they could have got their question out and answer given 5 seconds if they'd have done it in the first place, but, you have to be good at that, you have to be good at dealing with people, setting them at their ease. And I think a lot of people's problem is that they just need somebody to spout off at, you know, there you are. They get frustrated, they've gone through 5 or 6 different telephone calls, usual pass the buck business at City Hall, and then they're tired of it, they don't really know, they don't know how to find it. You start using terminology, they haven't got a clue what you're talking about, I mean, we spout out DAs, and DPs and JPs and, we don't think anything about it, because we live with those, it's like us, using computer codes, we do the same thing, often, you hear people say, well I 89ed that, or I 34ed, or something, what the hell are you talking about. To us it makes sense, to them they don't have a clue, so you have to be able to take people through the system, explain to them, 'hey this is what we're doing, and this is what you have to do and sorry, it takes so long but that's the way it works out and you just have to go back to the department you started with' and, away we go. That's probably the biggest part of answering the telephone and taking messages.

This example was chosen because it best illustrates this requirement.

Monitoring the emotional states of others is slightly less complicated when Paula interacts with customers and employees in person because she has the opportunity to read body language and facial expressions. Monitoring the emotional states of others becomes much more difficult when answering the telephone because all the visual cues are absent. During a telephone conversation all the clerk has to rely on is the caller's speaking voice and inflections in tone.

An example of Paula being concerned with the emotional state of a client was when she experienced difficulty in finding requested permit application information. A client had telephoned to obtain up-to-date information regarding an application. She told the caller that she would call back. When she found that the information regarding the file was not where it was supposed to be, and a long time had lapsed since the initial request was made, Paula telephoned the individual back. She told the person that she could not locate the information at present, but would continue to search the resources available. Telephoning the person even when she did not yet have the information, was an indication that she was concerned that the caller might think she had forgotten about the request or had not actively pursued it.

She wanted to reassure the client the matter was being looked into. Sensitivity is needed in dealing with clients who are confused with the procedures followed in the processing of applications. She is required to anticipate others' expectations and needs. Both the clerk-stenographer and the administrative clerk are required to know the characteristics of other people.

In summary, there are four kinds of social relations: clerk-clerk, clerk-superordinate, clerk-subordinate, and clerk-client. Activities that involve regulating and maintaining social relations include cooperation and communication, as well as taking over someone else's job. Case Two requires more abilities on this dimension than Case One because of the additional kind of social relation. The result is a greater complexity of this job on this dimension in contrast to the first case.

Management does not, however, fully recognize monitoring the emotional states of others as a requirement of the job. The job description does, however, say that the clerk must, "successfully meet and effectively deal with the public in interpreting and explaining departmental rules and regulations". The emphasis in the passage appears to be more on conveying one's knowledge of office procedures than the abilities needed to interact with clients or customers.

The official job description does recognize regulating and maintaining social relations as crucial to the work. The complexity of skill and knowledge on this dimension exceeds management's description. One task where this dimension is alluded to is, "interviews callers, answers questions, makes and cancels appointments for a superior; and processes confidential matters".

Coordinating Different Tasks

The same criterion used in Case One for examining the category of coordinating, connecting, and managing tasks applies to this case. The dimension refers to the way work is organized

and scheduled. It is used in order to discuss how various tasks are put together. As in the first case, this clerk is required to plan and coordinate routine tasks. The requirements discussed in Case One for this category equally apply to the second case. A difference between the two cases, however, is that Paula has more tasks to coordinate than Janet. Case One's job description consists of twenty-six general tasks in comparison to Case Two's thirty-seven tasks. In both cases the requirements are the same, for example organizing work activities with time constraints, and coordinating tasks with priorities. Case Two differs because it is more demanding and complex on this dimension as there are more tasks, and she has some authority over other people. As Case Two appears to be more complicated on this dimension than Case One, it is necessary to spend some time toward the end of the discussion about this category. I will discuss in detail the complexity of responding to clients' inquiries as it requires organizational abilities. This task is required in Case One, thus many of the same abilities needed for it apply to the second case.

Both Paula and Janet do many things at the same time. They have to put all the parts of their job together so they will get through the day and still complete the necessary work. Coordinating tasks involves the ability to handle several activities at once. They must be able to go back and forth between tasks without having to go back and begin the work activity from the beginning. Each of the clerks has to determine tasks' priorities that are always changing.

Some of the requirements, and I will not indicate all of them, for coordinating, connecting, and managing different tasks include: knowledge of the time required to complete a particular task, and how often the task is completed; knowledge of, and compliance with official deadlines for finishing the work. The clerks in Case One and Case Two are also required to handle several different activities at once. Another requirement, and perhaps the most crucial one, is judgment in completing tasks. In Case Two, knowledge of rules, practices and procedures is the focus of the official job description, whereas the judgment required for the job is not elaborated.

There are a number of examples in Case Two from both the activity record and interview where the necessity of coordinating work is revealed. One example is particularly fascinating because of the number of different tasks that are attended to in an interval of four minutes. In an four minute excerpt from the activity record, Paula performed a number of different work functions at once: checking information in a file, obtaining additional information from a plan checker, locating information in a file in question, typing a memo, answering a telephone call, transferring the call, discussing a work procedure with another employee, proof-reading a document, and planning when to do a task that had to be completed before the end of the day. The following is the excerpt from the activity record where the clerk coordinates these work activities.

- 3:20 Paula goes to her desk. She checks the information in the permit application file that she has just been using. Paula goes to a plan checker's office to collect additional information regarding this file.
- 3:21 Paula goes to her desk. She quickly reads through the various letters attached to this file and locates the required information.
- 3:22 Paula sits at her typewriter and continues typing the memo. She stops typing and answers a call. The caller wants the telephone number of a plan checker. Paula transfers the caller to this checker.
- 3:23 Paula continues typing the memo. She stops typing. She answers another call. This caller wants to speak to a plan checker. Paula tries to transfer the call but is unable to. She tells the caller when he should call back. She ends the call.
- 3:24 Paula continues typing the memo. Laura, the clerk-typist, comes to her desk with a letter of renotification. Paula quickly reads this letter. Laura wants to know if this permit has been issued today. If it has not been, they are unable to send it out until tomorrow. If this permit has been dated today, Paula and Laura will have to get this letter signed by the appropriate plan checker, the required number of photocopies made, the envelopes and mail labels typed, and the envelopes stuffed by 4:00 p.m. All items would have to be mailed by this time.

Thus, she did a number of different procedures at one time.

Paula has to manage and organize her work tasks in accordance with time constraints. Scheduling her work requires that she know how long each task takes to complete and how often she has to engage in the activity. For example, she makes corrections to plan checkers print-outs every second week, and every two weeks she types information about meetings. Computer entries are completed on a daily basis. Again, because there are more

tasks involved in Case Two than Case One the demands made upon the second clerk are greater than the first one.

Similar to Case One, Paula has to organize her work in conjunction with the work of other staff members. There are more employees in the first office with whom Case One has direct contact in organizing her work than in Case Two. But, because Case Two has a supervisory function, she has to be much more aware of organizing her work with other people than in Case One. For instance, Paula has to determine whether there are people available to look after the downstairs counter and telephones so that an employee can go upstairs to use the photocopy machine. She must also organize workers to work together to complete a large task within a particular time limit. During the interview Paula made reference to the necessity of creating work teams to complete extensive mailing efforts.

Oh I don't think so, other than simply that, coordinating, being able to coordinate everybody so that you work together. Particularly, mailing is our big problem, you know, sometimes, like today we have about a thousand envelopes that have to be stuffed and out in the mail. We have a deadline to do it and we don't get the photocopying done until everybody's back from lunch, because there's always just one person on. And, it means that everybody has to work together, you know, the department works really well that way. Everybody is good that way.

In both Case One and Case Two the clerks have to work with other people to organize large mailings. But, Case Two's greater authority in comparison to Case One implies that Paula is more likely to be held responsible for coordinating people to work together in completing large tasks than is required of Case One.

Unlike Case One that is predominately responsible for coordinating her own work, Case Two is required to spend time as secretary to a supervisor, and scheduling his work. Thus, in addition to coordinating her own work, Paula coordinates the supervisor's work load. Given the secretarial requirement of Case Two, the demands are greater in comparison to Case One on this dimension. She makes sure his meetings are scheduled for the day, and makes changes when necessary. This clerk must know what meetings the supervisor is expected to attend, what regularly scheduled meetings are on his itinerary, and whether the

meetings are weekly or monthly. Paula keeps the supervisor's diary up to date. She tries to meet with him every morning to plan and remind him of his work schedule. Thus, she is required to manage his work in addition to her own work activities.

The task of responding to application inquiries involves moving clients through the process with reasonable speed and minimum difficulty. She has to monitor this task with the concern that it has to be done in a certain length of time in order to keep up with the flow of work. If there are a number of persons in the reception area all wanting application information, Paula has to speed up the process by "cutting corners" if possible. She may get back to people if there is not enough time to respond thoroughly to each individual inquiry. In-person inquiries are given a higher priority than inquiries made over the telephone. If people have made the effort to come to this office, Paula does not like to let them go away with the notion that the staff did not bother to respond to a particular question. The promptness to which she attends to an inquiry depends on the available time. The occurrence of a lengthy problem posed by a client may interfere with managing the flow of work. Dealing with difficult clients, for example, is a deviation from handling the routine procedure. It requires a special allocation of effort at the expense of other demands.

The official job description does not discuss the requirement of coordinating, connecting, and managing work. The description does however mention three requirements that are relevant on this dimension. The clerk is required to have, "thorough knowledge of business English, spelling, punctuation, and arithmetic". It lists two other requirements: "knowledge of office practices and procedures" and "knowledge of applicable rules and regulations which govern departmental activities". All of these requirements are needed in order to coordinate tasks and manage the work duties. Still another requirement mentioned in the job description that is applicable on this dimension is, "assigning work and supervising work of one or more employees engaged in a variety of office duties". The description is making reference to the clerk-typists in the office, but not the complex coordinating work that Paula does for her supervisor.

The purpose management had for creating the official job description is not the same as my purpose of analyzing the jobs. Because I am interested in detail of what it takes to do the job, I have developed this dimension. Because the official job description is in part used for hiring a clerk to fill this position, and is likely to be used to determine pay scales and authority in relation to other positions, discussing the coordinating function may not have been necessary from management's position. Still, the organization could not employ a person for any length of time who did not fulfill some the mentioned requirements.

Knowledge of the Organization and Other People's Jobs

This category is applied in order to discuss what the clerk has to know about the organization, the jobs within it, and organizations outside of the workplace. Requirements needed in both Case One and Case Two include knowledge of the organization and knowledge of the requirements of other people's jobs. The official job descriptions in both cases do not identify these requirements.

The two cases, however, are not the same. Case Two's work is different from Case One, the location of the jobs is the organizational hierarchy is different, and the extent to which Case One is required to engage in relief work is greater than in Case Two. In Case Two clerks are not moved throughout the organization as they are in Case One. Because this organization is much larger than in the first case, Case Two has to know more about the organization than Case One, such as the different departments and what they do. In Case One the knowledge about the organization applies to a small office, but in Case Two the clerk is required to have a general knowledge of a large bureaucracy. Nevertheless, Case One is required to know a lot about other people's jobs because of the amount of relief work that she does, but Case Two also must have extensive knowledge of other people's jobs because of her supervisory function, and requirement of instituting, changing, and eliminating procedures in clerical work that applies to a number of different positions.

The same criteria for analyzing Case One is applied in Case Two, but because the second clerk is required to have knowledge of a very complex bureaucratic organization, this requirement is discussed at greater length than in the previous case.

The first requirement under this dimension is knowledge of the organization. Knowledge about the organization includes all the knowledge that Paula develops about workers in other job categories with whom she comes in contact. She has to have some understanding of the division of labour in order to complete such activities as transferring telephone calls.

Paula requires knowledge of this organization and other organizations such as the Post Office. She has to be aware of the mailing system internal to this organization as well as the Post Office's mailing system, in order to distribute documents for this office and other departments into work baskets and file boxes. She has to know the city's mailing system to determine when items are mailed out. She has to make arrangements to do photocopying and distribution before the mail is picked up.

She has to know which departments cover particular work functions, whether inside or outside of the organization. This department's work is connected with work in the Engineering Department, Permits and Licences, Social Planning, and to a lesser degree the Health Department, Fire Department, and Police Department. The latter three departments are contacted for references on particular structures or proposals that are suitable or if there might be problems on a particular site. The Permits and Licences, Engineering, and Social Planning Departments have bylaws, policies and regulations that specifically govern many developments that employees in this office work on. Paula has to make sure that this office only grants permits to firms or persons that comply with the zoning and development bylaw, and the requirements and standards of these three other departments.

The knowledge that Paula is required to have about other departments is extensive. When waiting on clients, she has to determine, for example, what parts of the Engineering Department cover streets on boulevards, and who is best able to explain to a client about

property lines. Similarly, if she were helping a client, she has to know which reception counter is organized for taking questions about building bylaws, and who would be able to give a client correct street names. Paula has to have knowledge about clerks who handle reports to council and provide public information about these reports. The job requires that she be aware of the type of information that clerks at the zoning counter can answer, and the specific areas that planners are assigned to. The area planners have a specific subject that they may be working on that Paula may need more information about.

Paula needs to know the work that is done in other departments as well as the one she is working in, to be competent in directing telephone calls. The reason why Paula must possess this knowledge of the organization is made clear during the interview with her.

People will phone for information, you have to know the workings of the rest of the departments, because a lot of time they will phone and ask us, a series of questions, maybe 2 out of 5, you can answer and somebody else, they have to go to another department to get them, so you have to know where to send them, to save, again this problem, where they've been passed on from body to body to body, and they get fed up eventually, and call City Hall all kinds of names and hang up on you but, yes, you have to know the other departments, you have to know preferably a contact person in the other departments so that if you don't know specifically who ought to handle it, you can say, 'look, I'm going to put you through to John Brown, and if he can't answer your question, he's going to put you through somebody who can' and people tend to feel better that way, because they think, you know, personal service or something, I don't know what it is, but they like it, they're easier to deal with if they have a name to call. And, in that respect, yes, you need to know the organization fairly well.

She uses her knowledge of the organization and dealing with customers to judge whether a client's problem is important enough to contact the director or the supervisor. As far as people in general, Paula has to respond to "repeat clients". She gets to know their names and whether or not their meetings are legitimate. From experience in this office, Paula has developed a stock of knowledge about particular clients who just want to complain about official work procedures.

The screening of calls requires an extensive understanding of the organization. In order to be effective at screening telephone calls, Paula has knowledge about various job categories. When a person on the telephone is extremely upset, Paula has to know which

employee on the hierarchical scale to contact. Directing a call to an employee in one position may be trivial to his or her job.

Paula knows whether a call is from within or outside of the organization. If it is an inside call, the local that it is coming from will come up on the machine. The machine indicates the local number. If it is an outside call, in contrast, the switchboard keeps track of the number of calls coming through certain systems.

The clerk knows the local numbers for whom she is to put a call through immediately. There are certain people that take priority when the call is within the organization. If the Director calls, Paula knows that he has priority to see most of the individuals to whom she directs calls and books appointments. If requested to do so, she is obliged to interrupt a meeting for the Director. The same applies to the City Manager's Office. The process is different for calls that are coming into this organization. Callers are helped on a first-come-first-serve basis.

In order to answer the telephone and direct callers, Paula has to know other employees' schedules. This same requirement applied to the previous case. Similar to Case One, Case Two has to determine who is in the office, who is not, and when persons who are out of the office will be back. Paula conveys the importance of this knowledge when she was asked about taking telephone messages.

You, theoretically, the thing you really need to know to do something like that efficiently, is everybody's whereabouts all the time, doesn't always happen in our job, we don't have an efficient system, because we have a repetition of telephone calls being rung through to various people in the hope that they're going to answer them, which in a lot of cases they don't. But I think that's the most important thing you've got keep on, you've got to know where all 15 people are at one time, to do that most efficiently, that would be the way to do it. To know the operation.

Paula has to know about by-laws and the criteria for permit approval in order to function effectively at her job. Often, she has to explain to persons who are applying for permit applications the rules and procedures regarding permits. The following is an example where Paula discusses with a caller application procedures. The example is chosen because it

conveys the requirement of knowledge of the organization, and its official rules and procedures.

9:35 Paula's telephone rings. She answers the call. This is a call for a plan checker. Laura, one of the clerk-typists tells Paula that this individual is in a meeting at present. Paula explains the situation to the caller. Paula writes the address of the site and gives the caller an approximate time when he can call back. The caller discusses his problem with Paula. Paula outlines the possible reasons why the caller's permit application is being held up. She writes the information that the caller gives her regarding his request as he describes his problem. Paula ends this call and puts the message form in the right hand corner of her desk. Immediately there is another call. Paula takes this call. It is another message for the plan checker who is in the meeting. Paula writes the site address and tells the caller that she will check to see what is happening to his permit application. Paula takes the written message and goes to this plan checker's office.

Paula uses her knowledge of the organization and routine office procedures to answer questions that the clerk-typists have about their work. The clerk-typists may ask about forms that they are not used to working on or procedures that they have forgotten. In order to answer these questions Paula has to possess an extensive knowledge about permit procedures, minor amendments and letters, and the distribution procedures within this department and other departments. She has to have basic knowledge of contacts in other city departments, and where to retrieve information when necessary.

Paula is required to know the requirements of other employees' positions. For instance, she has to be intimately aware of the clerk-typists' work. She has to know the processing procedures of plan checkers, but not the technical aspects of their work. Through her experience on the job she has acquired extensive knowledge of technical terms used in the department, and is able to answer some questions of a technical nature when requested by clients who want information about permit applications.

In summary, there are a number of requirements under this dimension. The official job description does not mention the extensive knowledge a clerk must possess about the organization. By neglecting to mention the complexity of this aspect of the work, management de-values the knowledge and skill required for the job. But, even though this dimension is not fully discussed, some of the necessary requirements are listed. For example,

Paula is required to "successfully meet and effectively deal with the public in interpreting and explaining departmental rules and regulations". Knowledge of official office rules requires that one also have some knowledge of the organization. Other related requirements listed in management's job description include: "considerable knowledge of the applicable rules and regulations which govern departmental activities," and "considerable knowledge of office rules and procedures". But, the requirements are more extensive and complex than is indicated by the job description. Knowledge and skill is underestimated on the part of management. However, it might be too complicated to list in the official job description all of the requirements under this dimension, and perhaps the dimension itself.

Beginning Work After an Interruption

This dimension applies to how a clerk re-initiates work after a disturbance. The ability to begin work after encountering an interruption is required in Case One and Case Two. One difference between the two jobs is that Case Two is more specialized in comparison to the first. When Paula is interrupted she is not as likely to have to attend to something that is completely different in comparison to Janet working in a small office. Janet is more likely to be interrupted than Paula, because the clerks in the first case perform a number of different functions in a small office. Throughout a work day both these clerks have to periodically stop what they are doing and attend to another task that demands immediate attention, for example waiting on a customer. A skill associated with doing the jobs in Case One and Case Two is the ability to return to a particular work function after an interruption.

On one particular occasion Paula was taking a clipboard of permit applications to the map room when she had to stop what she was doing and wait on a customer, page a plan checker, and wait on still another customer and give the individual all requested materials, before finishing the initial task. The example is taken from the activity record because it reveals the frequency of interruptions in this job.

3:19 Paula picks up the unbound permit application forms on the clipboard and goes towards the map room. A customer is waiting at the counter. She asks him what he wants. Paula goes to the telephone under the message board and pages a plan checker. Another customer has arrived. He wants to pick up a set of plans and a copy of a development permit application form. Paula takes an envelope for this individual from the pick-up box under the message board. She goes to the counter and gives this envelope to the customer. He leaves. Paula takes the clipboard to the map room.

In order to cope effectively with some interruptions, Paula has to use her ability of coordinating activities in order to re-schedule work procedures. Unusual events happen when she types letters and memos on the electric typewriter. Situations occur where the equipment is faulty, and as a result she sometimes has to delay what she was working on, and begin the activity again at a different time.

Answering the telephone is a task where interruptions are frequent. This characteristic of the work is shared by both Case One and Case Two. In an interval of a few minutes Paula might have to respond to numerous callers. She has to keep one call distinct from another, and convey the necessary information, all while remaining calm, and without becoming flustered or confused.

None of these requirements associated with the ability of beginning work after an interruption are indicated in the official job description. Perhaps this dimension appears too trivial to management to be included in the official job description. But when one considers the frequency of interruptions it becomes clear that disruptions are obstacles to completing routine work, that require the ability to resume one task after stopping to attend to another completely different activity.

Exceptions

As in Case One, working knowledge is used to overcome obstacles to routine work procedures, to solve problems that interfere with productive work. Exceptions refer to deviations from routine procedures or unusual circumstances. Because the work done in the

two cases is different, the exceptions that occur are also different. But some of the same requirements for coping with, and solving problems are similar in Case One and Case Two. The knowledge that Paula uses in order to cope with exceptions on the job is applied periodically and consciously to permit her to continue with routine activities. I shall examine some of the exceptions in the work, and the requirements that are needed in this case. Much of the same requirements identified in Case One apply to this job.

The official description does not fully recognize the necessary problem-solving abilities that the clerk must possess or that exceptions to standard procedures are frequent. The official job description states:

Employees of this class ordinarily make independent decisions which are based upon a good understanding of departmental rules and regulations but unusual or difficult problems are referred to a superior.

The official job outline indicates that a clerk-stenographer must, "take and transcribe dictation of a technical nature with high accuracy and considerable speed". Prerequisites for the job include stenography courses. A closer examination of what the clerk actually does, however, reveals that skills such as shorthand are exceptions to the work. For example, during the interview Paula said: "It [shorthand] is a requirement of my position although I don't use it that much, I do have to use it sometimes".

Paula has to find information regarding the status of permit applications when a client telephones for a request, but, items are not always where they are supposed to be. The following is an exception where Paula has to search all possible sources before locating a specific permit application file. In order to cope effectively in this situation, the clerk had to have a thorough knowledge of plan checking procedures. This knowledge was not required in the previous case. In the following excerpts from the activity record Paula tries to determine the status of a particular applicant. After an exhaustive investigating process she locates the information about a permit application.

- 9:43 Paula goes from the plan checkers' office area and goes to zoning. She checks in their development permit records to see if this permit is a combined building and development application. It is not. Paula then goes to the terminal to the far right of the zoning counter. She calls up the appropriate file to see if there is a plan checker assigned to this application form. She types the permit application number to have access to this file.
- 9:45 Paula goes to the office and goes to the telephone under the message board. She contacts another plan checker to ask if she knows anything about this applicant's permit status. She does not.
- 9:46 She goes to the side desk behind a clerk's desk and looks at the stack of permit application files. Paula opens the top drawer of this same desk and takes a record of the development permits that are kept in a booklet. The applicant's permit is not there. She puts the booklet in the appropriate file in the drawer. Paula goes to the supervisor's office and knocks on the door. She cannot get in. The supervisor then comes out. She goes in to see if the applicant's permit is on his desk. It is not there.
- 9:48 Paula goes behind Laura's desk and opens the same top top drawer. She takes the booklet with the record of the development permit out and checks again. She goes to the terminal on the zoning counter and types in the permit application number and checks the appropriate file again. She goes to a desk and opens the top drawer, and brings out another copy of the same booklet. She reads the list of development permit application numbers. She puts the booklet in the appropriate file in the drawer.
- 9:49 She calls the applicant and tells him she is still searching for the permit. She asks him to hold.
- 9:50 She goes to the desk behind Laura's desk and takes another booklet out of the top drawer. She checks if the permit application number has been recorded. She returns the booklet. She searches through the permit application file on the top of this desk that she brought out from the supervisor's office yesterday. She goes to the shelf above a clerk-typist's desk to check if the word processor log contains any information related to this caller's application form.
- 9:51 Paula goes to the plan checker's office to check again on the status of the caller's permit application.
- 9:54 Paula goes back to the telephone and tells the caller that a "prior to" letter has been signed for his permit application. Paula discusses the application with him.

Another exception to the job that was not encountered in Case One was a lack of equipment for keeping up with the work. There were not enough photocopiers available for clerks to keep up with the rate of processing information. Paula describes the problem during the interview, and how clerks such as herself respond to the situation.

The xerox machine that we are presently using is on the 3rd floor, our office is located on the 2nd floor, it means that in order to do any photocopying to complete a project, of any sort that involves any type of photocopying, we either have to, (a) wait until there's somebody else back so that we can go up to the photocopier, wait in line, because there's usually 2 or 3 people standing in line waiting to use it. And then go back downstairs again, or we have to wait and go up at certain periods during the day when there is enough staff around to cover the phones downstairs. And we take a whole batch up at once which means you're up there for half an hour or so when you do go up there. And that's the

main problem, although word has come down that we're going to get our own photocopier this year, so that might alleviate that some.

Both Case One and Case Two file material, and retrieve information when requested. In the second case, the clerk sometimes encounters the problem of misfiling. Paula has to use her working knowledge to cope with unusual circumstances associated with the task of filing. The subject matter may refer to two subjects and she will file the information under one of the topics at one time that seemed to have taken priority. But, at some future point she cannot remember where she filed the material. Many documents that she files are letters from people in the community requesting that they be notified about a particular development site. Many of these cases there is no present development on the site or there is no existing development permit file pertaining to the site in question. If there is an existing development permit file, anything for that site is filed in that particular permit file. If there is no file, then the letter goes into Paula's files.

People will write and request that they be notified if there is development on a particular site. In some cases, index maps are flagged, indicating that if a development permit application is requested on this site, check the files in Paula's desk drawer. At some point when a request is made for a permit application, the original letter will be placed in the permit application file, but a plan checker might neglect to take the flagging off the the index map or change the letter to the permit application file. As a result, an employee might come back to Paula's files looking for a particular letter that is no longer there, and the person does not know where the letter is located. According to her, sometimes information is in the file and at other times it is not. She has to try and solve the problem of missing file information when it arises.

Unusual events happen when she attempts to answer questions related to permit applications. Problems associated with this task include not finding the appropriate file, having the computer break down, or not having access to the record book to find out who is a plan checker for the project in question. At other times Paula encounters difficulty

obtaining an exact address of a site, and she has to resort to finding project material by making reference to a name. At other times the clerk has to access all information in order to answer one question regarding an application.

Unusual circumstances occur when entering data at the computer terminal. People are careless about recording numbers. If a wrong number is recorded, an entry may become lost in the computer system. An entry may be made incorrectly and not found for months until someone specifically is looking for the entry and cannot find it. When this happens, she has to conduct a search using the computer system. The problem is frequently solved by going back to the paper files and checking information, and then cross-checking with the information on the computer.

At times Paula experiences problems with the computer itself. For instance, the computer will not accept entries when excessive demands at one time are made on the system. Some days Paula will make a lot of entries on the computer, and the following day she will find the print-out is blank because the computer did not accept the information she entered. Another problem that occurs is hitting the wrong key. Because she makes computer entries so often, sometimes she presses the wrong key or types incorrect information. The clerk has to solve mistakes that she personally makes or mistakes made by other workers. When working at the computer, Paula has to determine whether or not a sequence can be deleted or if the sequence was entered erroneously. Discretion is required for making corrections. This is a requirement in both Case One and Case Two.

Periodically, she encounters unusual events when answering questions that the two clerk-typists have about their work. If Paula has not been given correct information on a specific procedure, she will pass on inaccurate information that may result in following through to a number of departments. The problem generally occurs when people who are temporarily hired in various departments are not given complete and full training experience about how to complete the work. The department has lost files because someone was told what to do with a file, but not specifically instructed why it should go in a particular location.

As a result the file was put in the wrong place. Another example was when a carbon copy was left out of information sent to inspectors. The inspectors used the copies to make lists for doing a particular job, and suddenly found they were no longer receiving them. Then, Paula had to re-initiate a program of not eliminating carbon copies in processing documents in order to correct the problem.

When Paula and other persons in this office want to implement change they try to anticipate any problems before alterations are made. The process requires a thorough knowledge of the organization and its work procedures. If the problem has already occurred, employees such as Paula have to try and find a solution. Procedural problems may result from breakdowns in communication between departments. One department will decide that its employees handle a particular portion of a task in a more streamlined manner, and neglect to consult other departments. As a result, some information or work might be missed somewhere along the line, so that the next person in the chain of communication is not able to do his or her job properly. A department's attempt to make work more efficient sometimes results in cutting out a particular job outside of that department. This kind of problem is less apparent in Case One, because there is not the necessity of ensuring procedures are integrated with other departments, as Case One is from a small organization. Case One has to integrate her work with people within the office, but not outside of it.

Exceptions occur in taking minutes at departmental meetings. Some of Paula's greatest fears when taking shorthand is missing something of prime importance, recording what was said incorrectly or not being able to read the notes when she goes back to transcribe them. When these events happen, she uses her judgment to try and determine what was said. One problem-solving technique is to contact the person who was speaking and hope the individual will provide the necessary information. If a person reads from a written document, and Paula forgets to ask for a copy, she might telephone the person, apologize profusely, and ask for a copy. Sometimes she has to correct minutes when someone has made a lengthy speech and she has summarized what was said incorrectly

because she did not understand the person's field of expertise. This problem usually occurs when Paula takes minutes outside of her own department.

In summary, Paula's and Janet's working knowledge is largely developed in response to difficulties that occur on the job. Both women are required to use their judgment and problem solving-abilities. The official job description in this case does not recognize the frequency of exceptions, only that they are to be avoided. When an exception does occur, the job description describes that a clerk resorts to following official office rules. But, this is a problematic method of dealing with exceptions. Exceptions cannot be sufficiently listed in any employee manual, nor is it always most effective to have recourse to official office rules.

Keeping Tasks in the Correct Sequence

Keeping tasks in the correct sequence is a skill refers to the ability of putting tasks and sub-tasks into a logical sequence of events. This skill is required in both Case One and Case Two for completing work tasks. Sometimes Paula begins an activity and completes a portion of it when something interferes and she has to stop the work. She later has to pick up working on the same task while keeping the work in the prescribed sequence. For example, Paula types letters for her superiors. But, in order to mail the letter she needs to obtain an authorized signature. If she were to forget to obtain the necessary signature and mail out the letter, she would not have followed the correct sequence of events.

Because the municipality is a prime example where bureaucratic procedures are followed, Paula has to be aware of the hundreds of thousands of pieces of paper that a clerk might have to sift through to locate information. Her knowledge of the organization assists her in pin-pointing where to go to get particular information, and how to go about obtaining it.

The fastest way of locating information in this office is through a sequence of steps. First, clerks will try to find information by using the computer. Second, these workers will

search for information on maps before resorting to permit books. The sequence of events that Paula takes to find information depends upon her familiarity with routine procedures of where to go to begin a search. This ability is required in order to function at this job.

Knowledge of Office Technology and Operating Equipment

The category is applied to determine what a clerk has to know about office technology, and how to use the technology to tailor it to the work. This official job description states that the clerk-stenographer must have, "skill in the operation of common office appliances". In contrast to Case One's official job description, management gives more recognition to the knowledge required in using office technology and operating equipment. The official job description in Case Two, however, overlooks how the clerk has to tailor the machinery to her own work, and use the equipment to her own design. As noted in Case One, office organizations and equipment determine how the tasks are completed, but in both cases the clerks are left to figure out how to make the equipment work.

The list of equipment used in this office is longer than in Case One, which makes this dimension more complex in the second case than in the first. The category, then, is not equivalent in both cases in pertaining to the knowledge and skill required. The list of equipment and forms used in this office is extensive, and Paula is required to know how to use them in order to accomplish her work. Similar requirements apply to both cases such as the ability to use discretion and judgment. Both clerks work with computers, but in Case Two the clerk also has to know how to use a mainframe computer, dictaphone, and many forms. Another difference between the two cases is that Case One predominately uses a microcomputer, in contrast to Case Two that most often uses a terminal connected to a mainframe computer. Paula, like Janet, also uses a microcomputer as well for some tasks. The difference in office size in the two cases in all likelihood has some influence on the technology used in the organization. Because the second case is in a large bureaucracy, the

investment made in office equipment is greater. A smaller office probably does not require the same kind of investment in technology. For example, the computer programs appear to be more sophisticated in this case, and there is a greater need to have computer systems with a larger storage capacity than in the previous case. In Case Two, the additional equipment, that in some instances is more sophisticated, makes the knowledge required under this dimension more complex than in Case One. Because of the greater amount of equipment used in this office, it is worthwhile considering some of the technology that Paula is required to know how to utilize.

There are two electric typewriters that sit on the clerk-typists desks. The typewriters are programmed for typing development permit application forms that have a consistent format. There is another typewriter in the office with multiple memories that Paula uses to type letters and reports. She uses a copy holder to hold material upright while she is working on it. In both cases electric typewriters are used by the clerks for typing letters. Paula has to know how the electric typewriter works. According to her, the electric typewriter is like a "mini word processor", and "You can do an awful lot on it".

Part of her working knowledge is fixing malfunctions associated with the machinery. A passage from the interview conveys her working knowledge about using the electric typewriter.

The plattenroller got flat, and instead of having a serviceman come in and look at this stuff and get a heavy bill for that sort of thing, you can isolate the program or the problem, you can, a lot of times fix it yourself.

Isolating variables in a system is a technique used by this clerk in order to solve problems with machinery.

Unlike Case One, Paula uses a dictaphone for her stenographic tasks. The machine has a set of headphones attached to it, and a built-in tape-recorder for playing small cassettes. Paula activates the machine by pushing her foot down on a pedal connected to her typewriter

and the dictaphone. In contrast to Janet, Paula has to use the typewriter in conjunction with a second piece of equipment, that is not required in Case One.

There are three telephones in the office that can hold up to four callers at once. There is also a standard telephone that is connected to an intercom system to page plan checkers in their offices.

This kind of equipment is similar in both cases, but the switchboard that Janet has to use is more sophisticated than in Case Two. When Case One does relief work for the receptionist, her task of answering the telephone is more difficult than in this case, in part because of the additional number of telephone lines in comparison to the telephones used in this office. Both clerks are required to know how to use paging equipment.

This office, unlike the previous one, has computer terminals attached to a mainframe computer in a computing service department. When the computer is not working, clerks have to locate permit application information manually, using bound volumes of permit application forms, maps with the permit applications listed by geographical area, and clip boards with copies of the issued development application forms for the last three months. Case One only uses a computer for one task, posting cheques into the accounts receivable program. Case Two, in contrast, must know how to use the computer for a variety of tasks. Because computer technology is very sophisticated, the additional number of tasks that the second clerk is required to use the computer for, makes her knowledge of operating this kind of equipment more extensive than the first case.

Paula and the two clerk-typists use the same software. One program is used for displaying addresses of sites and the plan checkers assigned to them. A second program will provide information on each permit application. The third program is for displaying addresses of sites and development application form numbers, and is the starting point for locating information in the other two programs. Whereas Paula uses software for tasks related to permit applications, Janet uses software for accounting work. The first clerk, however, only has to know how to use one software program.

The level of difficulty to operate the programs in both cases appears comparable. An exception, however, is that in the first case the clerk only appears to enter information, while in the second case, the clerk engages in another step of transforming information. For example, Paula enters information into a software package for creating reports. She develops reports on the computer and runs them to obtain weekly statistics about applications. She also inputs information with another program for updating development permit procedures and appeal board results, and other status information pertaining to a permit. Another program is for updating information on projects that have assigned plan checkers. Paula has a choice of submitting jobs on line or in batch. Generally Paula uses the batch method.

Another type of computer is used for word processing. This microcomputer has a hard-drive and is also connected to the mainframe computer for transferring or retrieving information electronically. The system is designed with a menu. The computer is connected to a daisy-wheel printer in this office for printing documents. Because of the mainframe system, Case Two requires more knowledge in using the computer than Case One.

The office also has a photocopier with a number of functions. It staples, reduces, enlarges, prints on both sides of a piece of paper, switches from double to printed on a single side, and collates. Photocopiers are used in both cases, and the skill and knowledge required for their operation is similar in Case One and Case Two.

In Case One and Case Two the clerks are required to use standard office forms, but in the second case the number of forms far exceeds that in the trade association office. At the core of this job is the processing of some forty-one different forms. The official job description does not identify knowledge of these forms as a requirement.

As in Case One, knowledge about how to adjust parts of the photocopy machine when it jams or compensate when the electric typewriter does not work according to specifications creates a stock of working knowledge. Adjustments, manipulations, and coping techniques can minimize or eliminate problems to allow the clerk to return to routine procedures. Paula has developed techniques to unjam the photocopier when it malfunctions,

and she uses her judgment to determine when she ought to put in a request for a repairman to fix a problem that she cannot solve herself. If she is photocopying materials for a development permit file, she determines whether or not to use the reducing function on the machine in order that documents fit neatly into file folders. The judgment and discretion required in Case One is also required in this case.

Knowledge of office technology and operating equipment develops in response to the idiosyncrasies of machinery that vary between Case One and Case Two. Occasionally the employees in this office have to change the wheels or ribbons on the computer printer. The sheet feeders on the office printer make it difficult to fit the paper into the feeder properly. The user has to know the direction in which to bend a stack of paper, and the thickness of the paper required so that the feeder will work properly. This process changes from time to time. For example, during the winter there is more static in the paper. The paper cannot be left in the feeder overnight, because the stack of paper is more likely to develop too much of a bend.

Employees in this office share their knowledge of how machinery works to a much greater extent than in the previous case, in order that all workers use technology tailored to specific tasks. In the first case knowledge of office technology and operating equipment is most often shared among employees in response to doing relief work, but not out of the employees' curiosity for improving the way work is accomplished. An example from Case Two was when Paula showed an employee from another department how to remove a staple using a staple remover that was been built into the back of the stapler. The other employee had used the stapler often, but had never noticed this additional function.

In the course of routine work, clerks develop new knowledge that contributes to technological innovation. Paula has learned what office machinery does and the effects of the equipment on the materials processed. In summary, knowledge of how office machinery operates is a crucial aspect of the working knowledge of clerks in this organization. This same finding is also characteristic of the first case.

The official job description reads that a requirement of the job is "to operate common office appliances". It tends to underestimate the knowledge and skill required, although it does state that it is a job requirement to have knowledge of office technology and operating equipment. The use of the terms "common" and "appliances" are perhaps attempts at conveying that office technology is not very sophisticated. Upon closer examination, however, computers are extremely sophisticated, and requires a great deal of skill in their operation. Overall the official description of the job does not fully express the skill and requirements needed on this dimension.

Techniques a Clerk Uses To Do the Job Better

Paula's working knowledge includes the ways of improving her work to do the job more efficiently. The dimension is used to assess how the clerk improves the job itself, and how she does the job. As in the first case, this clerk also has set up the job differently in terms of work procedures, equipment, and paper work in order to do the work better. The way the clerk does her job better than previously, is a method by which the worker transforms the job and maintains control over the working knowledge. These break throughs, however, are rare events. A filing system that Paula designed is an example. Case One and Case Two's knowledge has transformed their jobs, and is assimilated by other workers that carry out related tasks. The methods of fixing the office equipment when it malfunctions in all likelihood originated this way. What is required is job experience and judgment. While they to comply with official office rules and procedures, these clerks have to be able to adapt to, and at times, alter ways of doing the work. Most of the requirements mentioned in Case One also apply to this case, such as knowing characteristics of other people, and using one's judgment. Some of the ways this clerk does her job better are very similar to Case One.

An example are shortcuts. Both clerks use the memory function on electric typewriters and computers as a time-saver in re-creating letters because they complete

numerous drafts. Paula, for instance, used her knowledge of office equipment to tailor the procedure of typing letters to her own specifications, as did Case One.

An example of a shortcut used in Case Two for improving the work that differs from Case One is as follows. Paula has improved taking messages for employees by using shortcuts. The office receives a number of repeat telephone calls. A lot of times Paula will recognize the voice of a caller and the previous telephone conversation with that person. When a person calls repeatedly, Paula simply says thank-you, the message has been taken already and I will make sure that the person returns the call as quickly as possible. On the existing message Paula marks down how many times the person has called, at what dates and times, in order to save writing out another message slip.

There are other examples of using shortcuts that do not apply to Case One. In order to answer customer requests by telephone more efficiently, Paula sometimes uses shortcuts. She has the option of passing a caller onto the plan checker who is handling the job or she can pass the call to a development planner who may know what is going on. A third option is transferring a call to an area planner when a client is concerned about the overall future effect a development project will have on the surrounding environment. When she is finding it difficult to meet work demands a short cut to answering customer inquiries is "passing the inquiry on to someone else to answer". A policy in this office is that if the caller will not leave his or her name, the clerks do not take a message. This is a shortcut in responding to clients, because workers do not have the time to try and obtain information from persons who are unwilling to provide it.

Paula uses a shortcut when she attends Development Permit Board meetings. Rather than using shorthand to record what was said, she will ask a person who is reading for a copy of the written document. The technique is time-saving because she does not have to write everything down.

There are other techniques of improving how work is accomplished that are similar in Case One and Case Two. Both clerks have developed efficient ways of responding to

telephone inquiries. Both clerks are able to obtain information even when a caller seems hesitant. When answering the telephone, Paula, for example, has to determine what information to get from a caller for taking a message. From experience, she has devised a procedure to follow when an employee is not in, and she has to take a message. She asks callers three questions: their name and telephone number, the subject of the call, and the site of interest.

Although the nature of the work is different in Case One and Case Two, each of the clerks have improved their work with the technique of "double-checking". Paula, for example, double-checks information in permit application files and other documents for completeness. She checks to make sure that all the information required to type a permit is in its assigned file and permits have the supervisor's signature on them. When information on computer sheets is incorrect, she may enter the missing or correct information before sending the sheets to Data Conversion. The double-checking that Janet, does, largely pertains to numbers in accounting procedures.

Their work experience in Case One and Case Two has contributed toward the knowledge that even rare events may become recurring phenomena. Obstacles to routine work become problem-solving and learning opportunities. An example in Case Two is identifying a problem permit application. In Case One an example are errors that reoccur in posting cheques into the accounts receivable program on the computer.

There are differences between the two cases on this same dimension. Because Paula has more authority in the office than Janet, Case Two has more opportunity to make improvements. Part of the clerk-stenographer's job is to institute new and improved work procdures. This requirement is recognized in the official job description that reads:

In supervisory positions, the main responsibility is in assigning and reviewing the work of one or more subordinates doing a variety of office work where the introduction of new methods is occasionally necessary to facilitate the work group.

What is missing, however, from the official job description is that the clerk improves not only the work done in positions subordinate to her's, but also her own work, and the work in superordinate positions. For example, the way Paula schedules and coordinates her supervisor's activities has also improved his job.

She has transformed the way routine procedures get done when policies are set by management that do not make sense to the work functions in this office. Management may have a specific reason for implementing a policy, but sometimes the policy is not practical. As a result office procedures are constantly changing. This clerk has streamlined work tasks. She exercises her judgment and working knowledge to make changes such as which is the easiest way to initiate a procedure, and have other office workers follow the prescribed method. The clerk has to explain the procedures to workers who are affected in such a way that they understand why they are doing it, so it gives them an incentive to do the task properly.

If Paula wants to make a major change, however, she presents the new method of completing the work to the supervisor. When the supervisor is consulted, the workers collaborate to actively transform the way work is accomplished. This process changes the job and creates a stock of working knowledge that is shared among the workers, but is not likely to be officially recognized by management.

A similar process applies to the working conditions within this setting. Paula sometimes considers a solution, to a work problem and seeks to implement it. She has to be able to explain the problem to the supervisor, and provide convincing reasons why change is necessary. Sometimes Paula makes requests that funds are allotted to a particular project.

The jobs in Case One and Case Two differ in the nature of the work, thus any improvements the clerks made do not necessarily correspond. There are some improvements that are unique to Case Two. The examples are chosen on the basis of ingenuity applied in order to do the work.

Paula has stepped outside of the formal office rules and procedures by designing a more efficient filing system than previously existed. Generally the correspondence that comes

in through this department is in reference to a particular address with a particular development permit on it. The filing system Paula created is based on permit numbers where items are filed numerically.

Sometimes this office receives correspondence that is related to a specific subject and not a specific site, and Paula has designed and maintained this filing system. It is based on an alphabetical, and numerical system that she devised because most of the materials are related to a site address and may not yet have a development permit on it. Information is filed first by name, if there is a name involved and if not, by number. For instance, information pertaining to a site at 51st and Glenhaven, would be filed under the letter "G" for Glenhaven. If the information was specifically in reference to an address on 52nd, it would be filed under 52nd Street File. If the information corresponds to a subject matter, Paula files according to subject matter. She uses her judgment about matters where there is not a specific site being referred to, and she has to determine where to file it. Paula has created the filing system so that anyone can retrieve information. It is not a complicated system and there is no cross referencing in it because there is not a large volume of materials.

She uses her knowledge of how long materials are kept in this organization to maintain the filing system that she has designed. Paula discards memos that go back three or four years while she maintains files for on-going projects. Specifically, there is a file that Paula was maintaining on development sites near schools because of controversy regarding liquor store approvals within a two mile radius. The appropriate uses of sites around school areas is an ongoing public issue that involves several different departments. Therefore, she uses her judgment to determine information that is no longer useful to the organization in order to keep file content to a minimum. In Case One there is not a comparable example of the ingenuity with which Case Two devised an office filing system.

Paula has improved work on the job in response to the lack of photocopy machines available for clerks. Instead, of packing bundles of files upstairs to the photocopy machine, Paula and other clerks decided to separate the files and take only the necessary pieces of

information upstairs, and do the work more frequently than was done in the past. By following this method, clerks avoided carrying massive bundles of files upstairs, with a lot of information that did not require copying. Furthermore, when individuals go upstairs for a coffee break, they might take a load of papers up with them, and stop at the photocopier on the way back instead of having to make the full run back and forth.

She has developed an efficient technique for answering the telephone and taking messages for plan checkers and supervisors. When the telephone rings, she asks the caller to specify the nature of the problem to be discussed. By requesting that the caller provide this information, she is better able to determine to whom to direct the call, and who is best able to resolve the caller's problem. Because Paula has an extensive knowledge of permit application rules and procedures, she can sometimes answer a caller's question without interfering with the work of another employee. The following is an example from the activity record.

9:25 Paula's telephone rings. She takes a call. The caller wants to speak to a plan checker. Paula asks the caller to specify the nature of the problem to be discussed. The supervisor goes by and Paula puts the receiver down and asks him who this individual should see. She goes to the telephone and asks the caller to specify the details of the site. After obtaining this information Paula suggests that the caller should contact the supervisor at zoning. Paula spells his name and gives his telephone number to the caller. The supervisor referred to here is the supervisor at the zoning information counter.

Paula has designed her tasks to do them more efficiently. One task she has improved is proof-reading. She corrects a written mistake quickly because if she were to neglect the problem for an extended period of time, she might forget what the problem was. For instance, when proof-reading a document, Paula stops reading and fixes a typing error with white-out as soon as she comes across a mistake. Furthermore, she might indicate a problem to the person who wrote the material in order that the person does not repeat the same error. The following is an example.

4:08 Paula picks up this letter and goes to a plan checker's office to confirm if there is an error in the information contained in the text of this letter.

Paula has improved her task of proof-reading other employees work by maintaining and updating her knowledge of city bylaws that pertain to permit applications. As part of this task she checks to see whether general sections of the bylaw that are made reference to, are cited correctly, and the person who wrote the letter has not quoted the wrong section or subsection. Paula is not responsible for determining whether the information is correct, but by doing so she has improved her work as a proof-reader.

The employees have developed methods to make the task of answering permit application requests more efficient. By always keeping computer listings up to date clerks have the opportunity to retrieve accurate information as quickly as possible. A program was also instituted for plan checkers to make sure they put correct information on computer sheets. The result was that a clerk could go to the computer and quickly retrieve information without having to ask plan checkers to pull files when the information electronically recorded was clearly inaccurate.

Working Within Formally Recognized Work Procedures

"Working within formally recognized work procedures" refers to following official office rules in performing the work. Because manager's assign work tasks, choose among the available technologies, and control the division of labour, it allows them to structure the required working knowledge to a great degree. The official job description outlines much of the formally recognized work procedures. The outline does not, however, include all the tasks that Paula engages in as part of her job, and the skill and knowledge needed to perform the tasks. This same finding is characteristic of Case One. In the first case, however, the official job description is far less descriptive and does not indicate any of the requirements for the work.

The actual list of tasks in Case Two is more extensive than management recognizes. When relief work and knowledge of other positions is taken into account the number of activities the clerk is expected to know is even longer. Nevertheless the job description identifies "knowledge of office practices and procedures", and "knowledge of applicable rules and regulations which govern departmental activities" as requirements.

An analysis of Paula's work reveals a different picture from the official job description. This clerk has developed knowledge about carrying out routine procedures necessary to accomplish the functions assigned to the job. The knowledge involves all the basic know-how to accomplish routine work tasks. Responding to routine work is carried out almost unconsciously on the part of this experienced worker because the knowledge has become so thoroughly internalized. For example, because Paula knows how to type letters on the typewriter, stopping to think about the process of doing the work would probably slow her down. Knowledge of routine procedures is in constant use while another form of knowledge is used in response to problems that arise.

In both Case One and Case Two even what appear as simple tasks involve extensive knowledge and skill. It is necessary to go beyond the analysis of Case One on this dimension, and consider in greater depth the know-how needed for a few of the general work tasks applicable to the second case. In Case Two, following the plan checking process is a response to working within formal work procedures. Paula has to be able to determine the status of an application. For example, she might have to convey what has been done, what is the next step in the process of an application, and approximately how long it will take. She has to know how to find out who is handling a particular project, who else might be involved particularly in the context of large projects where Paula has to know who is the client, and who are going to be the development planners. She has to gain access to information about who is involved from the Engineering Department, and Permits and Licences. She is required to find out if there are Board of Variance items when a project is likely to be problematic.

Following routine procedures requires an extensive knowledge of the work functions in the organization, even if the clerk actually only attends to specialized tasks within the process.

The task of typing letters and memos on the typewriter requires such obvious abilities as typing skills, a command of the English language, and the technical jargon that is a part of this department. But, the knowledge necessary for this job is more complicated. For example, when Paula is typing a letter she has to be able to understand what a person is saying on the tape or read handwriting that looks like scribbles on a page. She has to exercise judgment in determining what someone is saying or has written when the individual is unavailable for questioning.

Paula has to possess a thorough knowledge of work procedures in this office that would probably go unnoticed by persons outside of this work environment. This same observation equally applies to Case One. Even tasks that appear as trivial as delivering mail and documents to employees in this office, have a host of procedures that the clerk has to know in order to carry out the task effectively. The following is an example of the extensive procedures associated with delivering a council report.

- 8:45 Paula goes to her desk and puts the file on it. She picks up a permit application form file from a work basket to the right side of her desk and takes this to a clerk-typist. As Paula puts it in the clerk typist's work basket she tells the clerk-typist what is to be done with this file.
- 8:47 Paula goes to her desk and sits. She makes a call to the city clerks' office. She is checking the procedures for delivering a council report. She asks, If I deliver this right now, do I need a memo for it? If a report is late, normally a memo indicating why it is late is required. This report is one day late. She does not require a memo. She ends the call. She leaves with a copy of this report and goes to the photocopy room on the next floor. There is a line-up at the photocopier and Paula must wait. She makes twelve copies. She uses blue paper to make six copies and uses pink paper to make the other six copies. She delivers two of the blue copies plus one of the original copies to the city clerks' office. Two copies are made of the original copy of this report. The other copy on plain paper goes to council. She does not have to deliver copies of this report to council.
- 9:07 Paula goes to the office. She puts nine copies of the report in the appropriate inter-departmental mail box under the front counter. She goes to her desk.

This example taken from the activity record was cited because it conveys in part the complexity associated with this duty.

The task list devised was based predominately on a single work day. Had the investigation of the job lasted longer, it would probably be found that the clerk performs even more work activities, and thus probably met additional requirements. The same conclusion is likely to have been made in the previous case. This official job description indicates that a clerk is required to comply with official office rules. But, the extent of those "rules" and the exceptions to them reveal that the official job description does not account for all the knowledge and skill required for this job. The official job description considers only some of the knowlege and skill that is required. What is clearly missing in management's job description in both Case One and Case Two is the value of judgment needed on the part of the clerk.

Stepping Outside of Formally Recognized Work Procedures

This category is defined by the ways in which a clerk deviates from the official office rules in doing her job. Workers often transform formal work procedures to their own design. The development of new knowledge transforms formally recognized procedures. The official job description does not take into account the neccessity of working around routine work procedures and devising improved techiques to make the work better. The creativity and ingenuity that Case One and Case Two have to bring to their work is overlooked in the corresponding official job descriptions. Paula for example devised a filing system that saves time. As noted in Case One, a strict adherence to office rules is not practical. The category of stepping outside of formally recognized work procedures encompasses this characteristic.

Occasionally it is necessary to step outside of the formally recognized rules and procedures if the job is going to get done. This finding made in the first case also applies here. Sometimes it is crucial to work around the formal rules. This office setting is bureaucratically organized to a much greater extent than in the previous case, and if a clerk

was to follow every rule and procedure specified, the so-called "red-tape" would bring work to a standstill.

There are some examples that illustrate the required ability of stepping outside of formally recognized work procedures in Case Two. Paula works as a stenographer when she attends meetings of the Development Permit Board. She occupies this position because she takes shorthand and is able to take verbatim minutes at a highly technical level. Her job was to take verbatim minuting, but Paula has found that she has to step outside of the formal rules and procedures because the meetings are sometimes eight hours long without any breaks. As a result, she uses a combination of shorthand and recording. She has shortened the minutes so that they are strictly minutes, covers only the motions that are made in regard to the various applications, and provides a brief summary of what is happening. A requirement is the ability to take minutes, to sift through the information gathered, and determine what is relevant and what is not in producing the minutes for the meetings. Taking and transcribing shorthand involves editing abilities so that the eventual written material has a "flow" about it, has continuity. The requirement of judgment is one of the necessary abilities on this dimension for both Case One and Case Two.

A Day's Work as an Accomplishment

Paula's and Janet's knowledge is developed in response to routine procedures and difficulties that reoccur. Their actions are rational responses to their work environment. The consequences that affect them as they attempt to carry out functions assigned to their job contribute toward their working knowledge and skills. The length of their experience in the job allows them to see even rare events as recurring phenomena and subjects of knowledge. Still, the formal division of labour in the workplace determines a job's learning potential. The job specifications assign necessary contacts with others in the office. Paula, for instance, has learned to understand and anticipate the circumstances and responses of people in her

workplace. The knowledge needed in order to finish a day on the job appears to fit into a number of areas such as knowledge of routine procedures, documents processed, technology, patterns of client behavior, and the work patterns of other workers in the organization. In order for clerks to do their work successfully, they must acquire a stock of working knowledge about the specific office setting.

Management's description of Case Two's job does not identify what it takes in order to finish a day's work. The job is described as moderately-complex, but an examination of some of what Paula has to know provides a basis for characterizing the work more as difficult, complex, and requiring skill and ingenuity in order meet the necessary requirements. The formal job description begins with an outline of the "nature and scope" of the work. The passage does not, however, begin to encompass the actual nature and scope of on-the-job-know-how. The description points to what management perhaps identifies as the most difficult aspect of the job: "They are responsible for performing more difficult clerical duties such as those involved in preparing non-routine correspondence, documents, and reports". Clearly the task is demanding, but in order to finish a day on the job the clerk has to coordinate her work, step outside of the formally recognized rules, and cope with exceptions, all within the context of regulating and maintaining social relations. Among other requirements, the clerk is expected to fulfill a supervisory role. The official job description underrates the difficulty of the job, and does not identify the attributes that one has to bring to the work. Rather, the description is limited. The brief outline of some examples of the work does not include all of the tasks, and the section on requirements provides a surface description of some of skill and knowledge requirements.

Chapter VII: AN ACCOUNTS PAYABLE CLERK

Office Organization

The organization is a branch of a linen supply firm with one hundred and seventy-five employees. Although the company has a retail outlet where souvenirs and articles of clothing are sold directly to the public, the main part of the business is the repair and laundering of rented items. This firm currently supplies some nine hundred items which include linen for restaurants, mats, mops, towels, uniforms, and overalls. It also sells a variety of non-rental items to customers. These items include paper towels, aprons, party hats, paper cups, rags, toilet tissue, and garbage bags. Goods are collected and delivered by drivers employed in this company. I will call the accounts payable clerk Carol. The job examined is referred to as the "accounts payable clerk" even though the work includes the branch journal job. Because employees in this office frequently do relief work or assist other co-workers, I shall describe the office by providing an account of the jobs and the functions performed that are related to the job investigated. The other employees consist of an accounts receivable clerk, a credit assistant, a senior and a junior computer operator, a payroll clerk, a sales clerk, and linen supply clerks.

The full-time accounts receivable position was left vacant during the observation period because the clerk had just been fired. The duties for this job were then dispersed among other clerks in the office. One of the linen supply clerks was assigned to do accounts receivable for half of each working day. The other employees who do over-time work in accounts receivable are the accounts payable clerk and two other linen supply clerks.

Accounts receivable work involves taking cheques from the incoming mail and posting the cheque amounts to the customer accounts. The amounts are recorded on statements which are kept in filing trays. Data entry sheets are used to cross-reference cheques and statements regarding changes made to customer accounts. The person working at this job

has to ensure that the data entry sheets balance with cheques. A copy of the data entry form is given to the computer operators for keypunching. The person working in accounts receivable completes a bank deposit slip for the cheques, and gives a duplicate copy of the slip to the accounts payable clerk, credit assistant, and payroll clerk. The original copy with the cheques is stored in a safe. The credit assistant completes the bank deposit.

The credit assistant is a job that was to disappear with the functions divided among the remaining clerical positions. An important task is updating information in the Monthly Age Listing. This binder contains information for each account that includes amounts of invoices that have been paid, and whether any cheques have bounced. At the end of the month the assistant transfers missing information from the previous month's listing to the current month's listing. This individual answers telephone inquiries and letters from customers with questions related to information on current and past invoice statements. The credit assistant processes incoming cheques by checking totals printed on each cheque with accompanying statements to ensure the amounts correspond. This employee alters amounts on statements where customers are entitled to a discount. She records the customers' account number on cheques when these numbers are missing. She delivers cheques and statements that are matched together to the assistant credit manager. The credit assistant makes lists of corrected and missing customers' postal codes and telephone numbers, and takes the new list to the computer operators for printing.

In the office are a senior and junior computer operator. Their work is related to the accounts payable clerk and other clerks who frequently give them information for further processing. Sometimes office clerks have to perform computer related tasks ordinarily completed by the operators when the operators are busy. The main task that the senior computer operator performs is the implementation of computer programs that print information on a variety of forms used by persons working in the main office and the plant. Commands are typed to run approximately thirty daily programs and thirty month-end programs on microcomputer and minicomputer systems. The senior computer operator is

responsible for correcting any errors made by the junior operator. Both operators separate empty and printed forms using a bursting machine before making deliveries to the office and plant. They transfer and copy information onto different disks and computer systems. They also maintain all the computer equipment or contact the service technician when necessary.

The junior computer operator has two main tasks. She organizes soil tickets that are returned from customers into numbered bundles, and then enters the information into the computer. She also enters cash amounts for demand sheets and cash forms that are credits to accounts. Linen supply clerks prepare the tickets by hand. After entering the credits, the junior computer operator prints a daily credit report. This individual also enters any payroll information electronically. The operator transfers the information to head office, and then receives it by a modem. Once the information is returned to this office, the operator prints cheques for employees.

A payroll clerk updates by hand all payroll information for all non-managerial and non-sales employees. She gives this information to the junior computer operator who then enters the information. The payroll clerk sometimes completes the branch journal even though it is a task associated with the accounts payable clerk's job. The payroll clerk keeps a record of the dates when non-managerial and non-sales employees are entitled to receive vacation or sick pay. She completes Workers' Compensation Board Claims and other medical claims for all employees. She files various application forms for health services and distributes them when requested. This clerk answers payroll inquiries from various departments. After consulting with an appropriate supervisor, the payroll clerk is authorized to make adjustments in wages paid.

The sales clerk is responsible for completing by hand service agreements for customers who order items by telephone. She must answer any customer inquiries related to telephone sales. An important work task associated with this position is completing monthly reports of sales and entering commissions for sales on commission sheets for each salesperson. This clerk completes invoices for service agreements that are given to her by

sales people and drivers. She checks that the information on each agreement is complete and accurate. The sales clerk distributes copies of invoices to the purchaser and the senior computer operator. She also distributes copies of invoices with the accompanying service agreements to a linen supply clerk who files them.

The linen supply clerks process information concerning customer accounts and send the information to the computer room. These clerks complete increases, decreases, and alterations on customer accounts. Linen supply clerks open new customer accounts using information from service agreement forms. The information from the form is manually listed onto a customer data sheet and sent to the computer room. A new account is assigned a number, and all the information related to the account is stored in filing cabinets. Maintaining customer account files is a task associated with this job. Alterations on customer accounts are completed by using a Customer Request Form that has been filled out by a salesperson, service representative, delivery driver or person from the customer service department. Sometimes linen supply clerks charge losses to customers, and schedule service calls. All of the linen supply clerks handle cash and cheques collected by drivers by checking the totals with demand sheets. These clerks complete deposit slips and give copies to the accounts payable clerk, payroll clerk, and credit assistant. They bill customers after orders are delivered, and proof of delivery comes back to this office. Linen supply clerks answer inquiries from customers regarding complaints or inquiries about billing. They respond to questions related to the servicing of rented items. Answering requests may involve sending the customer photocopies of documents related to their account. The senior linen supply clerk has more responsibilities than other linen supply clerks. She is in charge of giving up-to-date information on new accounts to the store clerk, training new linen supply clerks, and providing answers to questions that other linen clerks have about customer accounts.

The clerks and salespersons working in this office prepare and deliver to the plant the documents with instructions for the laundering, repair and or packaging of items to be delivered to customers.

Job Description

I shall now discuss the accounts payable job. The task list compiled from the interview and activity record provides a summary of the job.

The Accounts Payable Clerk's Task List

1. Date stamps incoming purchase orders, packing slips and invoices
2. Separates, matches and sorts incoming purchase orders, packing slips and invoices according to appropriate department
3. Files
4. Arranges for the payment of invoices
5. Enters batches of invoices and information into inventory sheets
6. Prepares and types Branch Journal Sheets
7. Completes cheque requests and issues cheques for local bills
8. Completes rush orders/requests
9. Ensures that shipping companies and brokerage companies are paid promptly
10. Opens and sorts incoming mail
11. Completes inter-branch transfers
12. Does month-end medical payments
13. Does accounts receivable recap which includes information about what has gone through the computer and into the journal
14. Does month-end inventory
15. Works with the trial balance when the computer closes off for the end of the month
16. Prepares and types credit applications
17. Completes month-end reconciliations (includes branch journal number, explanation, debit, credit, and balance)
18. Answers inquiries from other employees
19. Does bank statements and stores deposit slips in bank statement box
20. Teaches new account payable clerk how to do various tasks
21. Types letters
22. Makes photocopies
23. Handles petty cash
24. Detects errors
25. Gets authorization on cheques, bills, and other forms
26. Gets information and materials from other employees
27. Cross-checks figures
28. Answers inquiries - by telephone
29. Sorts copies of cheques
30. Operates equipment
31. Copes with exceptions
32. Does month-end reports on withdrawals
33. Coordinates tasks
34. Does month-end 'close-out' on sales

The job involves some thirty-four different work activities. Carol's core set of tasks is to maintain all accounts payable files for this office, and prepare accounts payable items for submission to head office. She receives and then processes a variety of incoming documents.

Invoices are processed for departmental approval. She separates, matches, and sorts invoices from suppliers with packing slips and purchase orders before sending all these items to the the appropriate department to check whether the goods were received. All the items are stamped before they are sent to whoever originally ordered them. Once an employee in the department indicates whether the goods or services were received, the documents are sent back to Carol in order that she will pay the firm's bills.

She is in charge of reconciling and controlling payment of all payable accounts. Carol issues cheques for local invoices and submits outside invoices to the head office for payment. Before an invoice is mailed to head office it is stamped to indicate the date the invoice has been sent. The following is an excerpt from the activity record where the clerk prepares invoices to send to head office to be paid.

11:13 Carol takes the papers from her top tray. These are the invoices that the delivery manager has signed to indicate that the goods have arrived. She takes the August deposit slips and places them on the bottom tray as she doesn't want these to get mixed up with the July deposit slips that are not yet finished. She returns to the papers that the delivery manager, has signed. She adds codes for her copies. This is referred to as 'doing extensions'. She puts them in alphabetical order and places them with the other invoices. She places them in the top tray where they will wait until there are more invoices before doing a batch to send to head office for payment. It is head office that issues the cheques for payment on these invoices.

Once head office authorizes the payment of invoices, the cheques are usually sent to this office before they are forwarded to the supplier.

This clerk is responsible for preparing and typing local cheques. For instance, Carol will complete cheques for telephone and utility bills. The following two examples are excerpts from the observation record.

- 11:23 Carol looks at her memo pad for today. She has a note to pay the X company \$582.96 on today's date.
- 2:32 Carol takes a utility bill that needs to be paid on Monday. Since the branch journal clerk is on holidays next week and she will not be here on Monday, she prepares for the bill to be sent out now. There is a large penalty if the bill is not paid on time. Carol types out a cheque. This is another double cheque form, that is, an original and a copy. After typing in the necessary information, she takes it out of the typewriter and goes to the cheque register on the cupboard behind this desk, stamps in the amount to be paid, and clips the cheque and an envelope and the bill together. She calls to the office manager and he comes and signs the cheque. She takes the cheque and attached papers and puts it into the branch manager's tray for his signature. Carol takes the envelopes for mailout that she has placed on the divider between her desk and the payroll clerk's desk, and gives them to the receptionist at the switchboard. The receptionist does outgoing mail.

She makes out cheque requests if the head office is in charge of issuing a particular payment.

Carol also has to complete rush requests. A rush request is an emergency for payment of a bill or when someone asks that a cheque is made out very quickly. The clerk completes the cheques, and obtains the necessary authorized signatures from either the office manager or plant manager. A task associated with the job is getting authorization on cheques, bills, and other forms. A department head must sign any cheque that goes out from this office.

This clerk is also responsible for ensuring that shipping and brokerage companies are paid promptly. Usually Carol has to wait for a packing slip before paying a bill. But, because it is extremely important that these firms are paid quickly she does not have to wait for this kind of documentation. She completes cheques for brokerage and shipping companies in a batch once a week.

One of her work activities is to open and sort incoming mail. The mail she is responsible for is mostly bills from suppliers. Carol uses a letter opener to open the envelopes. She also receives what is referred to as "junk mail" that she throws in the garbage or divides up to send to various departments.

The clerk is required to complete inter-branch transfers. An inter-branch transfer form is filled out when this branch pays for a portion of a bill, and another branch or branches pays

for the remainder of the bill in question. The following excerpts are from the activity record where Carol works at this task.

- 2:14 Carol phones to the receptionist at the switchboard and asks for a phone number and gets it quickly and puts the phone down. This is the number concerning the inter-branch transfer. Carol is confused as to whether or not the number she has been given is a long distance number (which it should be to Landview where this transfer will be taking place). The receptionist had earlier given her the number as a 734 dialing which is local. She goes to the receptionist's desk, waits for her to get off the phone, and then asks her about the number for this branch. This employee looks at a reference sheet and realizes that instead of 734 it should have been 754.
- 2:18 Carol returns to her desk and dials the number which includes the 754. She quickly gets through to the Landview branch office. She says "Hi, this is Carol at the X company in Genewa City." She inquires about the branch transfers that the Landview branch is looking for. She says that one of them is #7110 and asks what the other number is. Carol mentions that she has it recorded in adjustments (that is, it is recorded on the branch journal under adjustments). She tells the Landview branch person that they should be receiving a 1288 any time now. This refers to an entry of a branch journal. Carol says that she will mail them a copy today. This inter-branch transfer is happening because the Genewa City branch is getting supplies in bulk and then shipping them to other branches. Carol hangs up the phone and looks in a binding case and finds a note regarding the branch transfer number 1288. She gets the black branch journal folder from behind senior linen supply clerk's desk area. She brings it to her desk and looks up this particular transfer. She realizes it should be 1289 and not 1288. She corrects the 8 to a 9. She goes to the copier and makes a copy of the branch transfer.

Carol completes month-end medical insurance payments. Medical payments refer to the company's insurance policy, such as dental. The procedure involves taking the total of employees' payroll deduction in addition to the company's contribution toward the insurance to determine the correct payment. She has a list of codes and the percentages to charge for each department, and adds up the various figures.

Carol enters information into expense sheets which are a record of how much this organization is spending. She indicates in pen the supplier's name, invoice number, code, and amount. She determines the exchange rate on American bills and calculates tax. She keeps a record of taxes due and submits payments to the provincial government. She completes a month-end inventory where inventory expenses are listed in a ledger. The information copied onto an expense sheet, is later used to type a branch journal sheet.

The accounts payable clerk completes the branch journal which is recording expenses and revenues for this branch. All branch journal entries include information about accounts

payable and accounts receivable. A branch journal form is typed every few days. For example, Carol records deposit slips and cheques from linen supply, accounts receivable, drivers, and the retail store. All non-sufficient fund cheques are recorded. Under the expense column, she lists all the expenses recorded on the expense sheet discussed earlier. Information about large assets is also recorded. An activity associated with the branch journal is recording the flow of money between this branch and the head office. She uses a calculator to add each of the columns on the sheet. At the bottom of the branch journal sheet, Carol records the branch journal number and name, the dates from and to, and who the report is submitted by. She attaches any copies of bills to the form sent to head office, such as hotel bills. She completes a request for cheques that correspond to the invoices attached.

Carol completes the accounts receivable recap. The task is summarizing records in accounts receivable. The work includes information about cheque amounts that have been entered in the computer and are listed in the branch journal. She gives information to the credit manager concerning accounts that are past due on thirty, sixty, ninety, and one-hundred-and-twenty-day payments.

The accounts payable clerk completes month-end reconciliations. She fills out a reconciliation sheet, taking information from the branch journal book, and recording it on lined ledger paper. She lists everything on the reconciliation that is in the accounts payable column in the journal. She uses a calculator to reconcile accounts payable. The accounts payable ledger has to balance with the the trial balance figure. She checks bank statements and stores deposit slips in a company deposit box. The journal figure must match up to the bank's statements to this firm.

She also prepares and types credit applications to obtain credit from a supplier. She types the names, addresses, and telephone numbers of three companies as references. Once she fills out an application, all the information is placed in an envelope and mailed.

Carol maintains files on various suppliers in two of the filing cabinets along the wall near the payroll clerk's desk. Copies of invoices, packing slips, purchase orders and branch journal sheets are kept in accounts payable files. The original copy of the invoice is sent to head office; the second copy remains in this branch. She maintains files on inter-branch transfer papers, and files copies of cheques alphabetically. In all of the files, the most recent papers are placed to the front of a file. The following is an excerpt from the activity record that describes filing.

1:03 Carol takes the invoices copies to the west wall filing cabinets to file. She goes to the right hand filing cabinet first. She opens the second drawer. She opens the drawer at the same level in the filing cabinet to the left of this one and places the papers to be filed on top of the folders in this drawer. She uses both hands to flip through the folders in the right hand filing cabinet drawer. She has placed her stapler and stapler remover on top of the second filing cabinet. Carol comments that since the year end was on June 30th, the drawer now contains only a few files and the drawer in general is quite orderly. She comments that it is easy to file at this time. Last year's files have been placed in two drawers in the left hand filing cabinet. All of the files are in alphabetical order. There is a file folder for each letter of the alphabet and the first name of the company is used to locate the particular file folder. Most files are placed alphabetically according to the first letter of the company name. However, large suppliers will have a folder of their own. Carol files the papers carefully. These papers are the total reference this company has as to whether a company has paid their bill to this company or not. She comments that most companies are quite honest generally. All of these files are just listed alphabetically and are not separated according to the categories of manager, US, or Canadian. As she goes through the file folders, she straightens papers and restaples in some cases where the papers have not been stapled together in the same direction. Once a batch has been sent to head office, the accompanying papers (which include invoice copies) are filed as soon as possible. If there are any calls from suppliers, the back-up files can be found alphabetically in the filing drawers. Some of the papers that Carol is filing are individual sheets. Others have two sheets stapled together. This would be the invoice copy and accompanying packing slip if present. Purchase order copies go directly to head office. Carol files an invoice from the X bus company which does not have a packing slip attached. Within each file folder which is labelled according to the letter of the alphabet, the papers are filed alphabetically according to company name. Many of the suppliers are American owned.

Other work tasks that Carol does are responding to inquiries internal or external to this organization. She answers inquiries from other employees such as salespersons, linen supply clerks, and department managers. She also answers customer inquiries by telephone. Suppliers' representatives inquire when this company is going to pay a bill. The following are two excerpts from the activity record that correspond to answering inquiries.

- 8:33 A salesman arrives at her desk and asks Carol if she can locate a customer's NSF cheque. This customer has talked with the salesman and has agreed to pay as long as they get back their original cheque.
- 1:53 Carol goes to the filing cabinet drawer to refill the invoice copy which she had just taken out. While she is there, the phone rings. She finishes filing the invoice copy, closes the drawer, and then goes to her desk and answers the phone. This is a private call. While she is on the phone, the branch manager, comes to her desk and asks her where are the bills that have not yet been processed. She puts the phone down on her desk and tells him "over there". She gets up and goes to the cupboard behind her desk area and shows him. They exchange a few brief comments. The office manager is also at her desk area. She returns briefly to her phone call and hangs up. The office and delivery manager leave and go to the office manager's office. An employee from the retail store arrives at Carol's desk regarding the inter-branch transfer mentioned earlier.

Carol has to sort copies of cheques. The following are two examples from the activity record.

- 1:16 Carol goes to her desk. She takes a pile of cheque copies that have the branch journal stamp on them to signify that they have been entered in the branch journal. At the present time, they are in numerical order for the purpose of journal entry. Carol now files them alphabetically. She places them in two piles on her desk. The left hand pile is for A - L and the right hand pile for M - Z. Once she has divided them into these two piles, she divides them into further piles on her desk according to alphabetical listing. She works very quickly separating these cheque copies into alphabetical order. She has individual papers and piles of papers scattered across her desk.
- 1:22 Carol takes the scattered piles and places them starting with the letter "A" face down in a pile on top of the calculator to her right. She takes this pile and puts it on top of her typewriter and then sorts the M - Z pile in a similar fashion. As she sorts these cheque copies, she carries on a conversation with a linen supply clerk concerning a child's prop for use in a swimming pool.

She teaches the new accounts payable clerk to do various tasks. Carol started training this employee when she returned from maternity leave six months ago. At that time, Carol had decided that she would no longer work full-time. Thus, this clerk will do Carol's job when Carol is not in the office.

The Official Job Description

Job Description - Accounts Payable and Branch Journal Clerk

Accounts Payable: General Description of Work

This is accounting work in a commercial laundry office. Work involves preparing and accounting, accounts payable and related items for submission to the general office.

This position reports to: Supervisor

Duties:

- Receives and controls incoming documents
- Prepares invoices for departmental approval
- Submits invoices to general office for payment
- Controls payment and reconciliation of all payable accounts
- Prepares and types local cheques
- Prepares all necessary internal documents for the submission and control of accounts payable
- Maintains all accounts payable files
- Prepares and controls all petty cash purchase
- All telephone inquiries internal or external

Branch Journal Clerk: General Description of the Work

Duties:

- Receives all records of expenses and revenues
- Translates information into GL accounts and enters on Branch Journal
- Controls and is responsible for petty cash
- Calculates and remits all taxes due
- Reconciles all Branch Journal entries to include Accounts Receivable, Payable, and withdrawls
- Controls cash flow of monies between Branch and Head Office

Miscellaneous

- Prepares certain special accounts billing

The work of the branch journal clerk has become a part of the accounts payable job. For that reason, the official job description that pertains to the branch journal clerk is listed.

Analysis Of Case Three

Regulating and Maintaining Social Relations

The official job description of the accounts payable clerk does not take into account the dimension of regulating and maintaining social relations. Although management's general outline of the work describes some of the routine procedures, it does not consider that these activities are carried out in the context of other people's work. This observation is consistent with both Case One and Case Two. The category refers to the capacity to maintain some characteristic of encounters in social relations. The dimension is used in order to discuss how the accounts payable clerk goes about working with other people during her job.

As in Case One and Case Two, a large part of Carol's job is interacting with other persons. Carol's job requires that she respond to inquiries from suppliers' representatives and participate in discussions about work-related procedures with other employees. This case is similar to Case Two because they both have relations that include clerk-superordinate, clerk-clerk, and clerk-subordinate. Whereas Case One had no supervisory role, both Case Two and Case Three have some authority over other people. Carol has authority over the new accounts payable clerk that she is training to take over her job part-time. To a lesser degree, she has a superordinate position in relation to the linen supply clerks. Many of the same requirements listed under Case One and Case Two apply to this job as well. For that reason, I will not repeat all these requirements, but indicate some of the abilities that are specific to this job. Unlike Case One and Case Two, Case Three has no relations with clients or customers. Case Three has contacts with employees from supply companies. This relation, however, differs from the clerk-customer relation in the previous cases. It is necessary to consider the various kinds of social relations that are part of accounts payable work in this organization.

First, I will consider the clerk-superordinate social relation. From reviewing all three cases on this dimension, there are some shared requirements in all of the jobs that appear in

maintaining and regulating relations with superordinates. Women are often socialized to display nurturing characteristics, and these qualities have come to be expected in the office where much of the work involves assisting other employees. The work that so many women do in the home is taken for granted in the office, such as the "invisible work" that few people are given credit for completing. There are a lot of abilities and activities that are carried out within this job that appear unrecognized by other people in the work environment, and are probably never realized by persons outside of the organization.

Some of office work involves catering to persons in management positions. Although the official job descriptions might not include fetching coffee for supervisors, there are numerous duties that all three clerks do in their daily routines for superordinates such as making lunch reservations, sending flowers, and the like. Carol, for example, might have to locate a form the manager misplaced or re-book an appointment that he forgot.

Case Three works with managers of departments more than other employees such as sales persons or plant workers. She deals with managers constantly because they give her work instructions and tasks to complete. All the invoices are passed through managers and given back to her. She has to give them money for parking or funds from petty cash when requested. She is constantly telling the office manager what various codes represent because he has forgotten them. She is required to maintain a comfortable and compatible working relations with other employees, particularly those persons who have the power to terminate her employment.

The work in this setting in part requires that the clerk have the ability to read and interpret other people's emotional states as it did in the previous two cases. It is particularly relevant in relations with supplier employees. She frequently has to offer reassurance to hostile persons from supply firms who are demanding that their company get paid. When interacting with these angry individuals she has to remain patient, and not become upset or irate herself, if she is to manage inquiries about invoices effectively.

She makes sure that shipping and brokerage companies are paid promptly, but for some reason workers from these firms constantly ask about the status of cheques. During these constant inquiries, Carol has to convey to the representatives the date when a cheque was issued, and remain calm and polite, even though the repetitiveness of calls becomes annoying. She manages the interactions to ensure they run smoothly as these companies are crucial to this firm.

The official job description says that the clerk must answer, "all telephone inquiries internal or external". But, such a description does not encompass the skills needed to effectively interact with callers, for example her contacts with supply firms who demand payment for goods already delivered.

The tact required when conversing with persons from brokerage companies is conveyed during the interview with Carol:

Brokerage companies, first of all, have a deposit from us, to begin with, but for some reason, they don't care, they just nag and nag and nag. The invoice will be a week old and they're phoning and they want to know exactly when it was sent out. "Well could you just check to make sure that it was that invoice", When you've got all the information and you know that it's that invoice, I find it very annoying.

The example was chosen because it reflects the requirement of monitoring the emotional states of others. If Carol were rude to collectors, then, this company might lose its business with these firms. She allows her annoyance to take a second place to the priority given to these companies that this company buys something from. She has developed techniques keeping these employees happy.

Nevertheless, answering the telephone and responding to inquiries from supplier representatives requires that Carol know how to maintain and regulate these social relations. During the interview she reported that clerks who lack "telephone skills" are requested to take a course:

It's funny because I guess I've been dealing with, I've been in office work all my life. Some of the girls that come in, I don't know who notices or why, but some

of them have been sent for that course in telephone answering . . . I just guess they don't have the tactics, whatever to deal with the public. So they're sent to this course.

When asked about the skills that are involved with this task, she indirectly alludes to the ability of monitoring and responding appropriately to the emotional states of others. She makes reference to the skills that are needed to answer the telephone:

That they're [callers] always, that you feel sorry for them and they're always, not always right but always apologise, you know, for everything. Because I know myself, if I call a company, I don't want to hear, "well", "so" or something like that, you just want to "Oh, no, aren't we terrible" "isn't that horrible, oh gee, I'm so embarrassed" or something like that, it just, it gets them not being mad anymore, gets them thinking "oh, they're on your side", I guess. It kind of, cause I've never really had problems with. . . because I used to work in linen supply, I've got, I've had a couple of people call up and start swearing their heads off, just filthy language that you've got to deal with.

Carol explained how important it is to come across as a warm, caring, concerned, and competent employee.

When she answers inquiries from suppliers' employees she has a general outline about how to structure the conversation. When a supplier wants to know why they have not yet received a cheque, she starts out the conversation as sounding shocked. Then, she moves the discussion in the direction where the supplier calms down. If she is unable to relax someone who is angry or upset, Carol transfers the call to the supervisor. She takes the last measure so that this company does not lose a supplier, and she does not lose her job. She constantly uses her own judgment on the telephone about what she ought to say, and what the person on the other end perhaps wants to hear.

If a supplier insists that their company did not pay an invoice, Carol has to use her judgment about whether or not the cheque was sent. She generally looks up the information in the records. If a cheque was sent, but a supplier insists that no money was received, then she has to use her judgment about what to do. Quite often she will cancel the cheque if the supplier is persistent, and send another one in its place. If she does cancel a cheque,

however, Carol has to contact the head office because they record information about cheques that are returned, cancelled, and cashed.

The job involves dealing with contacts from suppliers, and not customers. Case One and Case Two, in contrast, are required to serve clients at a reception counter or by telephone. The work in this job demands less of the social interaction abilities. Carol identified the distinction between working with suppliers as opposed to customers:

Customers, its, I don't deal with customers, I deal with our suppliers. I'm lucky I don't have to step on glass all the time around them because I deal basically with suppliers, not customers.

What this example conveys is that Carol is not required to "please" customers which is necessary in Case One and Case Two. Case Three, however, has to ensure interactions with supply firm employees run smoothly.

The third type of social relation is between herself and other clerks or persons of a similar status, such as an accounts receivable clerk. There is an interesting example of an activity involving this kind of social relation that Carol has to regulate. Sometimes other employees ask her for cheques because she works in accounts payable. Carol has to take into consideration that an employee may request a bill to be paid that is not necessarily legitimate. She uses her discretion about what is a legitimate or illegitimate invoice for this branch office. If a worker asks for a cheque that Carol believes he or she has no right to, she makes sure that she obtains authorization before typing the cheque. She does not want to waste her working time typing a cheque that will get cancelled. At the same time she has to maintain comfortable relations with co-workers. Creating a hostile working relation with other workers might impair her ability to accomplish her work. If for instance, she refuses to pay a bill that another employee views as legitimate, then the employee may make it arduous for her to do her job by responding uncooperatively to her requests.

The judgment that she uses in completing the task of issuing local cheques is revealed in an excerpt from the interview:

Nobody's done anything ever crooked. Like, nobody's tried to pass something for their own benefit or anything. Sometimes they want to pay for tickets, like traffic tickets, and a lot of times we've paid them.

Carol has to decide whether the company ought to pay for drivers' traffic tickets.

The final kind of social relation is between herself and subordinates. Case Two had more authority in her job in comparison to Carol. Training other workers is a form of clerk-subordinate social relations. Carol has trained a number of workers. In order to teach the new accounts payable clerk a variety of work tasks, Carol has to be patient even when it becomes frustrating if the trainee does not understand how to complete the work. She has the ability to express how to accomplish the work so that the person who is learning the job is able to absorb, interpret and apply the instructions.

The way she conducts herself depends on whether she interacts with a subordinate, clerk, supplier's representative, or superior. As noted in the previous cases, these relations may take the form of cooperation and communication, work flow, and taking over someone else's job.

The requirements, among them, include the ability to speak and write clearly with an understanding of the technical character of the work, including its vocabulary. Similar to Case One, Case Three has to know terminology used in business and in accounting procedures. Both these clerks, for example, have to be able to understand and utilize terms used in accounts receivable. Case One used an accounts receivable program on the computer, and Case Two does relief work in accounts receivable. In each case studied, all three clerks are required to conform to the informal social norms of the office, and comply the official rules and orders from people in higher positions. The job requires anticipating others' expectations and needs, gaining the respect of others, dealing with problems of task dependence and sequence, and knowing the characteristics of other people. A crucial job requirement of Case One, Case Two, and Case Three, is monitoring the emotional states of others.

Coordinating Different Tasks

The dimension is in reference to how tasks are put together. Carol manages numerous tasks that she has to coordinate. The ability to coordinate work is also required in the two previous jobs. Carol has slightly more tasks to coordinate than Case One, but fewer tasks to manage than Case Two. The number of tasks performed by Case Two exceeds that of the remaining cases, but because Case One is from a small office, she engages in a diversity of work activities that the other clerks do not.

From experience, this clerk has determined how long a task generally takes, and what tasks are priorities and need to be finished as soon as possible. For instance, she would not leave two half day activities to complete in a single day. If something were to go wrong while she was doing one of the procedures, her entire schedule would become disorganized. Tasks such as answering the telephone, in contrast, have to be attended to immediately. Still other tasks are completed once a week or once a month. Medical insurance payments are prepared once a month, and issuing cheques for shipping and brokerage companies once a week. Carol schedules exactly when she is going to work on weekly and monthly assignments. She sets aside an allotted period of time to ensure that these duties are completed. High priority tasks she works on as soon as she gets to the office in the morning.

Carol has some tasks that she must complete when she first arrives in the morning, for instance opening the safe that contains computer equipment. She is one of the few people that know the combination to the safe. Therefore, in order for the computer operators to begin their work, they rely on Carol to complete this task right immediately.

If an employee came in with a request, she attends to the employee before returning to what she was originally doing. She has developed knowledge about when the work slows down and picks up, and uses this knowledge in order to manage her work. Afternoons are usually less busy, which is time when she can catch up on work. The two other clerks examined also organized their work on a similar basis.

In order to ensure that shipping and brokerage companies are paid promptly, Carol coordinates her work to make certain that these payments are not past due. She has made herself a schedule that these invoices are paid once a week. During the week she collects a number of these bills in order to do a batch, which is a faster way of completing the work than issuing a cheque every time an invoice arrives in the mail.

A similarity with Case One and Case Two is that Carol sometimes does a number of tasks at once. For instance, she coordinated filing work with answering the telephone, discussing invoices processed with the office manager, and giving information about an inter-branch transfer to another employee. The following passage is taken from the observation record.

1:53 Carol goes to the filing cabinet drawer to refile the invoice copy which she had just taken out. While she is there, the phone rings. She finishes filing the invoice copy, closes the drawer, and then goes to her desk and answers the phone. This is a private call. While she is on the phone, the branch manager, comes to her desk and asks her what they have in bills that are not yet processed. She puts the phone down on her desk and tells him "not much". She gets up and goes to the cupboard behind her desk area and shows him. They exchange a few brief comments. The office manager is also at her desk area. She returns briefly to her phone call and hangs up. The office and delivery manager leave and go to the office manager's office. An employee from the retail store arrives at Carol's desk regarding the inter-branch transfer mentioned earlier.

The example was chosen because it reveals that the clerk is required to perform various activities at one time in order to keep up with the pace of work in the office. Another activity record excerpt provides an additional example of Carol's ability to coordinate, connect, and manage different tasks.

9:48 Carol straightens her desk area. She takes a 'request for cheque' form which has been filled out by the chief engineer, regarding painting and cleaning. Carol puts a double cheque form into the typewriter and quickly types in the necessary information. She goes to the cheque register paymaster machine which is behind her desk area to stamp on the amount that will be paid on this cheque. She takes the cheque to the office manager to sign. While she is there at his desk, she asks him about a bill from a company supplier which the branch journal clerk had mentioned had not been paid. The office manager thinks it has been paid. Carol asks the office manager about the pricing on goods that are being shipped to another branch of the company. The office manager says to talk to the branch manager as he knows the price on that. The office manager's phone rings and he answers it. Carol returns to her own desk.

Carol sometimes coordinates different tasks to save time. When she was preparing a cheque, she had to go to the manager's office for authorization. While she was at his office she also asked him about an invoice that had not yet been paid. Thus, Carol coordinated obtaining information about a bill with receiving authorization for a cheque in a single trip to the manager's work area.

A requirement of all three jobs studied is the ability to connect, coordinate, and manage different tasks. They must be able to organize and schedule their work load according to time constraints. In each case, the clerks are required to organize duties around the office's cycle of activities. The skill needed for this job, and the other cases, is not only the ability to complete tasks, but also the ingenuity with which work is coordinated. All of the official job descriptions, however, do not report this ability as a job requirement.

Knowledge of the Organization and Other People's Jobs

The category is used in order to discuss what a clerk has to know about the organization as a whole, and the different jobs within it. Knowledge of the organization and other people's jobs is required in Case One, Case Two, and Case Three. Accounts payable work requires that a clerk knows what types of goods and services were required in a specific department, in order to send incoming purchase orders, packing slips, and invoices for departmental approval. She has to know what person to send this information. For example, the office manager receives invoices concerning the office and computer room; the delivery manager receives anything to do with trucks; the purchase department manager receives all invoices for this department; and the store manager receives bills related to the store and retail sales. Carol also has to know where everyone is in the plant, and what gets done in each department. She is always bringing bills to different people, thus it also helps to know where the work is done.

The clerk must know the various departments, and have a general conception about the work that gets done in each. Sorting incoming mail demands that Carol know the various departments, and the type of mail they receive. She has to decide what mail to keep and what mail to throw out. She uses her judgment about whether or not a piece of "junk mail" might be useful to a particular department.

Completing rush requests requires that asks workers to give her rushes in the morning because that is when all the signers are usually in the office. If she were to leave the task for later in the day, signers may have gone for lunch and not return to the office for several hours. If a worker comes to her in the morning she knows that she will be able to type a cheque right away, and have it signed. It is necessary to know where other employees are at any one time. This is a requirement associated with all three jobs studied. For example, Carol has to be acquainted with the various job positions, and employees' schedules. She has to keep track of who is in the office, as well as workers who have gone for lunch, have called in sick, or have gone on vacation.

The job requires that Carol know about the rules and procedures in other organizations as well as this one. Therefore, she has to have knowledge of work procedures in her own branch, other branches, head office, and other organizations such as banks, suppliers, and the Post Office. In every case, the clerks had to know something about the Post Office's work procedures and official rules in order to complete mailing duties. Another example is that Carol has to know federal and provincial sales tax in order to determine the amount this company owes suppliers when an invoice is received. Because many of this company's suppliers are located in the United States, she is required to understand American and Canadian exchange rates for completing cheques.

Carol also has to have a stock of knowledge about accounts payable and payroll at head office. This clerk has developed a working knowledge of recognizing voices, and which person will best provide an answer to a question. She has never seen the employees working in these areas, but she has come to know their names, and their personalities. She knows

who does certain jobs, and who to ask certain questions. There are some people she avoids, to ensure that she does not spend a long time on the telephone. The same knowledge was developed in the previous cases. In Case Two, for example, Paula acquired knowledge of persons in different departments with whom she has contact.

Outside of the organization, Carol has extensive knowledge about company suppliers which is conveyed in a passage from the interview:

Well, it helps, I guess, to know a couple of the different people that work at these places. Just also to know who to ask for, or who's going to give you a good answer, who's going to tell you they'll call you back. And you kind of get to know that just by their invoices, how they invoice, how they do their statements. Who to pay, who to make sure that gets paid right away and you don't sit on their invoices. Some people are quite picky, or their credit people are very good, in other words, so that they keep on talking to you. So, never get in their bad books.

Her experience provides her with a basis for developing a categorization scheme of workers in different offices. She is able to identify a conscientious worker from one who is lazy, who are the most helpful persons, and who are the least likely to comply with a request for assistance. This knowledge is then utilized in getting tasks completed such as making an inquiry about an inter-branch transfer at another branch office. Similar categorization schemes were developed in Case One and Case Two.

As in the previous cases, she is also required to know something about other people's jobs. Because she is recording and transforming information about the work that gets done in this branch, it is useful to have an understanding of others' work in order to find a particular document for herself rather than asking another employee. An example is finding a customer file in one of the linen supply clerks' filing cabinets.

She feels uncomfortable about saying to a customer that another worker will have to answer a question. She has taken it upon herself to know about the work that goes on in the office, and to be competent at providing answers to customer inquiries. When work is slow, particularly during the afternoon, she passes time by helping another clerk. During the process, she has learned a number of jobs.

She knows linen supply, accounts receivable, and even sales. Half of her time is spent doing relief work in accounts receivable. On the observation date, Carol was working on adjustments for accounts receivable. The last employee did not know how to do these adjustments, and for that reason Carol completed the task.

There are requirements associated with this dimension many of which are shared in common with Case One and Case Two. One must know the characteristics of other people, and the character of the work done in the organization. For example, the accounts payable clerk must know the different jobs, who they are held by, and general work functions performed in each position. In order to do relief work she is required to know other people's jobs.

Beginning Work After an Interruption

The dimension refers to re-initiating a program of action after encountering a disturbance. Throughout the day, Carol has to stop one task and attend another, and pick up the initial task after experiencing a disruption in the work. For example, she might prepare invoices for department approval when an employee makes a "rush request". In this case, she has to stop what she is doing and prepare a cheque. The telephone ringing becomes a constant source of interruption. Carol has to attend to a call immediately, even if she was in the midst of accomplishing other work. Constant interruptions are not only frustrating, they make it more difficult to finish tasks. Carol and Janet spend much of their time calculating figures. The activity requires a lot of concentration. The nature of office work conveys a constant state of confusion, even though work is getting accomplished: other employees are chattering, people are leaving materials in work trays, the office manager wants information, telephones are ringing, and the like. This busy, rushed, and often loud atmosphere makes it difficult to focus on work without getting distracted. Nevertheless, sometimes it is possible for her to attend to two tasks at once. For example, Carol types letters while talking on the telephone.

A requirement of the job is the ability to begin work after an interruption. It is also a requirement in the administrative clerk's job and the clerk-stenographer's job.

Exceptions

Exceptions refer to the notion that there is a routine course of action. When something goes wrong during a routine procedure, it is an exception. In each of the jobs considered thus far, and including this one, the clerks are required to deal with exceptions. Because the jobs differ in each case, the exceptions also differ. The following are ten different exceptions to Carol's work that are taken from the observation record. A requirement is the ability to detect an error, and then solve the problem.

- 9:05 She uses whitener to make a correction on the inventory form. As she registers a bill on the inventory sheet she puts it upside down at the top of her desk.
- 10:23 She finishes adding, takes the calculator slip out the calculator and checks to see if the amounts come to 0. She finds that she is out by \$4.00. She puts the slips down beside the branch journal on the desk and goes through the columns. She finds an error and corrects it on the calculator slip.
- 10:47 Carol puts a plus sign beside the two items on the calculator slip which are incorrect.
- 10:50 Carol records corrections on a lined sheet of paper. She finds a typing error on a cheque. In one place it looks like 36 and in another 26. She takes out a binding case with adjustment files to find the invoice that will show what the amount should be.
- 10:55 Carol continues to work on the corrections. She records the information for correcting the errors on a piece of paper. This includes for each error the invoice number, the cheque number, the incorrect amount and the correction. Carol writes a note to herself regarding the corrections that she will make the next time she does a branch journal sheet.
- 11:37 Carol uses her calculator to add the amount column of the form 6 which has a batch number of V1691. She gets a total. She adds the inventory column on the green sheet which should balance with the form 6 inventory total, but it does not. Carol comments that it is difficult to balance someone else's work.
- 11:47 Carol returns to her desk and sits down. She examines copies of invoices. She tries to balance the branch journal clerk's figures on the second page of green sheets. She is out \$.06. She examines the invoice copies that had been stamped with key number, etc. She gets up and goes to the pile of purchase orders. The total is correct but one column is out by \$.06. She examines very closely to find where this \$.06 is.
- 12:41 Carol returns to the green accounts payable breakdown sheets that concern the \$.06 miscalculation. She comments "I'm going to try to figure this out as it's bugging me". Carol cannot see where the error is at this time. She comments that it bugs her that it's not balancing and that she will try to find this out later, but not right now.
- 1:37 Another paper is regarding a mistake that was made in a branch journal entry. The branch journal clerk had made an entry in the wrong column. Carol has circled the error in red pen. She places the paper in a folder in the right drawer of the desk.

3:05 When she returns to the reconciliation, she realizes that she should be doing July and not August. She rips off this paper and throws it into the garbage, flips the branch journal black book pages to July and restarts another lined ledger page.

These are just a few examples of the exceptions that Carol encounters in doing her work throughout the day. The number of examples convey the frequency of exceptions, and indicates that problem solving abilities are crucial to this job.

Under usual circumstances Carol has to match a packing slip with an invoice before sending them to head office for payment but, many packing slips do not have a record of invoice numbers. In these exceptional cases, she looks for a purchase order number. If none of this information is available for matching slips, she resorts to a listing of actual goods, and makes sure that the goods invoiced are the same as the goods received:

When separating invoices according to department, Carol is periodically confused about which item was ordered for which department. Occasionally, she has difficulty in deciding who ordered goods, and at other times she does not know why this branch is billed for a particular item. Every so often the delivery manager will order clothes for a driver, and Carol will incorrectly send the invoice to the person in charge of purchasing garments. She said during the interview that she understood most of the goods ordered by most of the people in each department with the exception of the engineer. She had little understanding about the goods he ordered, but when she encountered an invoice that appeared unusual, the goods ordered were often for this worker.

Unusual circumstances occur in connection with invoicing, and Carol has to solve these problems when they arise. Carol discussed one of these unusual circumstances when a supplier's accounts receivable clerk contacted this company, and said they did not receive a cheque:

I remember once they [head office] pulled it out and they listed it, you see, they also send us a, what do you call it, a computer print-out that's got every cheque that they put to each code of our's, right? And they put it on, but I think it was American, so we never get the American cheques back. They put it on our records, so I noticed that we had a cheque number and then they backed it off, and this company was bugging me for the money and I called them and they

said, 'oh, yes', you know, it's been paid, it's on our records, and the company never got it, and the cheque was never returned, and then we found out that some person over there pulled the invoice out, recorded it and then pulled it and pulled the cheque as well and never sent anything and they found it somewhere.

In this instance the cheque to the supplier had not been sent from head office even though it was listed as if a cheque had been issued.

If something goes missing, Carol has to know how to find in the records exactly when a cheque was sent, if it was sent at all. For instance, a sheet from head office lists information about cheques, such as the cheque number and the date when issued.

Occasionally this office will send a cheque for the suggested retail price of goods rather than the actual price of goods that this company negotiated to pay. If such an error is detected, Carol has to contact the supplier about the payment. She then has to request for a credit to the company's account or a refund for overdue charges. The supplier is not likely to bring the overpayment to the attention of this office. Carol usually detects this kind of error when she is making copies of documents for record purposes. She then has to contact the supplier about the discrepancy in order to solve the problem.

There are still other exceptional cases in arranging for the payment of invoices. The routine procedure is to wait for a packing slip before paying an invoice. In the case of brokerage and shipping companies, however, Carol does not wait for a packing slip. She knows that brokerage and shipping companies are crucial to this firm's business operations, and to lose these connections would impair the functioning of the organization. Therefore, she makes sure these companies are paid quickly, and the invoices are not held for any reason in a file.

The figures on expense sheets are supposed to balance, but sometimes errors occur. Similar exceptions occur in the accounting work of Case One. The knowledge required to solve the problem of expense sheets that do not balance in Case Three is revealed in excerpts from the activity record where Carol works through the entire set of procedures in order to solve miscalculations by the branch journal clerk.

- 11:34 After finishing the conversation with the previous caller, she continues examining the inventory sheets that don't balance. She takes the green accounts payable breakdown sheets which are broken down by invoices and code number and examines these along with a pile of invoice copies. These invoice copies are what she worked on earlier this morning. She looks through the invoices that were posted to the branch journal this morning.
- 11:37 Carol uses her calculator to add the amount column of the form 6 which has a batch number of V1691. She gets a total. She adds the inventory column on the green sheet which should balance with the form 6 inventory total, but it does not. Carol comments that it is difficult to balance someone else's work. Carol goes through the invoice copies and checks off items on the green sheet that are on the inventory sheet. She uses her calculator to add the sums for one company and then checks off the total on the green sheet in pencil. She sets aside the invoice copies face down on the left side of her desk as she finishes checking through them.
- 11:43 Carol figures out that the branch journal clerk has done two batches and put them together on the one sheet. She draws a line on the inventory sheet (form B) near the bottom up to where this branch journal will record. Since it is an arbitrary decision as to how to group a batch, she places an X through the items on the bottom that will be on the next branch journal sheet. She takes the pile of invoices and date stamps them with the same date as on the batch. This allows for it to be easier to be found later if needed. She date stamps the original invoice copies and the file copies also. These copies already have the stamp with key number, amount, received by, date, etc., on it. She takes these invoices to the office manager who handles inventory control and leaves them in a basket for him.
- 11:47 Carol returns to her desk and sits down. She examines copies of invoices. She tries to balance the clerk's figures on the second page of green sheets. She is out \$.06. She examines the invoice copies that had been stamped with key number, etc. She gets up and goes to the pile of purchase orders. The total is correct but one column is out by \$.06. She examines very closely to find where this \$.06.

She has to have a thorough knowledge of routine procedures in filling out expense sheets, and a working knowledge about exceptions that might occur. There are some types of mistakes that are made repeatedly, and from her experience Carol is able to look for these kinds of errors. The task is particularly difficult when she has to identify another clerk's errors in completing work forms. She conveys how difficult it is to locate errors in the work completed by other people:

I almost know whenever, when something's wrong, I know exactly what to look for, for my errors, I wouldn't know how to check somebody else's work so well, because I don't know what their's would be all the time, but I kind of know what I do which is not putting a bracket on something quite often, so before I even start, I look to see if it's all minus and plus. Because if I don't put a bracket on it, then of course when I total it all, it jumps out as a debit for me. So that's one of my errors. And also because I don't see that well, I switch and then you're always out a 9, right when you, oh, how does it work, I can just, I can just look for it, it's incredible that I can see, if I'm out a 9, it's because I switched over, I

reversed, like a five and a four, I can't explain it. Anyway, I know exactly what I've done.

Case Two also experienced errors that other employee had made, and she had to solve in order to complete her work. In each case the clerks learn to identify re-occurring exceptions to their specific work tasks.

Exceptions occur when Carol prepares and types branch journal sheets. The excerpt from the activity record indicates how she solves the problem of a miscalculation of four dollars when the balance ought to be zero.

- 10:23 Carol comments as she uses the calculator that it probably won't come out to 0. She finishes adding, takes the calculator slip out the calculator and checks to see if the amounts come to 0. She finds that she is out by \$4.00. She puts the slips down beside the branch journal on the desk and goes through the columns. She finds an error and corrects it on the calculator slip. She continues cross checking from the calculator slip to the branch journal and writes in two places with pen under expenses. In this case she had put the entries in only on one side but it needs to be balanced on both sides. She continues to check and when finished checking she readds on the calculator to see if this second total will come out to 0. She adds each column.
- 10:34 Carol gets a second total. She tears off the calculator slip, holds it in her left hand, and with her right hand uses the calculator to add up the subtotals. It balances to 0 this time.

Because Case One, Case Two, and Case Three are required to type, they all experience occasional typing errors. It is important to try and keep typing errors to a minimum, but they inevitably occur. An exception in Case Three is typing errors on cheques. On one cheque that Carol was processing a figure appeared as a thirty-six in one location and a twenty-six in another. In order to reprint the cheque she had to take out a binding case with adjustment files to find the correct amount on the invoice. Sometimes when she makes an error using the typewriter she spends half an hour trying to locate the mistakes.

Factors outside of the organization may interfere with the task of paying company bills. For example, a postal strike interfered with making payments to companies a few years ago. If the strike had lasted for an extended period of time, Carol would have had to develop alternative methods for paying bills than through the mail, such as using a courier service to pay utility bills.

Many unusual circumstances arise when completing paper work. In the case of inter-branch transfers, sometimes the form is sent to the wrong branch. When this happens, the employee from the branch where the form should not have been sent will contact Carol about the error. In order to correct the mistake she has to destroy the form with the mistake, and complete a new form. She then takes the incorrect form off the journal and records the correct information. Lastly, she sends the new copy to the worker that should have received the original form.

Problems arise in connection with bank statements. Carol discusses a few of the difficulties she encounters:

Oh, there's just millions. If you've typed a deposit and just taken the wrong figures and you've got the wrong figures all month, and then when you're checking them off, of course you've got just millions of them because you have lists and lists, we do what, five, six deposits a day, sometimes more, so if you put a 10, instead of a 20 or whatever, and you go all month with it, you don't do your bank statement till the next month before the 9th, that's the deadline and it just won't balance. You'll look for that \$20 for ages. And also when you're checking them off, you're just checking, you see the deposit, you see it and your eyes are just going back and forth, well you're going to miss a 2 or 1 every once in a while, right? And then you're just looking for it, like you have to do the whole thing over again, because there's just no way of spotting something, that, oh. I start erasing all my ticks on my journal, and just start in right straight as if I'm just doing it all over again. Just for a lousy \$10 or something. NSF's, sometimes they'll go on, and it's something that I know what to watch for now, but it's happened to me a couple of times. They'll go on and then somebody will pull it after you've had it and took it, they'll pull it for something then give it back to you, so you add it on again, so you're looking for 2 amounts. You know, things like that. Oh, bank statements, a million things can go wrong. Our bank actually has once in a while given us money, a deposit which we don't know where it comes from, and then you're hunting and hunting, trying to figure out how come you've got no record of it, when they've actually just given it to you from somewhere else, right. Oh, I don't know, just, I really enjoy doing it but it's a very tedious job.

The working knowledge that Carol possesses has developed over her experience in reconciling bank statements. She has a system for solving frequently occurring problems, similar to the techniques that Case One and Case Two developed in response to their work.

The official job description mentions nothing about how a clerk has to be able to cope with exceptions to routine work procedures. One would assume from the official job

description that everything will go as planned as long as the clerk follows set procedures. An investigation of the job, however, reveals that exceptions frequently occur. Among the necessary requirements, that also apply to the previous cases, are knowledge of routine procedures, the ability to solve problems, often independently, and the ability to adapt to different and changing circumstances. Perhaps the most important requirement is the exercise of judgment on the part of the clerk.

Keeping Tasks in the Correct Sequence

The dimension is used to refer to how a clerk organizes parts of tasks, and tasks into a logical sequence. A clerk has to be able to keep parts of tasks in the correct sequence. This ability was evident in Case One and Case Two. Many of the tasks that Carol does involves following a sequence of procedures that she has to keep in the correct order. There are various steps in processing incoming purchase orders, packing slips, and invoices. Afterwards she has to arrange for the payment of bills. One part of the task often has to be completed before starting another part of the work. In this example of processing documents, Carol has to first date stamp all these items as they arrive by mail, and then separate them into trays according to department. Once the items are returned to her desk, she must check to ensure they are signed by department managers as an indication the goods were received. This entire stage has to be completed before Carol makes arrangements for the payment of invoices.

For this task she must choose between two different procedures. One procedure is to pay for local bills. The other procedure is to send the original copy of an invoice to head office for payment. Once the head office approves cheque requests, Carol sends the cheques to the appropriate suppliers. Thus, an ability required for the work is keeping tasks in the correct sequence, and not missing steps or completing them out of order.

Knowledge of Office Technology and Operating Equipment

Excluding forms, the only office technology referred to in the official job description is the telephone. The telephone is listed under one of the duties, "answering all telephone inquiries internal or external". The office technology that Carol must know how to use in order to complete her work tasks is extensive. Her knowledge of office technology and operating equipment is similar to Case One, but most like Case Two because of the requirement of knowing how to use a variety of computer technology and office forms. There are about twenty-eight different pieces of equipment that Carol works with, in addition to the abundance of office forms. This category refers to the knowledge the clerk has to have about office technology, and how the technology is customized to the specific job.

The office has a manual paper cutter that is operated by pulling down on a long lever that has a cutting blade screwed into it. This is a standard piece of office equipment that Janet and Paula use in their work.

The photocopy machine reduces and enlarges documents. It is capable of producing up to ninety-nine documents. The output trays are situated on a stand beside the photocopy machine. It makes copies of various sizes, each size of paper has a separate input tray. In every case the clerks are required to know how to operate this machinery.

Carol uses electric staplers that automatically staple items when paper is put in them. Besides staplers, there are some sixteen calculators that clerks use for their work. Each calculator has two memories and a ten character digital display; it has a clear entry and clear buttons, and will produce an automatic number count on tape. Like most calculators they will add, subtract, divide and multiply numbers. Case Three uses calculators to a greater degree than is required in the two previous jobs because it generally involves accounting procedures.

The office has ten telephones. There is also a sophisticated switchboard system that the clerks may not necessarily have to use very often, but must know how to operate. Case

One also is required to know how to use a switchboard in order to do relief work for the receptionist.

A manual cheque printer prints the dollar amounts on cheques. An amount is set manually by setting eight buttons. Once a cheque is inserted into the machine, the amount is printed by pulling down on a handle located to the right hand side. Both Case One and Three complete cheques; knowledge of this equipment is required for their work. Because Case Two does not do this task, it is unlikely that she is required to know how to use a cheque printer.

This office also has a safe. It is a metal box with a combination lock on the outside, and a handle for opening the door. This is the only case where this kind of equipment is used. Therefore, the two other clerks are not required to possess knowledge of safes.

In each of the jobs examined, all the clerks have to know how to use electric typewriters. But, because the specific characteristics of equipment are not the same, the clerk's may require slightly different knowledge about typewriters. In this office there are three different models of electric typewriters. One has no memory, but an automatic erase. The second typewriter has all the tabs for large figures for one to ten million. The last model is a standard electric typewriter with an automatic erase.

Metal file boxes are used for storing customers' current statements. They are wheeled throughout the day between the desks. Clerks use an electric letter opener. This machine has an automatic feed function. It is capable of opening fifty letters at a time. Each of which is fed into a four inch high stacking tray. There is a choice of two settings. One button is turned on for wide cuts; the second button produces a finer cut on envelopes and packages. Letter openers and filing cabinets are standard pieces of office equipment that Case One, Case Two, and Case Three must be familiar with in their work.

Carol and Janet have to know how to use a postage machine and weigh scale. Case Two does not require this knowledge because mailing outgoing items is not one of her tasks. Case Two only sorts mail. The machine in this office stamps postage and seals envelopes.

Postage to be stamped is set manually by pulling down levers. It is possible to stamp fifty letters at one time. A pressure gage is a feature that when used properly is supposed to prevent the machine from jamming. It has a detachable output tray when extra thick letters are fed into it. Attached to the postage machine is an automatic weigh scale which provides an electronic weighing system. The machine automatically calculates weight by placing items on the weighing tray; it has no memory, however. A characteristic of the machine is its digital character display for weight, two characters for class, four characters for postal code, and six characters for the amount of postage.

In all of the cases the clerks are required to know how to use computer technology, but the tasks for which they use it are not the same. Case Two, for instance, uses the computer in part for storing and retrieving information about development applications and permits. Case One and Case Three use the computer for accounting. Case One predominantly uses the computer for posting cheques into the accounts receivable program, while Case Three uses the computer for accounts payable tasks. Case Two requires more knowledge in comparison to Case One, in part because she uses computers more than the first clerk, and the computer system used in the second office is very sophisticated. Case One only uses a microcomputer for the occasional task. One main difference between Case Two and Case Three is that the clerk-stenographer uses a mainframe system while the accounts payable clerk uses a minicomputer and a microcomputer. But, similar to Case Two, Case Three also additionally has to know how to use a microcomputer, and an host of computer software. Case Three is required to possess this knowledge even though she does not use computers very often. In Case Three it is the computer operators that are responsible for performing computer related tasks, associated with the minicomputer even though Carol is required to know how it works. In this office, there are two computer terminals with keyboards that are connected to a computer system. Only one of the terminals is attached to a modem. An ordinary black desk telephone is attached to the system by an acoustic coupler. In order to transmit information the receiver is taken off the body of the telephone.

When information is transmitted a beep is activated from the receiver. This office also has a microcomputer.

There are ten hard disks and special cabinets used for their storage. Each pack is reusable for one to three years; they are stored horizontally on metal storage racks attached to the insides of three metal cabinets each with a sliding door and lock. The cabinets are fire proof for four hours. Each cabinet will store fourteen hard, sixteen inch disks.

There are three office floppy disc holders each with a plastic dust cover and key. The operators can lock these holders and store the keys in their desks. But, the desk cover function is considered more important than the locking function.

The operators work with two hundred different programs. The system has been used for five years, but no longer serves the company's needs. A new system is going to be installed where each clerk will have his or her own computer terminal, and the system will have a greater storage capacity.

The general office has three printers. Two of the printers do not produce documents that are letter quality. These printers print faster, are cheaper and are easier to maintain than a laser printer. Final copies of reports and forms are printed on these printers. The other printer is a dot-matrix variety that is used for listings of bulk input. It has a special feature where it is capable of switching from dot-matrix, to impact quality, to letter quality, but at a greatly reduced speed. Case One, Case Two, and Case Three, have to be familiar with, and know how to operate computer printers. In Case Two, however, printing is usually performed in the Computing Services Department.

A bursting machine is used for separating forms. Forms are fed manually into the machine. By turning a button the equipment is activated. In order to stop the machine a red button is pushed. It has a holding tray on the front, and an output tray on the back. Case Three is the only clerk of the three cases required to know how to use this machine, even though it is generally operated by the two computer operators.

Carol has to know what piece of equipment to use for each task, and through experience utilize the equipment in such a way that it is tailored to the job. The same notion applies to Case One and Case Two. The computer equipment and software are particularly sophisticated. Even rather standard office equipment now has a number of options and features that the user ought to be acquainted or familiar with. For example the office's *communications system, or switchboard, is software controlled, and a few of its many features are speed calling, conferencing, message waiting, call forwarding, call detail recording, and automatic callback.* When taken into consideration the diversity of equipment, and that machinery does not always work properly, the knowledge that a clerk must possess is extensive. I shall discuss the ways in which Carol uses office technology as tailored to her job.

In order to use the calculator more efficiently for completing the task of arranging for the payment of invoices, Carol has memorized the keys so that she types in the numbers by touch rather than always keeping her eye on the key pad. She uses the adding machine not simply to add numbers, but to keep a running record of invoice amounts.

Not only does Carol have to know how to use the machinery, but also which of its functions are best applied to particular tasks. In order to do many of Carol's work tasks that involve recording numbers, she must be able to use the tab function on the typewriter. In other clerical jobs knowledge of tabs may not be as crucial, as it is to doing accounts payable work in this office. Using the tab function is a time saving technique in comparison to using the space bar on the typewriter for making spaces between numbers.

When Carol issues cheques for local bills, she has to exercise her judgment about where the cheque paymaster machine will print the amount. Therefore, she has to be able to line up the cheque in such a way that the stamp will not cover the name of the firm to whom the cheque is addressed.

The task of photocopying involves more than producing another document. For instance, when she does photocopying for the office manager, she has to make reductions so

that the copies fit into a particular sized book. She also has to know what to do if the photocopy machine, or any other machine, breaks down. During the interview she stated that the copier was always malfunctioning. Similar knowledge is required in Case One and Case Two. All three clerks use the photocopier in such a way as to meet specific needs in their job. Case One, Case Two, and Case Three are required to adapt and tailor office equipment to their own design. They have to know something about office machinery, if for no other reason than it breaks down.

Techniques a Clerk Uses To Do the Job Better

This dimension is used to indicate the variety of techniques that the clerk has instituted to improve the way the work is accomplished. Her methods of improving the work are not exactly the same as those adopted by Case One and Case Two. All three cases, however, have some similarities on this dimension, such as cross-checking, and coordinating work tasks. Each clerk also has developed her own techniques in order to save time. Shortcuts are an example.

Given that one customer may have three different types of accounts, a labelling system has been devised for use in the office. Each label indicates the pickup and or delivery form procedures for each type of account. The system was devised for improving upon how accounts and delivery dates are indicated. There are three types of accounts that office workers process. These are bulk weekly accounts, every other week accounts, and monthly accounts. Pick-up and delivery of bulk weekly accounts takes place on Mondays. By Wednesday, all the information related to these accounts must be printed on relevant forms. These forms are then delivered to the production and delivery departments in the plant by Wednesday evening. A1 refers to the first week of a month, B1 the second week, A2 the third week, and B2 the fourth week. For example, items delivered on all monthly accounts

will leave the plant during A1 week. The same items will be returned to the plant during an A2 week.

Even what may appear as trivial methods of doing a task better accumulate to have an overall effect for improving the work. When Carol stamps invoices she is careful not to put the stamp on the company address or the amount column as this is very important information. Original copies of invoices are sent to head office, and a second copy is filed in this branch. Carol has improved how this task is completed by ensuring that the copy that remains in this office has exactly the same information as the one sent to the head office.

She keeps notes to remind herself of information about a particular work task. In order to make sure that invoices are paid as scheduled Carol might write herself a note. The following is an example.

11:23 By maintaining notes on particular files or accounts, Carol makes sure the supplier is paid no earlier than required without penalty, and double-checks that this task is completed. By not paying a supplier earlier than is required, she saves the firm money because the amount necessary for paying the bill remains in this organization's account for as long as possible, thereby accumulating the optimum amount of interest.

Thus, when she is arranging for the payment of invoices, she makes a note to pay a company before a certain date that allows for delivery time. This technique of note-writing is used to ensure an invoice is paid before it is overdue. Carol also writes notes when she makes an error so that the next time she does the same task she will not make the same mistakes. One task that she writes notes about is the branch journal form.

During the interview, Carol discusses how note taking has assisted her in doing the job when she was a trainee. Since that time she has trained a number of clerks. None of the people she trains take notes. Carol discusses during the interview that she does not know how trainees remember the various work procedures:

I'm a note taker, so I would sit, and I've got stacks of notes, I just write it down, but I'm the only one that is, I've never trained somebody who has taken notes. And I can't figure out how they're ever going to keep this in their head because I'm so bad with my notes, that I actually say "in red tray, second", so that I know

when I'm going to read it, if they're not there, and I'm going to do it by myself, exactly what tray to look for.

There are other methods that Carol uses to do her job better. A technique for ensuring that information entered into inventory sheets is not repeated, is turning a bill upside down once the necessary information is recorded. When she makes a mistake by entering an incorrect number, rather than waiting to finish the entire inventory form before making corrections, Carol brings out the liquid paper to make the necessary change to ensure that the mistake is not overlooked. Case Two follows a similar procedure when she proof-reads other employees work.

By returning to the work later on in the day or the following day, a mistake that she could not see before may become easy to identify. Sometimes solving problems requires that she take a rest, and return to the problem later with a fresh approach. If, for instance, an expense sheet does not balance, and she knows there is an error, but is unable to locate it, then she might leave the work and return to it later. This procedure is particularly useful when calculating figures, as in many of the work tasks associated with Case One and Case Three.

Cross-checking and double-checking information are techniques of doing accounts payable work better. These methods are useful in detecting errors when they do happen, and maintaining accuracy in calculations. Much of her job is recording and calculating figures, and it is very easy to write down the wrong number on a form or press the incorrect key on the calculator's numeric pad. In all three cases, cross-checking improves the way work is accomplished either by maintaining accuracy or finding errors.

When she completes branch journal sheets she cross-checks information on the calculator slip with information on the branch journal. As she works through the task, she cross-checks the information, and when she finishes the sheet she recalculates the the figures to further ensure accuracy. She goes through this process even before she types the form. When she types the figures on the final copy of the form she places a clear plastic ruler to mark the rows of subtotals on the calculator slip. Underlining the figures with a ruler is an

accuracy maintaining technique. Furthermore, she also checks the work periodically as she is typing the form to make certain there are no typing errors. In summary, the entire procedure of preparing and typing the branch journal involves extensive cross-checking in order to produce an accurate document. Carol also uses cross-checking when completing inter-branch transfers. She uses the calculator to add up figures and then record totals in pen, but she rechecks the totals as she completes the forms.

The following passages from the activity record are examples of how Carol cross-checks figures in order to do her work better.

- 10:23 These columns should all come out to 0 if the sheet balances. Carol comments as she uses the calculator that it probably won't come out to 0. She finishes adding, takes the calculator slip out the calculator and checks to see if the amounts come to 0. She finds that she is out by \$4.00. She puts the slips down beside the branch journal on the desk and goes through the columns. She finds an error and corrects it on the calculator slip. She continues cross checking from the calculator slip to the branch journal and writes in two places with pen under expenses. In this case she had put the entries in only on one side but it needs to be balanced on both sides. She continues to check and when finished checking she readds on the calculator to see if this second total will come out to 0 (that is, that it will balance). She adds each column.
- 10:34 Carol gets a second total. She tears off the calculator slip, holds it in her left hand, and with her right hand uses the calculator to add up the subtotals. It balances to 0 this time.
- 10:39 She checks to make sure that she did not make a typing error. She adds the figures that she has just typed in to make sure that they still balance.
- 10:41 Carol adds the amounts on the deposit slips on the calculator keeping a running total as she goes along. She cross checks with the information on the branch journal sheet as she goes along. Carol usually checks everything that goes through this desk twice. Yesterday she did not check the deposit slips thinking that she would find out today if she was out. Today she found out that she is out by \$2.00. She went through the working fund column, which is labelled DR/CR on the branch journal sheet, to look for the \$2.00. This \$2.00 is out somewhere between the branch journal entry and the calculator slip total. Most entries go into the working fund column on the branch journal sheet. This column refers to what is deposited into the bank or is taken out of the bank.
- 11:37 Carol comments that it is difficult to balance someone else's work. Carol goes through the invoice copies and checks off items on the green sheet that are on the inventory sheet. She uses her calculator to add the sums for one company and then checks off the total on the green sheet in pencil. She sets aside the invoice copies face down on the left side of her desk as she finishes checking through them.
- 12:41 Carol returns to the green accounts payable breakdown sheets that concern the \$.06 miscalculation. She comments "I'm going to try to figure this out as it's bugging me". She uses her calculator to total the invoice copies. She examines each individual invoice to see if the figures add up correctly. There are just two invoices for this inventory sheet.
- 12:45 Carol continues examining the inventory sheets. Carol refers to the column under department code 4416 on the green sheet. In this column there should be a total that

corresponds to the invoice copy. Carol can see that there are figures crossed out and corrected on the invoice by another employee; however the total on the invoice is not on the breakdown sheet. Carol cannot see where the error is at this time. She comments that it bugs her that it's not balancing and that she will try to find this out later, but not right now. She places these papers to the side on her desk.

2:03 Carol returns to her own desk with two service agreement forms. She sits down at the desk and uses her calculator to add up totals. She records the totals in pen on the sheets. She adds and rechecks totals as she goes along.

Another way that Case Three does her job better, as in Case One and Case Two, is through time-saving techniques. For example, Carol uses a sample copy that she has saved for preparing new credit applications. By having a sample copy, she does not have to redesign a form. Another time-saving technique is using the same supplier reference for credit applications because the company name and address are already listed on the sample form. It saves looking up suppliers' information in the files. She also exercises her personal judgment about which suppliers are most likely to provide a good reference to improve the chances of obtaining credit approval. Therefore, Carol has to have knowledge about which suppliers this company pays promptly, and has established a long term business relation.

She has developed her own training method that assists new workers in learning how to do the work. In order for her to teach the new accounts payable clerk how to do various tasks, she has to have a thorough understanding of routine procedures. But, the knowledge that she shares with the new worker takes into account more than just the rules for doing tasks. She begins by teaching the trainee one task at a time until it is mastered, beginning with what she believes is the least difficult activity. According to her, the easiest task is matching invoices with packing slips; in contrast, the most arduous task is completing the branch journal. By focusing first on the invoices, the trainee will quickly learn the company codes that are utilized constantly in office functions. From experience, Carol has found that if she tries to teach all the tasks at once, trainees become overwhelmed with information.

Case One, Case Two, and Case Three, are required to "tailor" their job by using judgment and work experience. A requirement is complying with official rules, but stepping

outside of them when necessary. Other requirements include the ability to cross-check work, use short cuts, and coordinate tasks.

Working Within Formally Recognized Work Procedures

The category refers to following official office rules in order to complete work tasks, and how these procedures are accomplished. It also refers to the tasks required for this job. The official job description is a list of duties that the clerk has to perform competently. It does state some, but not all, the routine procedures necessary for the job. The list of duties includes nine tasks for the accounts payable clerk, and seven tasks for the branch journal clerk. Because Carol completes the branch journal, she is expected to know about sixteen different tasks. Upon closer observation, however, the clerk has to accomplish more in the range of thirty-four different tasks, not including what is expected for relief work, such as work in accounts receivable. A list of all the tasks the clerk has to complete for accounts payable does not illustrate the knowledge and skill necessary for finishing the work. The skill that is required goes beyond the ability of, for example, answering inquiries by telephone. The activity is far more complex than perhaps speaking into the receiver with a clear voice, and writing down a message. Completing a task in and of itself is like the tip of an iceberg, and the knowledge needed to actually do the work is like the remainder of the iceberg submerged underneath the water. Furthermore, Carol has to conduct work procedures in the presence of others, in the context of interruptions, exceptions, and the like. She is required to coordinate the work.

Handling incoming purchase orders, packing slips and invoices is a routine procedure. But, in order to do the task quickly, she has trained herself to scan the pieces of paper for where the relevant numbers are located. When she first looks at an invoice, Carol picks up information that enables her to immediately process the document, for instance invoice numbers and dates.

One of her routine work tasks is sending copies of invoices to head office. But, the work is more complicated than stuffing the invoices into envelopes and putting them in the outgoing mail. She has to make sure that all copies of a batch of invoices sent to head office match with the second copies that remain in this office. She must continually check for balancing. If an invoice is left out, but head office pays it, there is the possibility of paying the invoice again. Therefore, Carol must ensure that information in head and branch office records for goods and prices are identical.

The task of arranging for the payment of invoices is not straight forward. When cheques come back from head office Carol has to make sure that she has a listing of every cheque sent back with the name of the supplier. She needs to have this information, and know that it is accurate so that if a supplier says that their firm did not receive a cheque, she is able to determine the status of the cheque or invoice.

Thus, even routine procedures requires the clerk to use judgment in completing the tasks. In order to type letters Carol has to be able to read other people's handwriting. She has to interpret how to format a letter. Sometimes she is given drafts of letters without any paragraph markings. She then has to decide when and where to begin a new paragraph.

The official job description indicates some of the tasks that are associated with the job, but does not identify any of the actual skills and requirements for working within formally recognized work procedures. One example is complying with official rules. Other examples of requirements are the ability to speak and write clearly with an understanding of the technical character of the work, and the ability to understand orders and instructions from persons in superordinate positions. These requirements also apply to the two previous cases examined.

Stepping Outside of Formally Recognized Work Procedures

The dimension is in reference to deviating from official office rules. It is in direct contrast to the previous category "working within formally recognized work procedures". Sometimes what is needed is to step outside of formally recognized work procedures. Because the work is different in each case, how the clerk works outside of official office rules is also going to be different. The same official rules do not apply to each case. Carol uses her own judgment about issuing cheques. Before she types a cheque she is supposed to obtain authorization. Once the cheque is typed, Carol is required to obtain a signature from at least one department head, but authorized people are not always available for providing signatures and recommending whether or not to issue a cheque. There are certain cheques she knows will get passed, and under unusual circumstances she may issue a cheque without authorization. For example, it is very important that this firm keep its brokerage companies. If Carol receives obtains a telephone call from a broker that they have yet to receive a cheque that was supposed to be issued a month ago, and Carol has no record of cheque sent to the company, she may prepare a cheque. She knows from experience that it will take another two weeks before the payment reaches the company. Therefore, by sending a cheque immediately, this firm does not lose its business connections with the brokerage company. If, however, the invoice is for a very large amount, Carol uses her judgment that under these instances it is better to obtain authorization.

Unusual events occur in doing month-end medical payments. These payments are extremely large. If the amount is not paid for one month, for instance, because of a problem with a new employee learning payroll procedures, the company has to pay twice as much the following month. If this error is identified by the office manager, he becomes irate because the company would be paying out too much money if two months worth of payments were paid in any one month.

Therefore Carol solves the problem of a missing payment by paying the amount in smaller increments over a number of months. She uses her judgment about stepping outside of routine procedure of paying for medical insurance, because the company is not in a position to pay for two months of medical payments in one month.

The routine procedure is for Carol to pay an invoice once she receives a packing slip, but, when funds are low, she makes alternative arrangements. During these times, she uses her judgment about which invoices she can neglect to pay immediately or which suppliers will refuse to continue a business relation if they are not paid within the prescribed period of time that was negotiated. In some cases Carol might try to construct a payment plan. She may ask if the accounts receivable department for a supplier would accept the monthly payments toward the amount owing on this company's account. Carol knows that the longer the company has maintained a business relation with a supplier, the more likely a supplier will allow an invoice or invoices to be paid late. In other words these suppliers are less apt to take drastic measures and cancel any further orders. The most important requirement under this dimension, as noted previously in other cases, is the ability to exercise one's judgment.

A Day's Work as an Accomplishment

This category is used to describe what a clerk has to be able to do in order to finish a day's work. The ingenuity it takes to finish a day on the job is overwhelming. Among other things, Carol must have a thorough understanding of basic accounting functions and terminology. She has to decide how to coordinate the work within the context of other people, interruptions, and unusual circumstances. It is not simply enough to know the rules and procedures. Every clerk must exercise personal judgment in carrying out tasks. Once the rules are learned, Carol has to conduct herself without thinking specifically about each detail. She has acquired an understanding of the reasons why things are done the way they are, and when there is room for improvement she changes the procedures. She has to know how all

the work she does fits together. She combines elements of tasks into her own unique system of doing the work. For instance, although she has come to recognize employees inside and outside of this branch, and suppliers to this company, she provides special treatment beyond that which is accorded to persons who are only known and recognized through work relations. She may ensure that suppliers the company has dealt with for years, have cheques issued to them quickly.

Chapter VIII: CONCLUSION

There is a contradiction in clerical work. On the one hand women clerical workers are required to know a lot more than is officially recognized. The omission of skill and abilities from the official job descriptions is evidence of this notion. On the other hand, clerks are unwitting tools of patriarchal and scientific management. This contradiction is an important one, although the ingenuity with which the workers carry out their jobs has a more decisive impact than the constraints made on them, such as the division of labour.

It is important to consider what kind of document an official job description is, and the purpose it serves. In addition to the main work of this thesis, there appears to be a second contradiction worth considering. In principle official job descriptions are rationalistic practices that have no room for prejudice, and yet they have embedded within them expressions of patriarchal ideology, that in all likelihood went unintended by the writer of the document. In any account, something is omitted from official job descriptions, and I will argue the omission is attributable to an interest, although the form it takes is a subtle one. I am not proposing that official job descriptions are intentional tools of exploitation. The emphasis is on official job descriptions as reflecting management's preoccupation with orderliness and control.

The Ingenuity of Women Clerical Workers

In each case the official job description was compared with knowledge and skill requirements on eleven dimensions, for a total of thirty-three comparisons. On each dimension, for each case, management generally underestimated the knowledge and skill required for the jobs. The practice of de-valuing and unrecognizing the skills and knowledge for clerical work is unjust. The daily work on the part of these women is somewhat "invisible"

to management. The eleven dimensions uncover some of the special talents needed for office work.

The eleven dimensions are useful because they assist in revealing some of the skills needed for clerical work. The categories were general enough to uncover requirements shared by all three cases, and yet they also allowed for a discussion of specific characteristics of each job. For example, exceptions to routine work apply to each case. The exceptions associated with the clerk-stenographer's job, however, did not necessarily correspond to the exceptions of the administrative clerk's work. In some instances a clerk from one case had to have more knowledge or required more abilities than another clerk on the same dimension. Case Two, for instance, required more knowledge under the dimension of "knowledge of office technology and operating equipment" than either Case One or Case Three. What these dimensions particularly help in revealing are the requirements of regulating and maintaining social relations, coordinating and scheduling work functions, and knowledge of the organization and other employee's positions. These abilities are usually neglected in studies of clerical work where a deskilling argument is proposed. They are also missing from every one of the cases' official job descriptions. The eleven categories indicate the problems of trying to quantify requirements in clerical work, or work in general. What the categories have shown is that had some quantitative measure of skill been used, important knowledge and skill requirements may have been overlooked in an analysis of these office jobs. This investigation lays the ground work for a further revision of these dimensions or the basis of designing new categories that attempt to detect skill and knowledge requirements. For example, it might be an improvement to further refine the category "knowledge of office technology and operating equipment" by indicating specific technology. Categories might include: "knowledge of standard office forms", "knowledge of electric typewriters", or "knowledge of word processing packages".

On the one hand these women are severely constrained in what they do. They are required for instance to adapt to office technology and changing circumstances. The clerks

have to do their jobs according to rules and imposed machinery. But, on the other hand, they have to bring a host of knowledge, skills, abilities, and qualities that create a balance between external necessity and autonomy. Each of the women studied has at least some control over how she apportions her time and her tasks, and makes herself valuable by re-creating the job to her own personal design. Their stock of working knowledge and know-how on the job makes them almost indispensable to the organization of which they are a part. In each case the women brought some additional qualities that made the work possible.

Along with the official job requirements were a host of unofficial requirements for accomplishing the work. The clerks have to organize tasks based on priorities, and also coordinate their work based on a constant flow of instructions and directions. The complexity and skill required for all three jobs are in part tied to the necessity of exercising judgment in carrying out routine procedures as well as responding to unusual events that occur. Because it is impossible to set rules and procedures for all possible circumstances, these women must use their discretion. Although each of the clerks were under the authority of one or more persons who are supposed to be held accountable for discretionary decisions, it was usually the clerks that settled difficulties when they were encountered. Each of the jobs revealed a high degree of uncertainty in getting the work done. This observation is in direct contrast to Braverman's (1974) analysis that scientific management and technology had almost eliminated uncertainty in clerical work.

The women studied, nevertheless, participated in transforming "rough letters" and documents into polished forms. Where they may only formally be expected to type these letters, they actually engaged in the writing and creation of them.

None of the jobs have clearly defined responsibilities, but are often left to the discretion of the person performing the job, and knowledge obtained from other employees about what is acceptable and unacceptable work behavior conduct. Each woman has to be able to almost carry out routine tasks unconsciously in order to keep up with the prescribed flow of work. Often demands made on them by other workers, members, customers or

clients became a source of interruption that each had to cope with. In each case, the women were faced with different problems all the time.

A proficiency in maintaining social relations is a core job requirement, but in all three cases was not alluded to in the official job descriptions. Clerks do not work alone in isolation of one another or persons outside of the organization. All three clerks were expected to interact with the public as part of their jobs. It is not enough for clerks to merely know how to complete assigned tasks, they must do the work in the presence of others. This factor adds to the complexity of work. The time spent on the telephone and routine office communication make the regulation and maintenance of social relations vital to the work.

A job requirement in all three jobs investigated is monitoring the emotional states of others. This requirement implies such skills as concentrating and accurately interpreting subtle meanings that are both visual and non-visual. Furthermore, social behavior involves verbal and non-verbal communication. Body contact, proximity of movements, facial expressions, gestures, body posture, and physical appearance are important ways in which we indicate our feelings and elicit responses from others. Even in verbal communication we can alter the same message using different voice levels or emotional emphasis. A sentence with a smile may mean the exact opposite if said while shaking one's fist. All of these women were adept at interpersonal skills. They were socially skilled, and could monitor, manage and sometimes manipulate the emotional states of others. One of the clerks mentioned this ability during the interview when she said it was necessary to know "how to read people". The women studied developed personal methods for remedying communication with others that became uncomfortable. For instance, Carol frequently dealt with irate representatives of suppliers who were concerned that they were not going to get paid.

Images develop to constrain women who take jobs as clerks. In Kanter's study of a corporation, she states that: "the role pressures of secretaries encourage them to be timid, emotional, parochial, praise-addicted, and wedded to a single boss (Kanter, 1977:5)". This observation similarly applies to these three cases where maintaining social relations and

monitoring the emotional states of others is a job requirement. In all three instances a relationship of personal service was developed with a superordinate, whether a manager or supervisor.

The clerks are involved in both planning and execution of work. Feldberg and Glenn (1977) quote several clerical workers who knew very few other employees in the organization and knew even less of about everyone else's work activities. In this investigation, however, all the jobs studied required that the clerk have extensive knowledge of the organization, other enterprises that they had business contacts, various job positions, and the ability to do relief work that might include entire sets of tasks associated with other jobs of comparable complexity.

Admittedly, I have only considered the work of clerks and not the work done in management. But, it nevertheless appears that much of the skills and requirements are common to members of both groups. The decision making element characteristic of what management is supposed to do, for example, is often shared with clerical staff. This was evident in Case Two, where the clerk-stenographer had some authority over other people. Clerks are also required to use their judgment in doing the work. If managers were to produce extensive descriptions about what it takes to do office work, they may actively engage in a process of recognition that the work of managers is not so different from the work of a mass of subordinate clerks beneath them. One difference, however, is that the former group reaps higher financial rewards and prestige for their work. The artificial hierarchical barrier that has been socially created between clerks and managers is used to enhance the position of management at the detriment of the office staff.

What is needed is either not to use official job descriptions or to re-create them on a closer approximation of the actual knowledge and skill required. If job descriptions are inaccurate, they must be improved or eliminated. The evidence here directs our attention to the issue of equal pay for work of equal value. These job descriptions indirectly help in elevating the work that managers do, that serves the interests of management and not the

clerical worker. Without the contribution made of clerical workers, organizations would cease to function. Management is presently obtaining a whole host of knowledge and skill on the part of clerks that is not paid for under the conditions of employment.

I maintain that what is missing from these official job descriptions is of crucial relevance. I hope the contribution has been to give value and recognition to the work that some one-third of Canadian women working in the paid labour force do, on a daily basis. It provides insight into the extraordinary measures that go into producing a day on the job.

The eleven dimensions I have created for the purposes of comparison are indicators of skill. These are all dimensions of skill that are not identified in much of the work of social scientists that propose a deskilling hypothesis, managements' formal job descriptions, or the general societal conception of what clerical work entails. These kinds of descriptions do not begin to provide what it is that women bring to their work.

Still, there are limitations in what I have accomplished, in the procedures followed, including the data. For instance, the data do not contain information about requirements. They contain descriptions of activities and interview accounts of the office worker's understanding of what is required. There is a difference between my way of assessing the requirements and those contained in interviews. The interviews provide the clerk's personal accounts of requirements that one should not take for granted unconditionally. The clerks, in many cases, were unaware of the extent of knowledge needed for the work, perhaps because they were immersed within it. In other instances, they provide insight of the nature of their work. On the other hand, the eleven dimensions were invented, and may not necessarily correspond to, or reflect actual job requirements. At best, what was accomplished was a closer approximation of the skills and knowledge requirements. Furthermore these dimensions may not be universally applied to all cases of clerical work.

Job Descriptions as a Product of Work Rationalization

Job descriptions reflect the drive for efficiency and control in the office. After 1900 there was a sweeping reorganization of the office in Canada based on rationalization. Key to understanding the rationalization of the office is the growth of subordinate clerical jobs and the drive to recruit women. Principles of scientific management were influential in restructuring offices. The goal, in part, was to cut clerical costs and assert management's control over administrative tasks. Solutions to the problem of bureaucracy included job classification with detailed task descriptions, attempts at measuring and regulating clerical work, more standardized methods of recording and processing information, increased mechanization, and other schemes aimed at enhancing office efficiency. Official job descriptions are rationalized strategies for reducing costs and improving efficiency that do not operate in the interest of the office worker.

Because large organizations are cumbersome, they require carefully planned systems of coordination. The official job description in Case Two is part of the strategy of making a large organization function. Job descriptions are a tool of scientific management used to outline the responsibilities and requirements for positions, establish a standard salary scale for each job classification, specify avenues of promotion, and delineate lines of authority. It is a common practice of modern management to make a clear delineation of responsibilities and lines of authority to make integration and supervision easier, at substantial cost reductions.

Job descriptions made by management are attempts at standardizing employment conditions. Management additionally saves money by creating job descriptions that facilitate the interchangeability of workers.

Elaborate classification schemes, more closely associated with Case Two than the other cases, are part of the scientific approach to administration. Progressive management

methods include a merit system. A principle of job descriptions is meritocratic promoting. The merit system is perhaps most characteristic of large bureaucracies, for example Case Two.

The official job descriptions from the cases studied ultimately are used to serve management. But, the kind of document the description is, varies slightly in each case. Case One is from a small private-interest organization. The necessity of formulating a highly detailed job description in order to coordinate the functioning of the organization is not crucial in Case One. Because the organization in Case One is small, there is not the need to distinguish jobs on the basis of skill requirements and pay scales as there is in the second case. Case One has the most simplified official job description because perhaps that is all that is required. It lists eight general tasks and makes no reference to requirements. Case Two, in contrast, is from a large bureaucracy where it is important to differentiate and describe the many positions. Case Two's job description reflects the greater degree of rationalization of jobs. Because Case Three is from a medium sized organization, it requires job descriptions that are less detailed than in Case Two, but more explicit than Case One. The official job description from Case Three appears to confirm this notion. Work rationalization is not as clearly apparent the smaller the office, for instance in the first case. The job descriptions are characteristic of the size of the organization. There is also a difference between Case One and Case Two because the former is a private organization and the latter, a public one. The official job description in the second case reflects an organization governed by bureaucratic rules, such as the merit system, to a greater degree, than in Case One. The organization in the second case is answerable to the general public whereas the first is not; therefore, Case Two's official job description is more reflective of the job in comparison to Case One and Case Three. Case Two is much more explicit and accurate in describing the nature of the work, duties, and requirements than the other cases from private organizations.

Job Descriptions as Expressions of Patriarchal Ideology

Official job descriptions are not intentional tools of exploitation. The individuals that create the job descriptions in all likelihood are not trying to cheat women out of well-deserved pay. But there is an omission in the official job descriptions that is attributed to an interest. The official job descriptions are perhaps subtle expressions of masculine bigotry.

Management obtains a host of knowledge and skill that they do not pay for partially because it is unrecognized as work. The ability to monitor the emotional states of others is one example. It might be argued that the reason why management left things out of the job descriptions was positive. Perhaps all that was needed was a general indication of what the work was like for management's records, for advertising the job as an employment opportunity, and for providing a basic level of what is expected in the position. It might have been the most efficient way for management to do these descriptions. These reasons are all possible, but I tend to think there is more to it than that. If someone from management were to hire a woman for any one of the positions examined, in all likelihood the manager would look for requirements during a job interview beyond what is listed in the official job descriptions. But, even the clerks themselves did not recognize their value and knowledge that they had for their jobs.

The "bosses" were not only supervisors or managers, but anyone whose work required their clerical services, for instance sales staff or tenants that rented space in the building. There is an acceptance of a patriarchal relation as an unofficial job requirement if work is to run smoothly. The relationship was sometimes made personal, such as making lunch reservations for the office manager, cleaning coffee cups, making the office coffee, and other office household duties. All the clerks acted as a buffer between supervisory staff or management, and the rest of the world. An example is knowing when to tell a caller that someone is out of the office or preoccupied with another matter, even if they were telling a

lie. The manager may have requested not to be disturbed under any circumstances. These women, then, acted as controlling access and protecting their managers or supervisors from callers. This unique relation was not officially cited as a job requirement, but expected all the same. There are unofficial expectations of personal service. Paula's supervisor became dependent on her for the scheduling and coordinating of his work by setting up meetings and determining how long any one task is likely to take to complete. She has developed an unspoken understanding about how the work gets done that makes her almost indispensable to his own job. It is unlikely that someone else could easily fulfill this unofficial duty.

The reason why clerical jobs are considered unskilled is perhaps that it is women who do them, and there is the perception that the jobs women do are not really work at all, whether in or outside of the home.

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