

**Women in the
Automated Office:
Computers, Work and
Prospects for Unionization**

by Daniel B. Cornfield

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FOR UNIONIZATION

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According to the post-industrial thesis on declining U.S. unionism, union decline since 1945 partly results from the aversion to unionization among women and white-collar workers and the deemphasis in targeting these groups in union organizing campaigns. Bell (1953, 1972, 1973) claims that as the majority-white-collar work force becomes increasingly employed in the service sector, while the declining, blue-collar manufacturing sector is saturated with union members, the percentage unionized declines because the labor movement is unable to organize women and white-collar workers. However, despite the declining percentage unionized and the greater percentage of union representation among men blue-collar workers, the rate of union membership growth among women and white-collar workers outstripped that of men and blue-collar workers in the 1970s (Freeman and Medoff, 1979, 1984; LeGrande, 1978; Gifford, 1982). While the percentage unionized of the U.S. labor force declined to 20.9% by 1980, the percentage unionized among women and white-collar workers increased to 15.9% and 15.3%, respectively (Gifford, 1982:1-3). Moreover, opinion research shows that non-union, women workers are more likely to favor unionization than non-union men and that no sex difference in pro-union attitudes prevails among non-union, white-collar or blue-collar workers when other causal variables are controlled (Kochan, 1979; Freeman and Medoff, 1984).

Given the increased unionization among those workers whom the post-industrial thesis claims are unlikely to unionize, the purpose of this paper is to analyze the sociological conditions which promote and retard the unionization of women clerical workers. After discussing theories of white-collar unionism and the changing nature of clerical work, I examine the unionization of women clerical workers in the insurance industry. The insurance industry was chosen for three reasons which are elaborated in greater detail below.

First, the insurance work force consists of a disproportionately large number of women clerical workers and a sufficiently high degree of occupational sex segregation to facilitate the analysis of unionization among women clerical workers. Second, as a growing, service-rendering industry which pioneered in the application of office automation, insurance may be archetypical of changing work conditions in post-industrial society which promote unionization among women clerical workers. Third, and consequently, women clerical workers in insurance and the financial sector have been the objects of joint union organizing efforts by the women's and labor movements. Therefore, the unionization of women clerical workers in insurance constitutes a novel form of unionism--a gender-oriented hybrid of craft and industrial unionism.

Theories of White-Collar Unionism

The post-industrial thesis rests on decreasingly tenable assumptions about the family and the social class position of white-collar workers. Social, economic and legal changes in the 1960s and 1970s altered sex roles such that "woman's place" was no longer relegated to the home. The renewal of the women's movement led many women and men to promote the participation of married women in the labor force in full-time careers. Inflation and declining real earnings in the 1970s compelled many women to enter the labor force on a full-time basis. The Civil Rights Act of 1964, the Equal Employment Opportunity Act of 1972, the Comprehensive Employment and Training Act of 1973 and other legislation facilitated the full-time entry of women into the labor force by banning employer sex discrimination and providing training to disadvantaged women (Appelbaum, 1981). Therefore, the labor force participation rates of married women between the ages of 20 and 44 and between the

ages of 45 and 64 increased to all-time highs of about 63% and 48%, respectively, in 1982 (Appelbaum, 1981; U.S. Bureau of Labor Statistics, 1983). By 1977, the average woman was expected to have 28 years of paid employment (Appelbaum, 1981:23).

Unionization assumes that the worker has a long-term vested interest in his or her job. In Mirschman's (1970) terms, unionization allows the worker to express dissatisfaction not by "exiting" from the employer but by remaining "loyal" with "voice" (Freeman and Medoff, 1984). The post-industrial thesis assumes that women, as temporary wage-earners under the traditional regime of sex roles, are likely to quit employment upon marriage and, therefore, are unlikely to unionize (Kassalow, 1966). However, the increased labor force participation rate of married women suggests that the growth of women union members and the presence of pro-union attitudes among non-union women resulted from social, economic and legal changes which motivated, compelled and facilitated the entry of women into the labor force (Tepperman, 1976; Cook, 1984; Wertheimer, 1984).

The post-industrial thesis also assumes that white-collar aversion to unionization stems from the relatively privileged, socioeconomic standing of white-collar workers, their identification with management, and their desire to disassociate themselves from institutions which they perceive as comprising their blue-collar, status inferiors (Kassalow, 1966). This assumption, in turn, rests on a static conception of the social class position of white-collar workers. Theories of white-collar unionization in the U.S. and Britain, as well as theories of unionization generally, assume a dynamic concept of social structure. The classical Marxian and functional theories of unionization held that industrialization and the rise of the large corporation in a market

economy with a class of tenuously employed, urban, factory wage-earners simultaneously alienated these workers, shaped their common interests, and prompted them to unionize (Marx, 1963; Tannenbaum, 1951).

Similarly, theories of white-collar unionism suggest that white-collar unionization increases when the socioeconomic standing of white-collar workers declines, employer resistance is low, political conditions promote unionization, and when unions turn to aggressively organize white-collar workers (Lockwood, 1958; Blackburn, 1967; Kassalow, 1966; Bain, 1970; Adams, 1975; Prandy et al., 1983). Two forces which lower the socioeconomic standing of some white-collar workers are bureaucratization and office automation. Both not only accompany increased firm size but deskill many white-collar jobs, especially clerical jobs, and engender centralized, impersonal, managerial control of the non-supervisory work force (Bain, 1970; Whisler, 1970; Braverman, 1974; Hoos, 1961; Glenn and Feldberg, 1977; Kraft, 1977; Greenbaum, 1979). Thus, bureaucratization and technological change may reduce the socioeconomic standing of some white-collar workers and motivate them to unionize (Lockwood, 1958; Kassalow, 1966; Bain, 1970; Coleman and Rose, 1975; Miller, 1981-82).

The classical theories and the theories of white-collar unionism emphasize the changing social class position of workers and neglect the effects of changing family and economic sex roles on unionization. The classical theories explained unionization in the era of the Industrial Revolution, when most wage-earners were men, women were often denied membership in craft unions, and when class conflict occurred almost exclusively among men (Kessler-Harris, 1975, 1982; Cook, 1984). These theories, then, implicitly assumed the traditional sex role arrangement in which many women were outside of the labor force, and, therefore, not directly engaged in class conflict. This is not to deny

the early involvement of women in the labor movement, as shown, for example, by the establishment of the Women's Trade Union League in the early twentieth century (Wertheimer, 1977; Foner, 1979, 1980; Dye, 1980). Nonetheless, theories of white-collar unionism bear the legacy of a class-emphasis in explaining unionization by neglecting the impact of increased women's labor force participation on the rise of white-collar unionism. Indeed, women accounted for 53% of both white-collar workers and white-collar union membership in 1980 (U.S. Bureau of Labor Statistics, 1983; Gifford, 1982). This suggests that a theory of unionization ought to address not only the forces which change employment conditions, such as declining social class position, but also such forces as the changing sexual division of labor in the family and the work place which increase the potential and actual number of union members (Lockwood, 1958:151-153). We turn now to a discussion of the changing relationship among clerical work, clerical workers, and unionization.

The Transformation of Clerical Work and Clerical Workers

Historical research on clerical work shows that the business office and clerical work have shifted from a craft-like organization toward a bureaucratic, factory-like organization since the late nineteenth century (Mills, 1951; Lockwood, 1958; Benet, 1972; Braverman, 1974; Glenn and Feldberg, 1977, 1979a, 1979b; McNally, 1979; Rotella, 1981; Davies, 1982; Fox and Hesse-Biber, 1984). In the small, nineteenth century office, the clerical worker was responsible for a variety of tasks. Clerks performed minor managerial and administrative functions and were often consulted on financial decisions. With industrialization and the emergence of the large corporation with a salaried, managerial class (Chandler, 1977), the division of labor in clerical

work became more complex with more lower-skill, specialized clerical occupation such as file clerks, typists, stenographers, receptionists and secretaries. Also, large companies introduced Scientific Management techniques in the early twentieth century office in order to rationalize the office as the volume of paper work increased (Braverman, 1974).

Office bureaucratization was also catalyzed by changes in office technology. The typewriter appeared in the late nineteenth century and the office computer was first introduced in the private sector in the 1950s. These technological changes increased the complexity of the division of labor in clerical work by spawning new, lower-skill occupations such as typists, stenographers, computer operators, and data entry operators. Emerging, then, from the nineteenth century, quasi-managerial and craft-like form of clerical organization is an office in which non-managerial, lower-skill clerical occupations are arranged in a skill and status hierarchy that ranges from the executive's personal secretary down to a pool of typists, file clerks, and office machine operators (Kanter, 1977; Glenn and Feldberg, 1977; Baker, 1964; Machung, 1984).

With increased office size and the pronounced differentiation between managerial and clerical occupations, as well as among clerical occupations, management in the post-World War II era has implemented impersonal techniques for controlling and monitoring clerical work and productivity. Office automation is used to monitor clerical worker productivity, including counting keystrokes per minute, and for quality control (Glenn and Feldberg, 1977, 1979a, 1979b).

Two changes in the composition of clerical workers have accompanied the bureaucratization of clerical work. The first is the "feminization" of clerical workers. Nineteenth century clerks were predominantly men. Women first accounted for a majority of clerical workers by 1930 (Rotella,

1981:26). Historians of clerical work maintain that feminization resulted from cultural values which led to the allocation of women workers to lower-skill, non-managerial jobs. With office bureaucratization, such values created occupational sex segregation between the emerging managerial jobs and the growing number of new, lower-skill clerical occupations in the early decades of the twentieth century (Kanter, 1977).

The second change is in the social class origins of clerical workers. In the nineteenth century, clerical workers were primarily the sons of white-collar workers or farmers (Davies, 1982). In her classic study of intergenerational (i.e. father-to-son) occupational mobility of Indianapolis men in 1910, Rogoff (1953) shows that 58% of men clerical workers were the sons of white-collar or farming fathers, while the remainder were the sons of fathers who held blue-collar or service jobs. In one of the few studies of nineteenth century intergenerational occupational mobility among women clerical workers, Aron (1981) shows that well over two-thirds of the women applicants for U.S. Treasury Department clerical jobs between 1862 and 1890, as well as those who were hired, were daughters of white-collar fathers.

By the late twentieth century a majority of clerical workers were from working class origins. In a rare study with published, intergenerational, occupational mobility data on women, Hauser and Featherman (1977:339) show that in 1962 53% of married, women clerical workers were the daughters of fathers who held blue-collar or service jobs.

In sum, office bureaucratization and automation, in a culture which promotes occupational sex segregation, not only led to clerical worker feminization but also increased the proportion of clerical workers from working class origins. The so-called "proletarianization" of clerical work (Glenn

and Feldberg, 1977)--the deskilling of clerical work coupled with increased, impersonal managerial control, changed the composition of clerical workers to include women from working class origins.

With this transformation of clerical work and clerical workers, unionization grew among women clerical workers. Published, time series data on the percentage unionized among women clerical workers are unavailable. However, Milkman (1980:121) estimates that 3% of women clerical workers were unionized in 1920. By 1980, 12.2% of women clerical workers were union members (Gifford, 1982:51). Recent research on the unionization of women clerical workers attributes the growth to increased women's labor force participation and to the transformation of clerical work described above (Goldberg, 1983; Coleman and Rose, 1975; Miller, 1981-82; Tepperman, 1976).

Another important cause of growing unionization among women clerical workers, as suggested by theories of white-collar unionization (Adams, 1975), is the increased efforts of the labor movement to organize women clerical workers. Until recently, the predominantly male labor movement neglected women and clerical workers in its organizing campaigns because it viewed these workers as unorganizable and as secondary, temporary workers (Goldberg, 1983; Seidman, 1978; Cook, 1984). However, with the decline in male, blue-collar union membership, increased women's labor force participation, and the resurgence of the women's movement in the 1970s, the labor movement is beginning to replenish its sagging membership by organizing women clerical workers, especially in such finance industries as insurance and banking, where the clerical-intensive occupational structure has been routinized by bureaucratization and office automation. The women's movement has developed organizations within and alongside of the labor movement in order to promote the unionization of women

and women clerical workers specifically. In 1974, women trade unionists established the Coalition of Labor Union Women (CLUW) to further the unionization of women and access of women to union leadership positions (Foner, 1980). Beginning with the founding of Working Women in 1973, women's movement activists have established working women's organizations which engage in litigation and educational activities on behalf of women workers, as well as joint organizing efforts with labor unions (Kozlarski and Insley, 1982; Foner, 1980; Goldberg, 1983). In 1981, Working Women and the Service Employees International Union created District 925 which targets women clerical workers, especially in the financial sector, in organizing campaigns (Miller, 1981-82). Other unions which organize women clerical workers include the Office and Professional Employees International Union, the Teamsters, and the United Food and Commercial Workers (Miller, 1981-82).

The transformation of clerical work has generated a status hierarchy among clerical occupations, as discussed above, which affects the occupational pattern of unionization among clerical workers. The higher-echelon clerical workers are personal secretaries who are isolated from one another and have frequent, personal contact with their bosses. Kanter (1977) refers to this boss-subordinate relationship as bureaucratic patrimony. Patrimony, according to Kanter (1977:74-89), consists of three elements: status contingency, principled arbitrariness, and fealty. Under patrimony, the status of the secretary is contingent on that of her boss. With no job descriptions, the boss arbitrarily assigns her work-related and personal tasks, expects the secretary to maintain his "front" of competence, and evaluates her performance with particularistic criteria. Status contingency and arbitrariness engender fealty between the boss and secretary because of a mutual dependence between them. The secretary's

status depends on her personal rapport with the boss, while the boss depends on the secretary to maintain his front of competence. Lower-echelon clerical workers, such as file clerks and office machine operators, experience impersonal, bureaucratic relations with management, develop little fealty, and are, therefore, more likely to unionize than secretaries (Lockwood, 1958; Kanter, 1977). Gifford (1982:51) presents unionization data for women in broadly defined clerical occupations in 1980. Among the lower-echelon, women clerical workers, 13% of office machine operators and 16.1% of other clerical workers (excluding secretaries, typists, stenographers, and bookkeepers) were unionized. For higher-echelon, women clerical workers, only 8.6% of secretaries-typists-stenographers (about 80% of whom were secretaries in 1980 [U.S. Bureau of Labor Statistics, 1983:50-51]) and 4.5% of bookkeepers were unionized. Thus, the clerical hierarchy promotes unionization among the lower-echelon clerical workers who experience the least frequent, personal contact with management (Prandy et. al., 1983).

In sum, the transformation of clerical work and clerical workers has led to the emergence of a novel form of unionism. This form of unionism is defined by a target population with gender, occupational and industrial traits: women clerical workers who are employed in the finance industries such as insurance and banking. As such, this unionism is a hybrid of craft and industrial unionism which is directed toward women. Although gender, occupational and industrial traits have defined the membership jurisdictions of earlier forms of unionism, the present combination of these traits in the unionism directed toward women-finance sector-clerical workers is novel. This unionism is simultaneously the product of the changing social class position of clerical workers, increased joint union organizing efforts by

the women's and labor movements, and the changing sexual division of labor in the home and work place.

Clerical Worker Unionization
in the Insurance Industry

Women clerical workers in the insurance industry have recently become the objects of increased union organizing efforts. Insurance industry unionization has historically been low. According to Freeman and Medoff (1979), almost 7% of insurance (SIC 63) workers were covered by collective bargaining contracts in 1968-72. However, insurance unionization has mainly been concentrated among insurance salesmen in the large insurance companies. Since the late nineteenth century, AFL-, CIO- and AFL-CIO-affiliated unions such as the Insurance Agents International Union, the Insurance Workers International Union, and the United Office and Professional Workers of America, succeeded in organizing men sales agents (Clermont, 1966). Nonetheless, the U.S. Bureau of Labor Statistics' (BLS) wage surveys of life insurance indicate that office worker unionization increased from 2% to 5% between 1961 and 1980 (U.S. Bureau of Labor Statistics, 1962, 1967, 1973, 1978, 1981). Before turning to the patterns of unionization among women clerical workers in insurance, I discuss four features of the insurance industry which are promoting the beginnings of unionization among this group of workers: occupational sex segregation, bureaucratization and technological change, changes in the clerical occupational structure, and the changing clerical occupational wage hierarchy.

Occupational Sex Segregation

Throughout the post-World War era, women and men insurance workers tended

to be employed in separate occupations, as shown in Table 1. Although women

[Table 1 about here]

made inroads into the professional, managerial and sales occupations by 1980, they accounted for less than half of professionals and less than one-third of managers and agents by 1980 (see columns 1 and 2). Between 1950 and 1980, women accounted for almost 85% of insurance clerical employees and for almost all secretaries, typists and stenographers. The data in columns 3 through 6 of Table 1 show that over 70% of women were employed as clerical workers and over 75% of men were employed as professionals, managers or salesmen in insurance between 1950 and 1980. While clerical occupations continued to comprise roughly the same percentage of women, the non-clerical occupations came to comprise an increasing percentage of women between 1950 and 1980.

Bureaucratization and Technological Change

Bureaucratization and technological change in the form of office automation accompanied insurance industry growth since the end of the Second World War. At least two indicators suggest that a growing proportion of the insurance clerical work force works under bureaucratic--that is, impersonally managed--work conditions. First, Table 2 shows that while the size distribution of insurance establishments remained stable, the percentage of employees in establishments with 500 or more employees increased to almost 37% by 1981. The percentage employed in smaller establishments declined by 1981.

[Table 2 about here]

The second indicator of bureaucratization consists of qualitative accounts of organizational changes that accompanied office automation in insurance. According to the BLS, insurance is "a major white-collar industry which pioneered

in the application of office automation" (U.S. Bureau of Labor Statistics, 1966:iii). Beginning in the 1950s, large insurance companies introduced office computers to handle the growing volume of paper work and to reduce clerical labor costs (U.S. Bureau of Labor Statistics, 1960:10). The computer was rapidly diffused throughout insurance among the smaller companies by the early 1970s (Cornfield et.al., 1984). The computer has been applied to a variety of clerical and non-clerical insurance functions, including billing, actuarial research, underwriting, and premium and commission calculation (U.S. Bureau of Labor Statistics, 1979). Scholarly accounts suggests that three organizational changes accompanied insurance office automation. The first is centralization of managerial control over the clerical work force. In their studies of insurance office automation, Whisler (1970) and Helfgott (1966) show that decision-making was centralized, supervisory jobs were enlarged, and clerical jobs became more routinized. Second, insurance management invoked impersonal controls of the clerical work force by adopting quantifiable and machine-measured indicators of clerical work quality and clerical worker productivity (Whisler, 1970; Costello, 1983; Working Women, 1980). Further, impersonal control systems, such as Advanced Office Controls and Analysis for Improved Methods, consist of standardized methods for performing clerical tasks which are predetermined in time-motion studies and are widely used in the insurance industry (Wiemann, 1979; Nolan, 1980). Third, the computer and advanced telecommunications systems have furthered departmental consolidation and control of the home office over branch offices (U.S. Bureau of Labor Statistics, 1966, 1979; U.S. Bureau of Industrial Economics, 1983). In sum, office automation has increased managerial control of the clerical work force, reduced the amount of employee discretion in some clerical jobs, and facilitated

the implementation of impersonal controls over the insurance clerical work force.

The Changing Clerical Occupational Structure

Bureaucratization and office automation have changed the insurance, clerical occupational structure, as shown in Table 3. Clerical occupations

[Table 3 about here]

may be classified by four categories. Interpersonal occupations--secretaries, information clerks (mainly receptionists) and adjusters and investigators--require frequent contact between the employee and other people, such as customers, other employees, business associates and managers. Computer-related occupations and non-computer office machine operators tend machines and manual occupations require the worker to perform manual clerical tasks.

Between 1970 and 1980, the numbers of clerical workers employed in interpersonal and computer-related occupations absolutely increased at above-average rates. The number of non-computer office machine operators and manual clerks absolutely declined or, in the case of bookkeepers, increased at a rate below the average rate of clerical employment growth. Among manual occupations, however, mail and material clerks (e.g., mail and stock clerks) increased at an above-average rate. Thus, office automation, bureaucratization, and industry growth led the growing insurance clerical work force to increasingly comprise interpersonal and computer-related occupations, while the share of non-computer office machine operators and manual clerks declined.

The Changing Clerical Occupational Wage Hierarchy

An occupational wage hierarchy is the set of ratios among the wages of a group of occupations. Assuming an occupational wage is partly an indicator of the status of an occupation compared to other occupations, changes in an occupational wage hierarchy may reflect changes in the relative statuses of the component occupations.

Despite increased clerical worker productivity which was associated with insurance office automation (Cornfield et. al., 1984), the real earnings of most insurance occupations declined during the 1970s and the occupational wage hierarchy remained stable, as shown in Table 4. Women clerical workers'

[Table 4 about here]

real earnings declined at a slower rate than that of men managers and professionals, while the real earnings of salesmen increased between 1969 and 1979. However, the wage hierarchy persisted with the real earnings of men managers, sales workers and professionals being almost three to four times greater than that of women clerical workers.

BLS data on 27 life insurance, non-supervisory, clerical occupations from the 1971 and 1980 life insurance industry wage surveys suggest that changes in the clerical occupational wage hierarchy accompanied bureaucratization and office automation. The 1971 and 1980, mean, real, weekly earnings of these 27 occupations are presented in Table 5. The occupations

[Table 5 about here]

are shown in descending order of their 1971 earnings. The alphabetical letters which follow most of the occupation names refer to the relative skill level of the occupation within its occupational subgroup, where "A" denotes the

highest skill level and successive letters denote decreasing skill levels. For example, secretary, A and secretary, D are the highest-and lowest-skill occupations, respectively, of the four secretarial occupations (secretary, A-D) which constitute the secretary occupational subgroup.

The life insurance clerical occupational wage hierarchy changed in five ways between 1971 and 1980. First, the real earnings of all 27 occupations declined between 1971 and 1980 (see Table 5). Second, the earnings of the growing interpersonal and computer-related occupations tended to remain and concentrate further above the median occupational earnings while the earnings of manual occupations tended to concentrate below the median between 1971 and 1980, as shown in Table 6. Third, although the earnings rank-order of

[Table 6 about here]

the 27 occupations in Table 5 remained fairly stable (Spearman's rank-order correlation coefficient = .96, $p < .001$), the ranks of 24 of these 27 occupations changed between 1971 and 1980. The data in Table 7 show that the earnings

[Table 7 about here]

ranks of the interpersonal occupations tended to be higher in 1980, while those of manual and computer-related occupations mainly declined by 1980.

The fourth and fifth trends in the clerical occupational wage hierarchy concern occupational subgroup wage hierarchies. Of the 27 life insurance occupations, 25 are components of 10 occupational subgroups (tape librarian and transcribing machine typist are not components of an occupational subgroup). These 25 occupations are listed by type of occupation (i.e., interpersonal, manual, and computer-related) and by occupational subgroup in Table 8. The

[Table 8 about here]

10 occupational subgroups in Table 8 are secretary, claim approver, correspondence clerk, accounting clerk, stenographer, typist, file clerk, insurance occupations, computer operator, and keypunch operator. The 1971 and 1980 ratios between the mean, real weekly earnings of the higher- and lowest-skill occupations within an occupational subgroup are presented for each of the 10 occupational subgroups in Table 8. For example, the ratio of the 1971 earnings of secretary, A to that of secretary, D is 1.46; the 1971 ratio of secretary, B earnings to secretary, D earnings is 1.27; the ratio of the 1980 earnings of correspondence clerk, A to that of correspondence clerk, B is 1.15; etc.

The fourth trend in the clerical occupational wage hierarchy, as shown in Table 8, is that the wage hierarchies of 6 of the 10 occupational subgroups diminished or homogenized between 1971 and 1980. That is, the ratio between the highest- and lowest-skill occupations within a subgroup for these 6 subgroups declined between 1971 and 1980. These 6 occupational subgroups accounted for 53% of the clerical employment represented by the 27 life insurance occupations.

The fifth trend in the clerical wage hierarchy is that wage homogenization occurred with greatest frequency among the manual occupations, as shown in

[Table 9 about here]

Table 9. All of the manual occupations were components of occupational subgroups whose wage hierarchies diminished or homogenized between 1971 and 1980, while almost 85% of the interpersonal and computer-related occupations were occupational components of subgroups whose wage hierarchies became more hierarchical by 1980.

The Changing Status of Insurance Clerical Work

The foregoing discussion of the four insurance industry features suggests that three trends in insurance clerical work which accompanied bureaucratization and office automation, in the context of occupational sex segregation, may have promoted or retarded the unionization of women clerical workers. First, despite increased clerical worker productivity and the stability of the relationship between the earnings of women clerical workers and those of the non-clerical, majority-men insurance occupations, the real earnings of all clerical occupations declined during the 1970s. Second, the proportion of clerical employment in higher-wage, interpersonal and computer-related occupations increased, while that in lower-wage, manual occupations declined by 1980. Third, the wage hierarchies among the declining, manual occupations homogenized, while those of the emerging interpersonal and computer-related occupations tended to become more hierarchical.

These three trends, along with bureaucratization and office automation, may promote or retard unionization among insurance clerical women. Declining real earnings and the homogenization of manual clerical work is likely to promote unionization, especially among manual clerks, because diminishing status differences among them may facilitate their perception of common interests. Also, the apparent status polarization between manual and other clerical workers not only may engender unity among manual clerks, but may also reflect blocked mobility of manual clerks into the higher-status jobs, as suggested by clerical work research (Seidman, 1978; Kanter, 1977). But while some have argued that blocked mobility facilitates unionization (Chinoy, 1955), Kanter (1977:150) maintains that blocked mobility lowers both clerical

worker morale and, therefore, the desire for unionization. In the longer-run, if the proportion of manual clerical employment continues to decline, the strength and capacity of this occupational group to unionize may diminish.

Status polarization between manual clerks, on the one hand, and interpersonal and computer-related clerks, on the other, as well as the emerging status hierarchies among the interpersonal and computer-related occupations may divide clerical workers as a whole and, thereby, retard clerical worker unionization. Moreover, the emerging hierarchies within the computer-related and interpersonal occupations, along with the continued patrimonial relationships among secretaries, may divide workers within these occupational groups, if not, in the case of secretaries, further their fealty toward and identification with management. Yet, bureaucratization, in the form of increased, impersonal and centralized controls, may lower clerical worker identification with management. Thus, bureaucratization, office automation, and the transformation of clerical work lead to ambiguous predictions about the course and occupational pattern of unionization among women clerical workers in insurance.

Occupational Patterns of Unionization in Life Insurance

The 1971-1980 trends in unionization for the 27 life insurance clerical occupations discussed above cannot be computed because occupational unionization data from the 1971 BLS wage survey of life insurance are unavailable. However, the BLS provided me with unpublished unionization data for 30 non-supervisory clerical occupations from the 1980 life insurance wage survey (3 of these occupations, secretary, E and switchboard operators, A and B, were omitted from the above analyses due to unavailability of 1971 data). Of these 30 occupations, 27 consisted of a majority of women and the percentage of women

in 24 of these occupations exceeded 90%. Therefore, only the percentages of women workers in these 30 occupations who are covered by a union contract are shown in Table 10 by occupation and establishment size. These occupational

[Table 10 about here]

percentages in Table 10 are shown in descending order of the percentages for small establishment workers.

Three patterns may be discerned from the Table 10 data. First, the percentage of women in small establishments who are unionized exceeds that of women in large establishments for 24 of the 30 occupations. While the occupational percentage unionized among small establishment women varied between 1.6% and 19.2%, that among large establishment women did not exceed 4.2% for 27 of the occupations, nor exceeded 2.2% for 20 occupations. Given the relatively low and invariant occupational percentages among large establishment women, the remaining two patterns pertain only to small establishment women.

Second, for small establishment women, variation in the 1980 percentage unionized across the 30 occupations is unassociated with occupational earnings and type of occupation. The Spearman rank-order correlation coefficient between mean, real weekly occupational earnings and percentage of small establishment women who are unionized for the 30 occupations is only .152 ($p > .05$). In an analysis which is unreported here, the 30 occupations were cross-classified by type (i.e., interpersonal, computer-related and manual) and by whether or not the occupational percentage unionized among small establishment women exceeded the median occupational percentage, 5.6% (see Table 10). The chi-square statistic for this cross-tabulation was statistically insignificant (chi-square = 0.84, 2df, $p > .05$).

Third, occupational variation in the percentage of small establishment women who are unionized is associated with the occupational earnings level within two of the three occupational types. That is, the occupations of each type--interpersonal, computer-related, and manual--were distinguished by their 1980 earnings relative to the other occupations of the same occupational type. Then, the 30 occupations were cross-classified by their within-occupational-type earnings level (i.e., whether or not earnings were less than the median earnings of the occupations within one type) and by the percentage unionized among small establishment women (i.e., whether or not the percentage exceeded the median occupational percentage, 5.6%), as shown in Table 11.

[Table 11 about here]

The data in Table 11 show an inverse association between earnings level and the percentage of small establishment women who are unionized within the interpersonal and manual occupations. There is no earnings-unionization association among the computer-related occupations, two-thirds of which have relatively high percentages of unionized women regardless of occupational earnings level.

These findings imply two hypotheses about the causes of life insurance unionization. However, given the unavailability of appropriate data, these hypotheses can only be inferred from the findings. First, the negative association between establishment size and percentage unionized suggests that, at least from a cross-sectional perspective, the classical thesis about the effect of large establishment size on worker alienation and, in turn, on unionization is inapplicable to insurance. Rather, for the recent unionization of insurance clerical women, establishment size may be an indicator of the quality of employment conditions (e.g. wages and benefits) and the capacity

of the employer to resist unionization. Indeed, union representation election research documents a negative association between election unit size and the odds of a pro-union election outcome for elections held in all industries since the late 1960s, despite the higher unit costs of organizing smaller establishments. Representation election research and the theories of white-collar unionization discussed above suggest that the unit size differential in representation election outcomes may be attributable to greater cohesiveness among small establishment workers, relatively inferior employment conditions in smaller establishments, and relatively low levels of employer resistance to unionization among small employers (Fiorito and Greer, 1982; Heneman and Sandver, 1983). According to the 1976 and 1980 BLS wage surveys of life insurance, the earnings of large establishment employees were on the average approximately 10% higher than that of small establishment employees (U.S. Bureau of Labor Statistics, 1978, 1981).

Second, the occupational patterns of unionization are consistent with a blocked-mobility hypothesis about occupational differentials in the propensity to unionize. For clerical workers in the interpersonal and manual occupations, the percentage unionized was greatest in the higher-earnings occupations within the interpersonal and manual occupational groups. This implies, as Chinoy (1955) maintained, that workers who have risen to higher-echelon jobs within a family of related jobs and, therefore, who expect no further promotions, are more likely to unionize to improve their livelihoods than workers who are beginning their careers in entry-level jobs, who expect to be promoted, or who may quit and seek employment with another employer. This suggests, then, that clerical workers with vested interests in their jobs, but whose upward mobility is blocked, are the most likely to unionize. The blocked-mobility

hypothesis is also consistent with insurance clerical workers who are likely to experience Kanter's (1977) patrimonial relationship with their bosses. The data in Table 10 show that the percentages unionized among higher-echelon secretaries (secretary, A-C) exceeded not only that of the lower-echelon secretaries (secretary, D and E), but the 30-occupation median percentage as well. Thus, blocked mobility may override feelings of patrimonial fealty and, thereby, foster unionization. Furthermore, the findings suggest that the blocked-mobility hypothesis holds for occupations regardless of the trend in their wage hierarchies. The inverse association between earnings level and percentage unionized holds among interpersonal occupations, most of whose wage hierarchies had become more hierarchical by 1980, and among manual occupations, whose wage hierarchies had homogenized.

Among the six computer-related occupations, the occupational earnings level relative to the computer occupation median earnings had little impact on the level of occupational unionization. Moreover, the percentage unionized of 4 of these 6 occupations not only exceeded the 30-occupation median percentage, but also were among the 8 highest occupational percentages of the 30 occupations. The relatively high levels of unionization among these workers, who are machine operators, may be attributable to greater restrictions on their physical movement. Moreover, workers in the computer-related occupations, which as a group consist of a smaller number of different occupations than the interpersonal and manual occupational groups, may possess skills which qualify them for a smaller number of jobs than workers in the interpersonal and manual occupations. Therefore, the relatively high levels of unionization among workers in the computer-related occupations may be attributable to greater restrictions on both their physical and social mobility.

Collective Bargaining Issues

The collective bargaining issues of women clerical workers in insurance address their economic concerns, the implementation of office automation, occupational health and safety concerns, and gender-related concerns. The policy statements of Working Women, the vanguard working women's organization which works with the Service Employees International Union (SEIU) to organize women clerical workers, provide an overview of the collective bargaining orientation of this new form of unionization. In its 1980 publication Race Against Time: Automation of the Office, Working Women presents a philosophy and critique in which technology, both its design and implementation, is not neutral but reflects corporate interests and managerial choices. These interests and choices are directed toward achieving lower clerical labor costs and higher worker productivity through a unilateral deskilling of office work with office automation and by implementing centralized, impersonal, Scientific Management controls of the clerical work force. According to Working Women (1980), the main consequences for women clerical workers, especially in the financial sector, is employment in degraded, low-wage, dead-end, unsafe, and increasingly insecure jobs which allow the employees little discretion, restrict their physical movement, and lead to on-the-job, social isolation. Also, Working Women (1980) opposes the spread of office piecework that has accompanied financial sector office automation and seeks to control increasing shift work. This philosophy and critique of office automation are fairly consistent with that of the AFL-CIO and the international labor movement (see for example, American Labor, [1981a, 1981b] and AFL-CIO News, [1983b, 1984b, 1984c]).

Given its assertion about the non-neutrality of technology, Working Women (1980) maintains that office automation can and should be implemented to create fulfilling, safe jobs and that negative human consequences of office automation must be controlled through collective bargaining. As Working Women President Karen Nussbaum put it, "The key to improving the conditions for women lies in organizing the private sector" (Trost, 1985:1). Among the many collective bargaining goals promoted by Working Women (1980) are higher wages, job redesign, job rotation, increased breaktime and limitations on hours. Similarly, the Women Employed Institute (1979), a Chicago-based working women's organization mainly oriented toward women clerical workers, published a seven-point program which espouses fair salary schedules, worker participation in setting office policies and procedures, employee training programs, written job descriptions, job posting and promotion programs, grievance procedures, and equal pay for equal work.

Occupational safety and health is a chief concern in clerical worker organizing and collective bargaining and has recently entered the political arena (Andrew, 1983; Apcar and Trost, 1985). According to Working Women (1980) and labor organizations, automated office work, especially typing at video display terminals (VDTs) for long hours, creates stress, eyestrain, migraine headaches, nausea and back pain, among other problems (AFL-CIO News, 1983b, 1984b, 1984c). While the question of reproductive hazards stemming from VDT radiation emission has yet to be resolved, labor organizations are calling for "pregnancy-protection packages" which allow pregnant VDT operators to transfer jobs without losing pay, seniority and fringe benefits (AFL-CIO News, 1984c). Other VDT, health and safety collective bargaining goals which were announced at a recent 20-nation meeting of the International Confederation

of Free Trade Unions covered control of radiation emission levels, rest breaks, work station lighting, facial rashes and air contaminants (AFL-CIO News, 1984c). Working Women and SEIU recently launched a "Campaign for VDT Safety," targeting 18 states for the enactment of protective, "right to know" legislation and regulations (Wall Street Journal, 1984; AFL-CIO News, 1985a, 1985b).

The recent and widely publicized union victory at Equitable Life Assurance Society of the U.S., the third largest U.S. insurance company, illustrates the collective bargaining issues of women clerical workers in the insurance industry (Wall Street Journal, 1982; Trost, 1984; AFL-CIO News, 1984a; Serrin, 1984; Perl, 1984; Slaughter, 1984; Service Employee, 1984-85). In February, 1982, SEIU District 925, a joint venture of Working Women and SEIU, won union representation among claims processors at Equitable's highly automated Syracuse, NY office. In November, 1984, after a standoff with company threats to close the office, employee picketing, and an AFL-CIO boycott of Equitable (Wall Street Journal, 1983a, 1983b), the union signed the first agreement in the company's history. The three-year contract provides the workers, who are mainly women, with 14% wage increases over the life of the agreement. Other economic provisions include a no-layoff clause, revised pay scales, and a commitment from the company not to close the office. Further, the contract removes attitude and attendance criteria from performance reviews, allows workers to challenge the computerized audits of their performances, and establishes a union grievance procedure with the possibility of appealing job ratings to an outside arbitrator. The union gained assurances from the company that it would not stall in future representation elections and collective bargaining and that it would not hire anti-union consultants.

The Equitable contract also addresses health and safety issues, especially for VDT operators. Among the health and safety provisions are the right of pregnant VDT operators to transfer to non-VDT work, the right of VDT operators to transfer to other terminals if the current terminal is believed to be unsafe, extra breaktime from VDT work and 2 hour limitations on continuous VDT use, VDT modifications to reduce stress and other physical, employee problems, regular machine maintenance, medical vision care, and requirements for such safety equipment as glare reduction devices, detachable keyboards, and adjustable chairs.

In sum, insurance industry collective bargaining is emerging to address the economic, health and safety, and gender-related problems of women clerical workers that accompany bureaucratization and office automation. Collective bargaining issues derive from a perceived need among clerical workers to gain control over the implementation of office technology in order to improve their economic livelihoods, maintain health and safety conditions at work, and limit capricious, managerial decision making.

Managerial Responses to Collective Bargaining

Theories of white-collar unionism maintain that employer resistance retards unionization (Adams, 1975; Prandy et. al., 1983). Insurance industry management has maintained a contradictory management philosophy toward the clerical work force which may have simultaneously promoted and retarded clerical unionization. The philosophy consists of unilateral, centralized control, on the one hand, and paternalism or human relations management, on the other. The pioneering efforts of the insurance industry in implementing labor-saving, office automation coupled with impersonal controls of the clerical work force

is the chief indicator of a managerial belief in unilateral, centralized control. Yet, such managerial action is a major contributing factor to the beginnings of unionization among women clerical workers.

Insurance management has responded to unionization in two ways. The first, which follows from its adherence to unilateral, centralized control, is to actively oppose collective bargaining, as shown in the Equitable case. Further, the insurance industry opposed the recent merger of the small Insurance Workers International Union into the United Food and Commercial Workers, which was mounting an insurance industry organizing campaign (AFL CIO News, 1983a).

The second managerial response to unionization follows from paternalism and constitutes human relations management for the purpose of preventing unionization. The chief indicators of paternalism in insurance have been efforts to avoid layoffs through retraining and job reassignment, low levels of layoffs, and little technological displacement associated with office automation since the 1950s (Kassalow, 1966:359; U.S. Bureau of Labor Statistics, 1960, 1966). Such paternalism has been buttressed by relatively high rates of voluntary quits and attrition among clerical workers and industry growth (Kassalow, 1966; Werneke, 1983; U.S. Bureau of Labor Statistics, 1960, 1966). The beginnings of clerical worker unionization have hastened the extension of paternalism in the form of human relations management (National Underwriter, 1980a, 1980b). For example, insurance management consultant Matthew Goodfellow (1975, 1980, 1981a, 1981b) disseminates his union-prevention advice in insurance trade publications, urging the industry to improve communication with employees and cease "autocratic" relations with clerical workers in order to discourage unionization. Similarly, labor lawyers Krupman and Vacarro (1981) advise

the insurance industry to address such women's issues as sexual harassment and sex discrimination in wage-setting to prevent clerical worker unionization, if not litigation against employer sex discrimination.

Increasingly, insurance management has adopted human relations management not only to prevent unionization, but to overcome clerical worker resistance to office automation and to raise clerical worker productivity. Human relations management practices in insurance include listening carefully to employee complaints, informing employees of technological change and seeking their advice, establishing quality control circles, job enrichment programs and flexible work schedules, and hiring retirees to fill temporary vacancies (Cornfield et. al., 1984). In sum, insurance management may have simultaneously promoted and retarded the unionization of women clerical workers. The expression of unilateral, centralized control in the impersonal, implementation of office automation created the centerpiece of the organized clerical worker critique of employment conditions and justification of unionization. However, paternalistic, human relations management may have retarded the growth of clerical worker unionization (Kassalow, 1966; Costello, 1983).

Clerical Workers and Management in Insurance

In sum, growing unionization among women clerical workers in insurance, occupational patterns of unionization, and clerical worker collective bargaining issues reflect and constitute a response to bureaucratization and office automation which is catalyzed by the increased organizing efforts of the women's and labor movements. Accompanying bureaucratization and office automation in insurance clerical work are perceived blocked mobility, increased impersonal managerial control, declining real earnings, and occupational health hazards

among the women workers in this highly, sexually segregated group of occupations. These trends may have promoted unionization among these women and have informed the explicit critique of clerical employment which has been adopted by the women's and labor movements in their union organizing drives among insurance clerical workers. These trends among women clerical workers in insurance also shaped the strategy for targeting this group of workers in organizing campaigns, thereby giving rise to this new form of unionism, a gender-specific hybrid of craft and industrial unionism.

With increased unionization, insurance management has responded by developing human relations management practices to prevent unionization, reduce worker resistance to office automation, and raise clerical worker productivity. This managerial response may have prevented the historically low level of clerical worker unionization in insurance from rising higher than it has. That large insurers have greater resources for modifying managerial practices and preventing unionization with the aid of outside consultants and for providing employees with relatively superior wages and benefits may account for the lower levels of unionization among women clerical workers in larger insurance establishments compared to smaller insurance establishments.

Conclusion

The case of growing unionization among insurance clerical women suggests that theories of white-collar unionization ought to be modified in two ways. First, with changing sex roles, many women are no longer temporary wage-earners and are embarking on long-term careers. Originally formulated in the early 1950s before the recent resurgence of the women's movement, the passage of civil rights legislation, and declining real earnings in the 1970s, the post-

industrial thesis assumed that women would not unionize because they lacked a career orientation. With these social, political and economic changes, more women have long-term, vested interests in their jobs and harbor pro-union attitudes. Given the persistence of occupational sex segregation in clerical work and other white-collar occupations, the changing sexual division of labor in the home and work place has generated a new supply of potential and actual white-collar union members. However, theories of white-collar unionization emphasize the effects of the worker's socioeconomic standing on the probability of unionization. Therefore, a theory of white-collar unionization, and of unionization generally, ought to include the effects of changes in extra-work institutions, such as the family, which affect the supply of potential union members and, hence, unionization trends.

Second, the post-industrial thesis assumed a static arrangement of social classes and, therefore, persistent aversion of white-collar workers toward unionization. However, since the late nineteenth century, the gender, social class origins and relative status of clerical work and clerical workers have changed, especially with office automation since the 1950s after the original formulation of the post-industrial thesis. Clerical work now comprises many women from working class origins in jobs that are more specialized, lower in status, and subjected to impersonal, partly computerized managerial control. These changes have motivated many women clerical workers to unionize for reasons which are similar to those that have motivated blue-collar unionization: improvements in economic employment conditions, limitations on capricious management, and control of the implementation of technological change. Therefore, a theory of white-collar unionization ought to include the effects of the

changing social class position of white-collar workers, especially women
clerical workers, on their propensity to unionize.

Table 1. Percentage Women and Percentage Distribution of Women and Men Employees by Occupation in the Insurance Industry, 1950-1980

<u>Occupation</u>	(1)	(2)	(3) (4)		(5) (6)	
	<u>1950</u>	<u>1980</u>	<u>% of Employed Women</u>		<u>% of Employed Men</u>	
Professionals	21.4 (28) ^a	46.5 (158)	1.8	6.8	5.3	10.3
Managers	15.5 (73)	29.2 (197)	3.4	5.3	14.6	16.9
Insurance agents ^b	8.7 (290)	25.7 (558)	7.6	13.3	63.1	50.4
Clerical workers	84.7 (333)	84.2 (932)	85.1	72.5	12.2	17.9
Secretaries, typists and stenographers	97.1 (140)	99.1 (292)	40.9	26.8	1.0	0.3
Other clerical	75.7 (194)	77.3 (639)	44.2	45.7	11.2	17.6
Other	25.8 (27)	37.5 (59)	2.1	2.0	4.8	4.5
Total	44.2 (751)	56.7 (1905)	100.0	99.9 ^c	100.0	100.0
N ^d	-	-	332	1081	419	824

a. N's in thousands in parentheses.

b. Includes agents, brokers and underwriters.

c. Doesn't sum to 100.0% due to rounding.

d. In thousands.

Source: U.S. Bureau of the Census: 1950 Census, Vol. IV, Special Reports, Part I, Chapter C, Occupation by Industry; 1980 Census, Vol. 2, Subjects Reports, PC80-2-7C, Occupation by Industry.

Table 2. Percentage Distribution of Establishments and Employment by Establishment Size in Insurance (SIC 63), 1951-1981.

<u>Establishment Size (Employees)</u>	<u>Establishments</u>				<u>Employment</u>		
	<u>1951</u>	<u>1962</u>	<u>1970</u>	<u>1981</u>	<u>1962</u>	<u>1970</u>	<u>1981</u>
Less than 20	70.6	73.5	71.8	71.0	12.3	11.6	11.6
20-99	23.4	21.2	22.3	23.1	27.6	26.4	24.9
100-499	5.1	4.5	5.0	4.8	27.8	28.6	26.6
500 or more	0.9	0.8	0.9	1.1	32.3	33.4	36.9
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
N (in 1000's)	16.8	25.9	29.2	32.9	815.6	1002.0	1229.4

Source: U.S. Department of Commerce and U.S. Department of Health, Education, and Welfare, County Business Patterns, First Quarter, 1951, Part I, Washington, D.C.: U.S. Government Printing Office, 1953; U.S. Bureau of the Census, County Business Patterns, First Quarter, 1962, Part I, Washington, D.C.: U.S. Government Printing Office, 1963; U.S. Bureau of the Census, County Business Patterns 1970, CBP-70-1, Washington, D.C.: U.S. Government Printing Office, 1971; U.S. Bureau of the Census, County Business Patterns 1981, CBP-81-1, Washington, D.C.: U.S. Government Printing Office, 1983.

Table 3. Percentage Distribution of Non-Supervisory Clerical Employment and Percentage Change by Occupation in Insurance, 1970-1980.

<u>Occupation</u>	<u>1970</u>	<u>1980</u>	<u>1970-80 % change</u>
Interpersonal occupations	43.8	47.7	42.4%
Secretaries	26.0	26.2	32.0
Information clerks	1.1	2.0	130.0
Adjusters and investigators	16.7	19.5	52.7
Computer-related occupations	4.4	6.1	83.1
Computer and peripheral equipment operators	1.1	2.6	216.6
Data-entry keyers	3.3	3.5	38.7
Non-computer office machine operators	1.6 ^a	1.1	-6.9
Duplicating, mail and other office machine operators	0.9	0.6	-9.8
Communications equipment operators	0.6	0.5	-2.7
Manual occupations	36.8 ^a	23.4 ^a	-16.8
Typists and stenographers	15.4	8.2	-30.0
Statistical clerks	4.8	1.0	-72.0
Bookkeepers	7.2	6.5	17.6
File clerks	7.0	4.3	-19.3
Mail and material recording, scheduling and distributing clerks	2.3	3.3	85.3
Other	13.4	21.7	111.6
Total	100.0%	100.0%	30.9
N (in 1000's)	648	848	--

a. Percentages of detailed occupations do not sum to subtotal percentage due to rounding.

Source: U.S. Bureau of the Census, Census of Population: 1970, Final Report PC(2)-7C, Washington, D.C.: U.S. Government Printing Office, 1972 and 1980 Census of Population, PC80-2-7C, Washington, D.C.: U.S. Government Printing Office, 1984.

Table 4. Mean, Real (1967 Dollars), Annual Earnings, Percentage Change in Real Earnings, and Ratio of Real Earnings to Women, Clerical Workers' Real Earnings by Gender/Occupation in Insurance, 1969-1979.

<u>Gender/Occupation</u>	<u>Mean Real Annual Earnings</u>			<u>Ratio of real earnings to women, clerical workers' real earnings</u>	
	<u>1969</u>	<u>1979</u>	<u>1969-1979 % change</u>	<u>1969</u>	<u>1979</u>
Men, Managers	14860	14134	-4.9%	3.94	3.78
Men, Sales workers	10799	11332	4.9	2.87	3.03
Men, Professionals	10776	9828	-8.8	2.86	2.63
Women, Clerical workers	3769	3741	-0.7	--	--

Source: See Table 3.

Table 5. Rank-order of 27 Life Insurance, Non-Supervisory Clerical Occupations by Mean, Real (1967 Dollars), Weekly Earnings, 1971 and 1980

<u>Occupation</u>	1971		1980	
	<u>Mean Real Weekly Earnings</u>	<u>Rank</u>	<u>Mean Real Weekly Earnings</u>	<u>Rank</u>
Claim approver, A	150.0	1	115.1	3
Secretary, A	141.8	2	124.6	1
Computer operator, A	135.6	3	117.7	2
Claim approver, B	129.8	4	91.8	8
Secretary, B	123.2	5	106.4	4
Computer operator, B	120.8	6	96.2	6
Correspondence clerk, A	118.7	7	96.4	5
Secretary, C	109.6	8	95.6	7
Computer operator, C	107.2	9	81.8	11.5
Tape librarian	105.1	10	80.6	13
Accounting clerk, A	100.6	11	81.8	11.5
Secretary, D	97.3	12	84.1	9
Stenographer, senior	96.9	13	75.0	15
Correspondence clerk, B	96.0	14	83.9	10
Keypunch operator, A	91.5	15	78.8	14
Policy evaluation clerk	87.8	16.5	74.1	16
File clerk, A	87.8	16.5	69.9	21
Typist, A	83.7	18	70.1	20
Transcribing machine typist	81.6	19	73.1	17
Premium acceptor	80.8	20	67.3	22
Stenographer, general	80.4	21	71.3	18
Keypunch operator, B	80.0	22	66.7	23.5
Accounting clerk, B	79.6	23	70.7	19
File clerk, B	73.8	24	61.2	26
Typist, B	73.0	25	61.6	25
Premium-ledger-card clerk	72.1	26	66.7	23.5
File clerk, C	67.2	27	55.1	27

Source: U.S. Bureau of Labor Statistics, Industry Wage Survey, Life Insurance, December 1971, Bulletin no. 1791, Washington, D.C.: U.S. Government Printing Office, 1973 and Industry Wage Survey: Life Insurance, February 1980, Bulletin no. 2119 (microfiche), Washington, D.C.: U.S. Government Printing Office, 1981.

Table 6. Percentage Distribution of 27 Life Insurance, Non-Supervisory Clerical Occupations by Type of Occupation and Earnings Level, 1971 and 1980

Type of occupation ^a	1971				1980			
	Real Weekly Earnings			N	Real Weekly Earnings			N
	High ^b	Low	Total		High ^b	Low	Total	
Interpersonal	100.0	0.0	100.0%	8	100.0	0.0	100.0%	8
Computer-related	66.7	33.3	100.0%	6	83.3	16.7	100.0%	6
Manual	15.4	84.6	100.0%	13	7.7	92.3	100.0%	13
Total	51.9	48.1	100.0%	27	51.9	48.1	100.0%	27
Chi-square, 2df	14.87*				19.96*			

* p < .001

a. Interpersonal = secretary, correspondence clerk, and claim approver; computer-related = computer operator, keypunch operator, and tape librarian; all other occupations listed in Table 5 are manual occupations.

b. High = greater than or equal to the median occupational earnings in Table 5.

Source: See Table 5.

Table 7. Percentage Distribution of 27 Life Insurance, Non-Supervisory Clerical Occupations by Type of Occupation and 1971-1980 Change in Occupational Earnings Rank

<u>Type of occupation</u> ^a	<u>Higher earnings rank in 1980</u>	<u>Lower or same earnings rank in 1980</u>	<u>Total</u>	<u>N</u>
Interpersonal	75.0	25.0	100.0%	8
Manual or computer-related	31.6	68.4	100.0%	19
Total	44.4	55.6	100.0%	27

Chi-square = 4.14, 1df, p < .05.

a. See Table 6, note a, for definitions of occupational types.

Source: See Table 5.

Table 8. Occupation Earnings Ratios between Higher-Skill and Lowest-Skill Occupations for 10 Subgroups of 25 Life Insurance, Non-Supervisory Clerical Occupations by Type of Occupation, 1971 and 1980.

Occupations	Manual Occupations		Computer-related Occupations	
	1971	1980	1971	1980
Interpersonal Occupations				
Secretary				
A:D	1.46	1.48	1.26	1.16
B:D	1.27	1.27	1.21	1.05
C:D	1.13	1.14	1.15	1.14
Claim approver, A:B	1.16	1.25		
Correspondence clerk, A:B	1.24	1.15	1.31	1.27
			1.10	1.11
Insurance occupations				
Pol. eval. clerk; Prem. led. card clerk			1.22	1.11
Prem. acc.; Prem. led. card clerk			1.12	1.01

Source: See Table 5.

Table 9. Percentage Distribution of 25 Life Insurance, Non-Supervisory Clerical Occupations by Type of Occupation and 1971-1980 Change in Occupational Subgroup Wage Hierarchy

<u>Type of Occupation^a</u>	<u>Part of an occupational subgroup^b with a diminishing wage hierarchy</u>	<u>Part of an occupational subgroup^b with an increasing wage hierarchy</u>	<u>Total</u>	<u>N</u>
Interpersonal or computer-related	15.4	84.6	100.0%	13
Manual	100.0	0.0	100.0%	12
Total	56.0	44.0	100.0%	25

Chi-square = 18.13, 1df, p < .001

a. See Table 6, note a, for definitions of occupational types.

b. See Table 8 for definitions of the 10 occupational subgroups.

Source: See Table 5.

Table 10. Percentage of Women Workers Who are Covered by a Union Contract by Occupation and Establishment Size for 30 Life Insurance, Non-Supervisory Clerical Occupations, 1980

Occupation	Establishment Size ^a		Occupation	Establishment Size	
	Small	Large		Small	Large
Stenographer, senior	19.2% (78) ^b	0.0 (183)	Typist, B	5.6 (897)	1.1 (920)
Stenographer, general	11.2 (134)	0.0 (305)	Policy evaluation clerk	5.5 (582)	1.0 (296)
Key entry operator, A	10.9 (475)	0.5 (824)	Computer operator, C	5.1 (78)	0.0 (128)
Computer operator, B	9.5 (116)	0.0 (171)	Correspondence clerk, B	4.7 (788)	3.9 (516)
Accounting clerk, A	8.7 (1054)	4.2 (496)	File clerk, A	4.4 (137)	3.9 (206)
Key entry operator, B	8.7 (977)	0.4 (446)	File clerk, B	3.9 (671)	4.1 (488)
Secretary, B	8.6 (754)	0.5 (601)	Switchboard operator, A	3.6 (112)	4.2 (71)
Computer operator, A	7.5 (53)	5.7 (35)	Claim approver, B	3.1 (553)	2.2 (402)
Typist, A	7.2 (500)	1.0 (794)	Premium acceptor	3.1 (419)	1.6 (123)
Secretary, C	7.1 (747)	1.7 (1163)	Secretary, D	2.9 (780)	3.4 (1040)
Transcribing-machine typist	6.4 (519)	14.3 (266)	Premium-ledger-card clerk	2.8 (283)	3.0 (33)
Accounting clerk, B	6.4 (1523)	0.7 (881)	Data librarian	2.8 (108)	20.4 (49)
Claim approver, A	6.1 (229)	0.9 (213)	File clerk, C	2.3 (931)	0.0 (567)
Switchboard operator, B	5.9 (85)	0.0 (29)	Correspondence clerk, A	1.9 (427)	1.8 (220)
Secretary, A	5.7 (157)	0.0 (196)	Secretary, E	1.6 (427)	0.0 (738)

a. Small=50-999 workers; large=1000 or more workers.

b. N's in parentheses.

SOURCE: Unpublished data from the U.S. Bureau of Labor Statistics.

Table 11. Percentage Distribution of 30 Life Insurance, Non-Supervisory Clerical Occupations by Type of Occupation, Earnings Level, and Percentage of Women Workers in Small Establishments Who are Covered by a Union Contract, 1980

Type of Occupation/Earnings ^a	Percentage of women workers in small establishments covered by a union contract			N
	Low ^b	High	Total	
Interpersonal, High earnings	20.0	80.0	100.0%	5
Interpersonal, Low earnings	100.0	0.0	100.0%	4
Computer-related, High earnings	33.3	66.7	100.0%	3
Computer-related, Low earnings	33.3	66.7	100.0%	3
Manual, High earnings	25.0	75.0	100.0%	8
Manual, Low earnings	85.7	14.3	100.0%	7
Total	50.0	50.0	100.0%	30

Chi-square=12.04, 5df, $p < .05$

a. For definitions of occupational types, see Table 6, note a. Secretary, E and Switchboard operator, A & B, which are excluded from Table 6 due to unavailability of 1971 data, are classified as interpersonal and manual occupations, respectively, in Table 11. The 1980 mean, real weekly earnings are \$77.6 for Secretary, E, \$75.6 for Switchboard operator, A, and \$70.9 for Switchboard operator, B.

b. Less than or equal to the median occupational percentage, 5.6%.

SOURCE: See Table 10 and U.S. Bureau of Labor Statistics, Industry Wage Survey: Life Insurance, February 1980, Bulletin no. 2119 (microfiche), Washington, D.C.: U.S. Government Printing Office, 1981.

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