

Gender Inequality at Work

Jerry A. Jacobs
editor



SAGE Publications

International Educational and Professional Publisher

Thousand Oaks London New Delhi

Gendered Instructions

Cultural Lag and Gender Bias in the Hay System of Job Evaluation

RONNIE J. STEINBERG

The labor market is not gender neutral. Gender influences job content, the structure of authority and control, access to jobs, training opportunities, and mobility channels. It informs ideologies that legitimate workplace arrangements and employer choices, and it even shapes what is noticed about jobs and the people who fill them (Acker, 1989; Beechey, 1988; Beechey & Perkins, 1987; Cockburn, 1983; Game & Pringle, 1983; Scott, 1986). Assumptions about gender saturate the structure of compensation. According to historian Alice Kessler-Harris (1990), "Wages . . . suggest a set of gendered instructions that speak to men and women and to the relations between them" (p. 2).

Job evaluation systems are one set of organizational practices that introduce cultural assumptions about men and women into the labor market. Systems of job evaluation are social documents constructed in particular historical contexts (Steinberg, 1990). Assumptions about what

AUTHOR'S NOTE: This research was funded by the Ontario Nurses Association. I gratefully acknowledge the statistical assistance of Mary Lou King of the Ontario Nurses Association in the analysis of the Minnesota data. Special thanks go to Jerry A. Jacobs for his help in shaping the direction of this chapter. Michael Ames offered helpful comments on an earlier draft.

is valuable job content embedded in these systems remain invisible and unquestioned as long as they stay consistent with widely held cultural beliefs (Remick, 1981). Even after conceptions about gender have changed, job evaluation systems of earlier eras may transport outdated criteria into the new labor market contexts.

This chapter examines gender bias in the Hay Guide Chart-Profile Method, perhaps the most widely used and copied system of job evaluation. Many of the shortcomings of the Hay system are shared by other commonly used evaluation systems. In this chapter, I reach two conclusions. First, the Hay system continues to reflect gender bias that was endemic during its inception in the 1940s and 1950s when the wages paid to women's jobs were lowered systematically and explicitly because they were performed by women. By continuing to apply remarkably similar factor definitions and factor weights today, the Hay system perpetuates discrimination against women in the wage structure.

Second, the illusion of gender neutrality obscures a system geared to reproducing existing inequalities and biased toward executive functions. By cleansing the system of all direct references to gender or the gender division of labor, it appears to "objectively" value jobs solely as a function of universal criteria. On further examination, however, we find that the Hay system evaluates all jobs in terms of a set of operational definitions of job content that were developed to capture complexity specifically for executive, administrative, and managerial work. It fails to adequately valorize or even recognize distinctive job content characteristics associated with nonmanagerial work, especially work performed predominantly by women. Instead, it only recognizes differences in job complexity that can be reduced to positions on hierarchically constructed organizational charts.

The chapter first links the development of the Hay system to broader cultural assumptions about appropriate allocation of wages by gender and by occupation. Because Edward Hay was an academic as well as an entrepreneur, he chronicled the evolution and rationale for his system in a set of articles published over the period of a decade. These essays cover the values, orientation, and structure of the early system in sufficient detail to make possible comparisons with contemporary versions of the system. The chapter then demonstrates the continuity of the basic structure and values of the Hay system over almost half of a century. The final section examines an actual application of the Hay system to determine whether there is a gender effect in evaluation outcomes. The data are drawn from public sector jobs in the state of Minnesota. Regardless of

the factor examined, a strong male bias emerges, in which managerial jobs are consistently found to be more complex than nonmanagerial jobs.

Gendered Wages and Job Evaluation Historically

Throughout the 19th and 20th centuries, the wage structure was reflective of "an abiding tension between a market that is said to distinguish between workers' skills, education, and commitment . . . and a set of social constructs that values sexual difference in various ways" (Kessler-Harris, 1990, pp. 3-4). Men's wages reflected not only what they were worth but also their status as breadwinners for a family. By contrast, women's wages were viewed merely as a supplement to the wages of other family members. As Kessler-Harris (1990) concluded, "The nineteenth century fight for a family wage was . . . simultaneously a fight for a social order in which men could support families and receive the services of women, and women, dependent on men, could stay out of the labor force" (p. 9). Both labor and management continued to agree with these assumptions in the 20th century. As far back as the 1920s, historians have documented separate pay scales by gender, with the least skilled male worker earning more than the most skilled female worker (Schatz, 1983, p. 32). The persistence of the wage gap over the 20th century attests to the strength of these views of sex roles and to their institutionalization in a two-tiered wage structure. Women were paid a wage enabling family subsidy (and not self-sufficiency), independent of what a job was "worth."

Such assumptions and ideologies are embedded in the job evaluation systems that rationalize and legitimate the wage structure. Job evaluation systems can be traced back over 100 years to the U.S. Civil Service Commission in 1871 or to Frederick Taylor in 1881 (Treiman, 1979, p. 1). Their use in the private sector became widespread during World War II, "prompted by decisions of the National [U.S.] War Labor Board permitting wage increases only for the purpose of correcting demonstrated 'inequities' in wage structures" (Treiman, 1979, p. 1; see also Baron, Dobbin, & Jennings, 1986; Baron, Jennings, & Dobbin, 1988). Today's systems of job evaluation were thus developed at a time when hiring advertisements said, "Help Wanted—Male" or "Help Wanted—Female."

Modifications of these systems have been largely cosmetic. As a result, 50-year-old wage policies constrain current wage-setting practices. For

example, one study of the gender effects of compensation practices in California state government employment found that the 1986 salaries were affected by gender bias embedded in the job evaluation system then in place, which had been implemented in 1931. The salary and classification study on which the system was based "explicitly lowered salaries for female-dominated jobs" (Kim, 1989, p. 39).

Many early job evaluation textbooks overtly recommended procedures that would maintain customary low wages for historically female work. One expert reported in 1937 that

the conferees noted with approval that most occupations in their companies were filled respectively by men or by women throughout. The conference favored the segregation of men's jobs and women's jobs for valuation purposes. The representatives held that men's jobs should be valued with reference to market rates for similar types of men's work, and women's jobs should be valued with reference to market rates for similar types of women's work. (Riegel, 1937, p. 21)

In a recent review of these earlier job evaluation texts, Taylor (1989) concludes that

the historical record shows that overt sex discrimination was, in the not distant past, an integral part of personnel practice. Employers routinely placed men and women in sex-typed job classes and assigned lower pay rates to women than men, regardless of the similarities of their work. (pp. 25-26)

It is widely acknowledged that early job evaluation systems chose factors and factor weights to best reproduce, rationalize, and legitimate an existing wage hierarchy, including lower wages for historically female work (Beatty & Beatty, 1984; Remick, 1981; Treiman, 1979). Schwab (1985) has remarked that

job evaluation is typically validated against a wage criterion (Schwab, 1980a, Treiman and Hartmann, 1981). That is, the acceptability of job evaluation results are initially determined by the correspondence between the job hierarchy produced by the valuation system and some existing distribution of wages for those jobs. (pp. 41-42)

Because women's work was especially low paying at the time of the development of these systems, this method for constructing job evaluation systems assured that the characteristics differentially associated

with historically female jobs would not be treated as valuable job content. Hidden from view within evaluation systems were assumptions about the value of work as a function of the gender of the typical incumbent. Thus these systems institutionalized the taken-for-granted reality of the late 1940s and 1950s of women workers as secondary workers in low-wage jobs. The tension between market and gender noted above was obscured, although decidedly maintained.

Early job evaluation systems also carry an indirect gender effect in the types of jobs for which they were designed. Job evaluation systems were first developed largely in manufacturing contexts during World War II and then again during the U.S. Korean War, primarily in defense-related manufacturing industries where wage freezes were in effect (Patton & Littlefield, 1957; Shils, 1972). Systems also were developed to capture managerial positions in administrative contexts, most notably the Hay system. In their review of the most widely used job evaluation systems, including Hay, Treiman and Hartmann (1981) recognize the lack of fit between the categories of work on which job evaluation systems were developed and the types of technical and service-provision jobs characteristic of the contemporary labor market. These early systems failed to capture the complexity of technical and service work, limiting their usefulness as reliable instruments for gender-neutral job evaluation. Thus three features of traditional job evaluation account for its simultaneous appearance of gender neutrality and profoundly gendered character: the structure and values of the labor market at the time of its development, the use of the existing wage structure as the criterion for establishing factors and factor weights, and the types of work settings evaluated. The sources of gender bias identified in traditional job evaluation systems used today are the residue of these features.¹

Managerial Bias in the Hay System: Development and Continuity

Managerial Bias

Although many have written about the managerial bias in the Hay system, its historical roots have not been systematically investigated (Acker, 1989; Burton, 1987; Treiman, 1979; Werwie, 1987). Certainly, there is considerable evidence in the articles written by Hay and others to attest to its managerial orientation at the time of its development. Writing in 1951, Hay and an associate, Dale Purves, introduced the personnel

manager to a new method of job evaluation distinctively developed for use on managerial, higher-level professional, and executive jobs. They contended that job evaluation procedures used to evaluate these kinds of jobs needed to be different from those used to evaluate "simpler" jobs. Although the job components, broadly defined, were the same for both categories,

the mental application requirements consist of choices, and are easily determined, but are circumscribed through established standards and supervision. . . . But as we go up the ladder in job complexity and importance, the tangibility decreases, and the evaluating yardsticks are called upon to measure quantities for which they were not designed. . . . The emphasis shifts from doing and following to thinking and delegating; from following mapped out courses to mapping out the courses. It becomes increasingly difficult to measure leadership components by followership criteria. . . . The difference in degree between low- and high-level job elements is so great that it amounts to a difference in kind. (Hay & Purves, 1951, pp. 163-164)

This quotation provides an excellent statement of the assumptions that went into the construction of the Hay system of job evaluation and that continue to influence it today. Note the strong assumption that complexity and the bureaucratic/organizational hierarchy are synonymous: High-level jobs are "complex" and "important"; low-level jobs are "simple" and "circumscribed." In other words, these two categories of jobs are not just different; rather, complexity is defined precisely and only in terms of one category of jobs—high-level managerial/executive jobs. Other jobs are, by definition, simple. The difference between high-level and low-level jobs is asserted to be a "difference in kind." Throughout their article, the definition of a high-level job is clear: It involves supervision, formal organizational responsibility, and a management title. Accordingly, a low-level job means the absence of formal supervision (i.e., hiring, firing, scheduling, formal organizational responsibility, and a management title).

Following the logic of this view of job complexity, as one moves up the hierarchy there is a shift from doing to thinking and from following to leading. These assumptions are presented as so obvious—so taken for granted—that no further explanation is necessary. I suggest and will illustrate below that treating the organizational dimensions of job complexity and responsibility as the only dimension of complexity and responsibility severely limits the full evaluation of nonmanagerial jobs.

Although, on average, managerial work involves complex skills and responsibilities, so do many nonmanagerial jobs, such that, were we to expand the range of dimensions of complexity and responsibility, we would find reasonable equivalence in skills, effort, and responsibilities among many managerial and nonmanagerial job classes.

The managerial bias in the development of the Hay system is further evidenced in the assumption by Hay and Purves (1951) that the job and the incumbent are indistinguishable for managerial jobs but not for non-managers.

The essential difference between high-level and low-level jobs is the difference between conception, creation and direction vs. execution. Since the job is to a large extent made by the man, it is to be expected that good men will change the nature and extent of any jobs they may hold. (p. 164, emphasis in original).

In a later work, Hay and Purves (1953) state,

It is immaterial who is in the low-level job, so long as he is properly qualified to do it. But at high levels, the job is largely built around the man. Low-level jobs are usually designed to be done "one best way." In . . . a high-level job, there is no "one best way" to do it. (p. 244)

These early statements in support of the profile method of job evaluation are full of problematic assumptions:

1. Managers are high-level employees who perform the most complex and responsible jobs in an organization.
2. Nonmanagers are low-level employees engaged in simple work of limited complexity with limited responsibilities.
3. Complexity is measured unidimensionally as organizational complexity.
4. Only managers think, whereas nonmanagers do.
5. Responsibility is defined as formal or ultimate responsibility and not as practical or actual responsibility.
6. People in low-level jobs are interchangeable, whereas people in high-level jobs are unique.

It is possible to see first-hand the consequences of these assumptions in the discussion of the "profile" of a typist according to the three job dimensions isolated in this system of job evaluation:

"What are we paying a typist for—knowledge, mental application or accountability?" Certainly we are not paying very much for the mental application . . . for she is not called upon to use her head very much in making decisions; or in planning, policy making, or in creativeness. She is doing exactly as she is told with almost no room for a choice. Nor are we paying much for accountability. . . . About the only error that she could make is putting down the wrong thing on paper. What about the requirement for knowledge? . . . Not only must she be able to type but she must also be fluent in reading and understanding the language. After that comes the training in typing and finally the short time required to learn the duties of her job. . . . The typist is being paid primarily for *knowledge*. (Hay & Purves, 1951, p. 166)

By contrast, the profile for administrative or managerial jobs involves less emphasis on knowledge and more on mental application and accountability (Hay & Purves, 1951, pp. 167-168). A later article is exclusively concerned with describing the parameters of the high-level job in terms of its functions. The manager must design his organization, make and interpret policy, and plan, direct, and control his operations. He may also specialize—indeed, he may even be an expert with no organization under him. But, in this case, he will still be evaluated as having a high-level job, largely because of his position in the organizational hierarchy. Again, the focus of that article is clear: It is possible to describe and analyze managerial work and to measure all other jobs in terms of the presence or absence of characteristics found in managerial work.

The problem is not that the Hay system recognizes differences in complexity between managerial and nonmanagerial work but that location in the organizational hierarchy is the primary dimension of job complexity used to differentiate jobs. The consequence of this decision is to artificially define nonmanagerial work as being of lower complexity than managerial work, regardless of its job content, and to compress almost all nonmanagerial work into a few categories at lower factor levels. In the next section, we examine the consequences of these rules in the evaluation of actual jobs.

The distinctive managerial perspective embodied in the Hay Guide Chart-Profile Method is spelled out more explicitly in later articles, as is the self-interested motives for introducing managerially driven systems:

Bargaining over wages is a familiar part of the economic scene. But who is there to fight for better salaries for corporate executives? . . . Little formal attention is given to the salary problems of the executive. . . . In recent years,

a method of evaluating high level jobs has been developed which uses management thinking. Called the Guide Chart-Profile Method, . . . it . . . was devised to explain the reasons for suggested job evaluation salary standards—to show management how to evaluate high level jobs by thinking of them in management terms. . . . We have seen that the Guide Chart-Profile Method was designed for a specific purpose—evaluating managerial and technical jobs in order to get equitable salary standards. (Hay, 1958, pp. 63-65, 71-72)

Thus, by 1958, the job evaluation system associated with Hay was developed specifically for the evaluation of managerial jobs. It brought a managerial perspective to the definition of the major dimensions of job content. As discussed more fully below, this managerial bias has a pronounced gender effect, both because managerial and administrative jobs have been disproportionately male and because the types of jobs typically held by women involve job content that is not captured in evaluation systems conceptualized in terms of the organizational hierarchy.

Continuity

Bellak's (1982) article (still routinely distributed by the Hay group) presents the parameters of the Hay system. It acknowledges the link between the Hay job evaluation system developed in the 1950s and the basic system in use today: "Over the years since 1951, the fundamental principles of the Guide Chart-Profile Method have remained intact although there have been many refinements in language and application" (p. 5). This emphasis on the stability of the system is routinely used by compensation consulting firms as a strong selling point of their systems. However, with a concern for pay equity in the 1980s, what was once a desirable feature has become a point of contention.

The continuity in the approach can be observed both with respect to process and structure—that is, the factors and factor weights.² Given the constraints of this article, I discuss only the continuities in the structure of the system.

Three basic Guide Charts—Know-How, Problem-Solving, and Accountability—were "devised [in the 1950s] to explain the reasons for suggested job and salary standards—to show management how to evaluate high level jobs by thinking about them in management terms" (Hay, 1958, p. 65). A fourth Guide Chart—Working Conditions—was developed later, ostensibly in reaction to union pressure in the evaluation of manufacturing and other blue-collar jobs. Working conditions are typi-

cally given little weight, and this scale is used infrequently upon request (Bellak, 1984).

All of the information examined below on the Hay Guide Chart-Profile Method of Job Evaluation is drawn from public records. Versions of the Hay Guide Charts are culled from published articles, final reports of pay equity studies, or reports prepared for litigation before a pay equity tribunal in Ontario, Canada. Data on job evaluations were obtained from the Minnesota Department of Personnel.

When examining the three major factors of the Hay system, the similarity between the description of the factors in Hay (1958) and in Bellak (1982) is striking. Table 3.1 presents the definitions of Know-How, Problem-Solving, and Accountability as offered in Hay (1958) and in Bellak (1982). Although the definitions in Bellak are somewhat more elaborate, the ideas about what constitutes valuable work and about the differentiation of factor levels remain essentially intact. Know-How continues to define skills in terms of technical skill, managerial skills, and the skills involved in working with other people. Problem-Solving encompasses the creative application of these skills or the thinking associated with a job. It is defined in terms of the environment and the difficulty of the thinking. Accountability is measured along three dimensions: freedom, impact, and size.

Fortunately, Edward Hay offered the basic format of the Hay subfactor levels in a 1958 article, so it is possible to compare subfactor definitions more specifically to contemporary Hay Guide Charts available in the public record. Indeed, as Tables 3.2 through 3.4 illustrate, when subfactor-level definitions for four versions of the Hay system are compared, the continuity is even more striking.³ In the Know-How Guide Chart, the only modification was to move Organizational Know-How from the top levels of a Technical Know-How dimension to create a third dimension to the factor. Interestingly, this modification has the effect of actually increasing the weight given to Managerial Know-How, as it is quite rare for jobs that score high on Organizational Know-How to score low on Technical Know-How.⁴

The definitions of Managerial Know-How are quite consistent across the contemporary systems. Note that Hay consultants are provided with internal memos that offer several variants of language that can be used in constructing this subfactor. The variations are usually on the basis of the size and complexity of the organizational hierarchy. The expansion of levels usually occurs at the top. If the chief executive officer (CEO) represents the highest level, then there must be enough additional levels

Table 3.1 Comparison of Factor and Subfactor Definitions for Hay Guide Chart-Profile Method 1958 and 1982

<i>Factor/Subfactor</i>	<i>Hay (1958)</i>	<i>Bellak (1982)</i>
Know-How	<p>"Each position must be thought of as requiring a specific kind of job know-how. . . . In addition to the specialized technical kinds of know-how required, skill in human relations is important in high-level policy-making jobs. Administrative knowledge is also necessary in jobs which have managerial responsibilities. . . . [The] guide chart for know-how . . . combines scales for these three kinds of skill and knowledge."</p>	<p>The sum total of every kind of capability or skill, however acquired, needed for acceptable job performance. Its three dimensions are requirements for:</p> <ul style="list-style-type: none"> • Practical procedures, specialized techniques and knowledge within occupational fields, commercial functions, and professional and scientific disciplines. • Integrating and harmonizing simultaneous achievement of diversified function within managerial situation occurring in operating, technical, support, or administrative fields. This involves, in some combination, skills in planning, organizing, executing, controlling, and evaluating and may be exercised consultatively (about management) as well as executively. • Active, practicing person-to-person skills in work with other people.
Problem-Solving	<p>"Thinking is always done in a specific environment which allows a particular degree of latitude. . . . [The] problem-solving chart [combines] the two scales of environment and thinking."</p>	<p>The original self-starting use of Know-How required by the job to identify, define, and resolve problems. "You think with what you know." This is true of even the most creative work. The raw material of any thinking is knowledge of facts, principles, and means. For that reason, Problem-Solving is treated as a percentage of Know-How. Problem-Solving has two dimensions:</p>

(Continued)

Table 3.1 (Continued)

Factor/Subfactor	Hay (1958)	Bellak (1982)
Accountability	<p>"There is one more important job element—the actions which must be taken. . . . The actions taken may be considered according to</p> <ol style="list-style-type: none"> 1. The amount of freedom. 2. The strength of the impact. 3. The size of the area affected. <p>These three aspects of action may be described as accountability for performance. The job holder is accountable for taking the necessary actions and thus accomplishing the aims of management."</p>	<ul style="list-style-type: none"> • The environment in which thinking takes place • The challenge presented by the thinking to be done <p>The answerability for action and for the consequences thereof. It is the measured effect of the job on end results of the organization. It has three dimensions in the following order of importance:</p> <ul style="list-style-type: none"> • Freedom to act—the extent of personal, procedural, or systematic guidance or control of actions in relation to the primary emphasis of the job • Job impact on end results—the extent to which the job can directly affect actions necessary to produce result within its primary emphasis • Magnitude—the portion of the total organization encompassed by the primary emphasis of the job. This is usually, but not necessarily, reflected by the annual revenue or expense dollars associated with the area in which the job has its primary emphasis.

of Organizational Know-How to encompass the multiple levels of management under the CEO. By contrast, regardless of the complexity and variety of nonmanagerial jobs, nonmanagerial factor levels remain the

(Text continued on page 72)

Table 3.2 Comparison of Know-How Definitions—Guide Chart Categories

Subfactor	Hay (1958)	Bellak (1982)	Trisman (1979)	Hubbard & Revo-Cohen (1989)
Technical Know-How	A. Basic B. Elementary vocational C. Vocational D. Advanced vocational E. Specialized technical F. Seasoned-specialized—technical G. Specialized—technical mastery H. Intermediate managerial I. Administrative managerial J. General managerial NA ^a	A. Basic B. Elementary vocational C. Vocational D. Advanced vocational E. Basic technical—specialized F. Seasoned technical—specialized G. Technical—specialized mastery H. Professional mastery	A. Primary B. Elementary vocational C. Vocational D. Advanced vocational E. Basic specialized F. Seasoned specialized G. Specialized mastery H. Professional mastery	A. Primary B. Elementary vocational C. Vocational D. Advanced vocational E. Basic specialized F. Seasoned specialized G. Specialized mastery
Managerial Know-How	NA ^a	1. None or minimal 2. Related 3. Diverse 4. — ^b	I. None or minimal II. Intermediate III. Broad IV. Comprehensive V. Total	I. Limited II. Intermediate III. Broad IV. Comprehensive
Human Relations Know-How	1. Normal courtesy and effectiveness. 2. Understanding and motivation of people is an important, but not an overriding, consideration. 3. Skills in selecting, developing, organizing, and/or motivating people are overriding.	NA ^b	1. Ordinary courtesy and effectiveness in dealing with others. 2. Understanding, influencing, and/or servicing people are important but not critical considerations. 3. Alternative or combined skills in understanding, selecting, developing, and motivating people are important in the highest degree.	1. Ordinary courtesy and effectiveness in dealing with others. 2. Understanding, influencing, and/or servicing people are important considerations. 3. Alternative or combined skills in understanding, selecting, developing, and motivating people are important in the highest degree.

a. Not available. In Hay (1958), managerial know-how was embedded as the most complex levels of Technical Know-How. Its separation into a separate subfactor (with varying levels depending on the size and organization complexity of the firm) actually increases the number of points and the weight given to scope of managerial responsibility.

b. Not available. Bellak (1982) presents only the lower sections of the Guide Chart-Profile Method because it is a proprietary system.

Table 3.3 Comparison of Problem-Solving Definitions—Guide Chart Categories

Subfactor	Hay (1958)	Bellak (1982)	Treiman (1979)
Thinking Guidance	A. Strict routine B. Routine C. Semiroutine D. Standardized E. Directed F. Generally directed G. Guided H. Generally guided	A. Strict routine B. Routine C. Semiroutine D. Standardized E. Clearly defined F. Broadly defined G. Generally defined H. Abstractly defined	A. Strict routine B. Routine C. Semiroutine D. Standardized E. Clearly defined F. Broadly defined G. Generally defined H. Abstractly defined
Thinking Challenge	1. Stable: Conditions covering jobs are inherently stable or repetitive, and are characterized by general absence of original problem-solving 2. Normal: Conditions covering job call for improvisation or adaptation to meet changing situations of manufacture, market, and the like 3. Uncharted: Path-finding in novel, nonrecurring, or swiftly changing situation in which the approach to the objective is not fully defined	1. Repetitive: Identical situations requiring solution by <i>simple</i> choice of learned things ^a 2. Patterned: Similar situations requiring solution by <i>discriminating</i> choice of learned things ^a 3. Interpolative: Differing situations requiring search for solutions within area of learned things 4. Adaptive: Variable situations requiring analytic, interpretive, and/or constructing thinking 5. NA ^b	1. Repetitive: Identical situations requiring solution by <i>simple</i> choice of learned things ^a 2. Patterned: Similar situations requiring solution by <i>discriminating</i> choice of learned things ^a 3. Interpolative: Differing situations requiring search for solutions within area of learned things 4. Adaptive: Variable situations requiring analytic, interpretive, and/or constructing thinking 5. Uncharted: Novel or nonrecurring path-finding situations requiring the development of new concepts and imaginative approaches

a. Emphasis added.

b. Not available. Bellak (1982) does not provide complete information because the Guide Chart-Profile Method is a proprietary system.

Table 3.4 Comparison of Accountability Definitions—Guide Chart Categories

Subfactor	Hay (1958)	Bellak (1982)	Treiman (1979)
Freedom to Act	A. Standardized B. General regulated C. Operational direction D. Oriented direction E. Top management, guidance F. Presidential guidance	A. Prescribed B. Controlled C. Standardized D. Generally regulated E. Directed F. Oriented directed G. Broad guidance H. Strategic guidance	A. Prescribed B. Controlled C. Standardized D. Generally regulated E. Directed F. Oriented directed G. Broad guidance H. Strategic guidance I. Governor/chief justice
Magnitude	1. Small or indeterminate 2. Medium 3. Large 4. Very large	1. Very small or indeterminate 2. Small 3. Medium 4. NA ^a	1. Very small or indeterminate 2. Small 3. Medium 4. Large 5. Very large
Impact	1. Remote: Positions that provide informational or custodial services used by others ^b 2. Indirect: Occurs when counsel or advice is provided 3. Shared: Participation with others in making decisions 4. Primary: Independent decision where there is little sharing of accountability with others	1. Remote: Information, recording, or <i>incidental</i> services for use by others in relation to some important end result ^c 2. Contributory interpretive, advisory, or facilitating services for use by others in taking action 3. Shared: Participating with others (except own subordinates or superiors) within organizational unit in taking action 4. Primary: Controlling impact on end results, where shared accountability with others is subordinate	1. Remote: informational, recording, or <i>routine</i> services for use by others in taking action ^c 2. Contributory interpretive, advisory, or facilitating services for use by others in taking action 3. Shared: Participating with others ^c (except own subordinates or superiors) within or outside the organizational units in taking action ^c 4. Primary: Controlling impact on end results, where shared accountability with others is subordinate

a. Not available. Bellak (1982) does not provide complete information because the Guide Chart-Profile Method is a proprietary system.

b. Guide Chart definitions elaborated in Hay (1958, p. 69).

c. Emphasis added.

The findings are based on several assessments of the Hay system (Acker, 1987, 1989; Burton, 1987; Haignere & Steinberg, 1985; Treiman, 1979; Werwie, 1987), on statistical analyses of results of job evaluations conducted using the Hay system in the state of Minnesota, and on information on the content of the job of registered nurse collected from focus groups of registered nurses in four Ontario, Canada, hospitals. Information on registered nurses is supplemented by secondary sources (Benner, 1984; College of Nurses of Ontario, 1989; Growe, 1991; Melosh, 1982; Reverby, 1987).

An assessment of the subfactor definitions and levels and their application on a set of jobs makes visible the specific ways in which bias toward capturing job content of managerial work dominates the system. Because managerial jobs have historically been designed for and disproportionately held by men, this constitutes an evaluation bias in favor of historically male jobs.⁶

The standard Hay system is composed of four Guide Charts that contain 11 subfactors—3 for Know-How, 3 for Accountability, 2 for Problem Solving, and 3 for Working Conditions—among which I have found managerial bias is expressed outright in the definitions of 5 of the most heavily weighted subfactors—Managerial Know-How, Human Relations Know-How, Freedom to Act, Magnitude, and Impact—and expressed indirectly in three others—Technical Know-How, Thinking Challenge, and Thinking Environment. I restrict the analysis here to managerial bias in 3 subfactors: Human Relations Know-How (HRKH), Freedom to Act (FTA), and Technical Know-How (TKH). I select these because, unlike Organizational Know-How, Magnitude, and Impact, these subfactor-level definitions are less explicitly written in terms of organizational scope or job hierarchy. I also select them over Thinking Challenge and Thinking Environment because the points gained as a result of FTA and TKH are partly derivative from and highly correlated with points received on other subfactors. Furthermore, the Working Conditions subfactors are not biased in favor of managerial work, although they are male biased. A complete analysis of male bias in each Hay Guide Chart factor is found in Steinberg (1991).

Human Relations Know-How (HRKH)

There are four ways in which the HRKH subfactor carries a male bias:

1. It combines different types of human relations skills, one of which is double counted because it has already been measured under Managerial Know-How.
2. It arbitrarily defines supervisory skills as more complex than client-oriented skills.
3. It defines supervision in ways that differentially exclude the forms of supervision typical of female-dominated work.
4. It fails to differentiate adequately among levels of nonsupervisory human relations skills.

It both advantages managerial and supervisory work and disadvantages service-oriented jobs.

Table 3.2 lists the standard subfactor-level definitions for HRKH. HRKH provides for three levels of differentiation, with the top level defined in terms of supervisory capabilities—"motivating . . . and developing people." As constructed, this subfactor allows, primarily, for the differentiation between supervisory and nonsupervisory jobs (between Level 3 and Levels 2 and 1) and, secondarily, for the differentiation between client-oriented and non-client-oriented jobs (between Levels 1 and 2). The implicit assumptions about complexity are that supervising employees involves more complex use of skills, such as communicating, motivating, influencing, understanding, listening, and teaching, than does working with clients or patients. The system offers no documentation about actual job content to support this assumption. Burton (1987) has questioned this assumption in asking whether supervising employees involves skill or the exertion of organizational power (pp. 90-91). She also suggests that women work up and across organizational hierarchies, whereas men work down the hierarchy. Acker (1989) reports that the Oregon Legislative Task Force overseeing a comparable worth study of public employment was similarly critical of the lack of differentiation and narrow dimensions found in HRKH, as well as of overreliance on notions of the formal organization hierarchy. Earlier, Acker (1987) writes,

Deciding who was or was not a supervisor was important for the emergent ranking. . . . The evaluation team, with the help of the consultants, developed rules to deal with this complexity. . . . The secretary who supervises 15 to 20 workers is seen simply as a lead worker. . . . Many [nonsupervisory jobs with supervisory functions] are female-dominated and adding some extra points

for supervision may be one of the sources of scores that show that these jobs have been undervalued. (p. 85)

Furthermore, by combining into one subfactor those human relations skills necessary for working with clients and those necessary for supervision, the Hay system cancels out the relative impact that nonmanagerial human relations skills can have on total points for nonmanagerial jobs. If, by definition, all managerial jobs receive the highest score on this factor, there is no way that a nonmanagerial job can be assessed as involving more complex human relations skills. But consider, for example, the registered nurse, who must negotiate with recalcitrant patients about life-sustaining medication or who must work regularly with dying patients who have no hope of recovery.

Moreover, when client-oriented skills and supervision skills are combined, human services jobs that involve both aspects of human relations only receive points for one skill dimension (Steinberg, 1990). So, for example, a registered nurse administrative supervisor receives fewer points than he or she would if the Hay system included two separate subfactors on Human Relations skills, one for supervision and a second for client-oriented skills. The inclusion of supervisory skills in HRKH also involves double counting of skills because supervisory responsibility is included as part of the definition of Managerial Know-How.

Hay consultants in Oregon appeared to be aware of the consequences of constructing HRKH to combine supervisory and client-oriented skills and to treat the former as more complex. They proved to be the biggest opponents to a proposed modification of the system by task force feminists, arguing that it "would result in a higher value placed on human relations relative to managerial skills." They viewed HRKH as a "sub-scale of Managerial Know-How," regardless of the commonsense meaning of the term, and they feared that modification "might change the rank order of some jobs." Their second objection to a revaluation of service provision work was that it would "decrease the point spread between managerial and non-managerial jobs," which would cause "even more difficulties in recruiting and keeping good managers" (Acker, 1987, pp. 189-190).

Examining the evaluation of 1,441 job titles in the state of Minnesota, I found noteworthy differences in evaluation scores by gender of job. For female-dominated jobs, 16.2% score at Level 1, 45.5% score at Level 2, and 38.3% score at Level 3. By contrast, for male-dominated jobs, the percentages are 13.6, 30.3, and 56.1 for Levels 1, 2, and 3, respectively.

The definition of supervisor clearly carries a gender effect, as does the artificial definitional ceiling that prohibits service provision skills from scoring at the highest level.

Freedom to Act (FTA)

FTA is defined in terms of extent of supervisory review at the lower levels of the scale and as scope of managerial direction at the upper ends of the scale. This is a classic representation of employee autonomy from the standpoint of the top of the organization. However, by defining autonomy only in terms of formal review relationships, this subfactor renders invisible the frequent actions taken by employees to autonomously carry out highly responsible tasks and functions—especially in human services contexts when time pressure is often significant. For example, the registered nurse informs the physician that a medical emergency warrants his or her intervention. In an emergency situation, the nurse will often begin medical procedures in anticipation of what she or he knows the doctor will order or because the doctor has placed a standing order allowing for autonomous intervention with legal protection. Under the Hay system, because human services workers are formally supervised, the supervisor receives credit (in points and in money) for the responsibilities actually carried out by his or her subordinate. In this case, the physician has formal, final responsibility for medical decisions, and all positions below him or her are treated as operating with little autonomy.

The concept of formal responsibility inflates the work performed by supervisors and diminishes the work performed by subordinates. It obscures the practical responsibility and autonomy of nonmanagerial employees, understating the extent to which incumbents of nonmanagerial jobs have control over the main goal of their jobs. It overstates the amount of supervision that supervisors engage in, especially when subordinates are performing their jobs competently (Burton, 1987, p. 92). Acker (1989) also observed an explicit reliance on the organizational chart in carrying out evaluations of actual jobs, based on the assumption that "supervisors ought to have more points than those beneath them, and fewer points than those above them in the hierarchy" (p. 89). Acker concludes that the assumption of "congruence between responsibility, job complexity, and hierarchical position" works to the disadvantage of differentially female nonmanagerial jobs: "Tasks delegated to a secretary by a manager will not raise her hierarchical level because such tasks are

still his responsibility, even though she has the practical responsibility to see that they are done" (p. 220).

The descriptions for each level of FTA are ambiguous and open to subjective judgments in their application. What differentiates "constant . . . supervision" from "very close supervision" or from "close supervision"? The top four levels of this subfactor are more clearly specified but only in reference to the scope of the organization managed, which theoretically is a proxy for autonomy. We can begin to understand what is meant by these words through a review of actual evaluations of job classes on FTA in the state of Minnesota: 99% of the 1,441 jobs with at least one incumbent are evaluated on FTA at Levels B and F (A is lowest and G is highest).

Table 3.5 lists a sample of representative jobs from a variety of job categories evaluated at Levels A through C. Fewer than 20 of the 1,441 job classes were scored at Level A, and these were disproportionately female-dominated. Job classes that score at Level A equate male jobs such as mail handler with female jobs such as child care center aide and entry-level clerk typist and stenographer. It is unclear why child care center aide and clerk stenographer require "very close supervision" as compared to "close supervision," especially in comparison to male jobs scoring at Level B, such as meat cutter, baker, and automobile driver. Do the job descriptions calculate the amount or percentage of time directly supervised or the number or types of instructions and work routines? In this instance, basing autonomy only on formal organizational review creates false differentiations that are not based on careful assessment of actual differences in work routines and extent of instruction and review.

Similarly, no rationale is offered for the decision to score licensed practical nurse, child care center assistant, supervisors of word processing centers, and dining hall managers at the same level of autonomy as athletic equipment manager, meat cutter, and groundskeeper. The autonomy and responsibility of working with sick clients is equated with the autonomy and responsibility of cutting meat. Handling children is equivalent to handling equipment. Performing at the highest level of clerk stenographer is at the same level of autonomy and responsibility as driving an automobile or baking. At Level C, coordinating a child care center is equivalent in autonomy and responsibility to that assigned an electrician, plumber, or heavy equipment operator.

Most notably, what these evaluations do reveal is that supervisors of what are considered low autonomy positions are scored on FTA on the basis of the *assumed* low autonomy of the positions they supervise.

Table 3.5 Representative Job Classes Evaluated on Freedom to Act/Accountability Subfactor, State of Minnesota

Subfactor Level	Female	Male	Balanced
A	Child Care Center Aide Clerk I Clerk Typist I Clerk Stenographer I Data Entry Operator Food Service Worker Laboratory Attendant A Laundry Worker	Mail Handler Traffic Recorder	Service Worker Inserting Machine Operator
B	Licensed Practical Nurse 1 Licensed Practical Nurse 2 ^a Physical Therapy Aide B Switchboard Operator Word Processing Operator Word Processing Center—Supervisor B ^b Account Clerk Clerks 2-4 ^a Clerk Stenographers 2-4 ^a Clerk Stenographer 4 Supervisor ^a Office Services Supervisor 1 Child Care Center Assistant Dining Hall Manager Human Services Technician—Senior Dental Assistant Sewing Machine Operator Medical Records Clerk	Athletic Equipment Manager Meat Cutter Materials Transfer Driver Labor—Trades and Equipment Laboratory Attendant 2 Baker Barber Automobile Driver Highway Maintenance Manager General Maintenance Worker Groundskeeper Groundskeeper—Intermediate ^a Groundskeeper—Senior ^a Chief Cook	Stores Clerk Recreation Program Assistant Admissions/Gift Shop Clerk First Aid Services Assistant Audio-Visual Technician
C	Registered Nurse Social Worker Legal Secretary Legal Secretary, Senior ^a Legal Secretary, Senior Supervisor ^a Public Health Sanitarian 1 Animal Health Specialist Accounting Technician Account Clerk—Senior Typing Services Coordinator Child Care Center Coordinator	Zookeeper Electrician Mason Painter Plumber Roofer Heavy Equipment Mechanic Heavy Equipment Operator Building Maintenance Lead Worker Bridge Worker Electrician Lead ^a Electrician Supervisor ^a Architect Drafting Technician Stores Clerk—Senior	Auditor Bacteriologist 1 Behavior Analyst 1 EDP Programmer

a. Balanced class.

b. A lot of supervisors of positions found in Level D.

Specifically, supervisors or coordinators of employees or a program are scored one step higher than the level of autonomy of the employees they supervise or coordinate. Thus the lower the evaluation on FTA assigned to a group of employees, the lower the level assigned to the supervisor of those employees or the manager of the program in which they work. So, for example, the child care center coordinator scores at a low level on FTA because the child care aide scores even lower.

The impact of this score compression is especially marked for managerial-level nursing positions. At least three levels of nursing supervisors are included in one level of FTA. This includes the registered nurse senior, the registered nurse principal, the registered nurse supervisor, the registered nurse administrator supervisor, and the director of nursing.⁷ By contrast, managerial positions in engineering job series are not as compressed. By imposing bureaucratic/administrative conceptions of autonomy on the provision of services and clinical care, the Hay system treats as invisible the extensive independence of action and initiative required of hands-on work. For example, the administrative distinction between the short run and the long run is less applicable in human services settings. Indeed, imposing it as the basis of differentiating levels of complexity and responsibility can obscure autonomy and responsibility in clinical and service provision settings, resulting in misjudgments in scoring. Often, of necessity, human service jobs must act "in the short run," or else patients will die or suffer serious consequences. In addition, following a set of general professional standards as those found in the Standards of Nursing Practice is not the same application of procedures, practices, or precedents typical of jobs in bureaucratic settings. Scoring administrator and director levels of nursing work at Level D of a subfactor that spans from A to H suggests that the image of nursing held by the Hay group is of work with limited autonomy and regular supervisory review of results, even including the Director of Nursing.

This general rating principle results in lower scores for female-dominated job classes. Of all male-dominated jobs in Minnesota state government, 70.1% are scored at Levels D and E, compared with only 48% of female-dominated titles. By contrast, three times as many (19.9%) of female jobs score at Levels A or B as male-dominated jobs (5.3%).

The male bias observed in FTA involves several aspects of its construction: its heavy reliance on the formal organizational chart as the operational definition of what constitutes autonomous work; its devaluation of the autonomy involved in direct clinical and service provi-

sion work; its tendency to evaluate supervisory and managerial positions in reference to the jobs supervised; compression of career ladders in female-dominated groups of jobs; and its reliance on only half of the defined levels to evaluate 97% of all job classes. Several dimensions of job autonomy are not acknowledged, and those that are, are not sufficiently differentiated and artificially compressed.

Technical Know-How (TKH)

When operationalized, TKH, like FTA, follows the general rule that a supervisory job should score higher than but close to the position supervised. In addition, for TKH, knowledge gained through work and other experience is given less recognition than formal and institutionally gained occupational knowledge and general credentials. Even women's formal knowledge, such as typing skills learned at school, is trivialized (Burton 1987, p. 89).

Given the ambiguous wording of the definitions of subfactor levels of TKH, it is necessary to ground their meaning in their application and impact. Table 3.6 lists examples of jobs ranked at different levels with the TKH subfactor. Some interesting patterns emerge. Few jobs score at Level A. At the lower end of the continuum on TKH are those male-dominated jobs that require no educational prerequisites or prior experience, such as the ability to drive a car, to learn tasks associated with sorting or delivering mail, or to do maintenance, custodial, or security work. Female-dominated jobs scored as equivalent include entry-level clerical, food service, and child care workers. Some of these jobs carry educational prerequisites. Others, such as food service and child care, carry strong associations with roles that women are assumed to perform in the home—in other words, it is assumed that these jobs are unskilled. Invisible and unrecognized are the organizational knowledge and language skills of clerical workers, the technical knowledge of food preparation in institutional settings, and the psychological knowledge and skills associated with child care work.

In my review of evaluations conducted in the state of Minnesota, I found clustering of jobs within a career ladder. This finding is consistent with an evaluation procedure that was followed by the state of Massachusetts in applying a Hay system. According to Department of Personnel Administration staff members, the descriptions from each career ladder or job series were considered at the same time, beginning with the

Table 3.6 Representative Job Classes Evaluated on Technical Know-How Subfactor, State of Minnesota

<i>Subfactor Points</i>	<i>Male</i>	<i>Female</i>
A	Mail Handler	Laboratory Attendant
B	Automobile Driver Building & Grounds Worker Delivery Van Driver General Maintenance Worker Groundskeeper Security Guard	Child Care Center Aide Clerk 1 and 2 Data Entry Operator, Lead, and Senior Dictaphone Operator Food Service Worker Interpretive Guide Parks Worker Switchboard Operator Work Therapy Technician
C	Automotive Technician Baker Barber Building Services Manager Engineering Aide General Repair Worker Highway Maintenance Worker Meat Cutter Office Machine Repair Supervisor Painter Plasterer Stores Clerk Chief	Administrative Secretary Account Clerk Supervisor Beauty Operator Cashier Child Care Center Coordinator Clerk Stenographer Dental Assistant Health Program Aide Special Education Program Assistant Human Rights Aide Legal Secretary Licensed Practical Nurse Medical Claims Technician Physical Therapy Assistant
D	Heavy Equipment Operator Plumber Architectural Drafting Technician 2 and 3 Automotive Mechanic Bridge Worker Cabinet Maker Driver Improvement Specialist Electrician Senior Engineering Aide Land Surveyor Machinist Public Health Sanitarian Radio Technician	Dental Hygienist Legal Secretary Senior Supervisor Income Maintenance Program Analyst Senior Legal Secretary Medical Laboratory Technician Registered Nurse Recreation Therapist Coordinator Social Worker

Table 3.6 (Continued)

<i>Subfactor Points</i>	<i>Male</i>	<i>Female</i>
E ^b	Physical Plant Director Attorney 1 ^a Boiler Inspector 2 Business Manager Economic Policy Analyst EDP Programmer/Analyst Elevator Inspector Senior Engineer Financial Institution Examiner Geologist Health Services Analyst ^a Psychologist Public Health Sanitarian 3 and 4 Systems Analyst Welfare Specialists ^a	Nutritionist Occupational Therapist Physical Therapist Assistant to Chief Executive Officer Child Health Program Supervisor Clinical Nurse Specialist Dietitian 1 Health Educator Library/Information Research Services Specialist Personnel Director 1 and 2 Registered Nurse Supervisor
F	Dentist Attorney 2 and 3 ^a (12) Directors (Programs, Labs, 12 Divisions) Pollution Control Scientist Assistant Commissioner ^c Assistant Director titles ^d Chief Executive Officer Education Finance Supervisor Education Specialist ^a Engineer Administrative titles Central Payroll Director Industrial Hygienist Plant Management Director Staff Physician ^a Transportation Director titles	Personnel Director 3 and 5 Public Health Nursing Director

a. Balanced class.

b. A lot of supervisors of positions found in Level D.

c. Three balanced: one male and two female titles; one title at Level G.

d. Six of 15 titles at Level E.

highest job in the ladder and working backward to the lowest (Haignere & Steinberg, 1985, p. 26). Thus the points for TKH are not simply based on the actual technical requirements of the job but on where a job falls within a job series and where the top, or the bottom, of that series falls on the organization chart as a whole.

One important reason why evaluating a job in terms of its position in a series carries a gender effect is that the disproportionate number of top management and professional jobs are held by men. If these top management and professional jobs score at the top levels of a subfactor, then, simply as an artifact of the evaluation process, even the bottom jobs in these series will score at high sublevels, regardless of job content and technical skills.

The use of these shortcuts in job evaluation can be seen with respect to the education barrier in scores for TKH. It appears that a job cannot score at Level E or above on TKH unless it requires a college degree. As a result of this rule, all secretarial and clerical positions *must* score at Level D or below, regardless of the actual technical, communication, organizational, and human relations skills associated with the job. This barrier has a similar effect on other female-dominated technical jobs that require 2- and 3-year vocational degrees. Note in Table 3.6 that the medical laboratory technician and the registered nurse both score at Level D, whereas the physical therapist and health educator score at Level E.

The impact of supervision on scores for TKH can be seen for all jobs evaluated in the state of Minnesota. Recall that all jobs that supervise automatically score at Level 3 of HRKH. Only one job class ranked as low as Level C for TKH was scored as supervisory on HRKH. The overlap between the managerial and technical factors is even more striking. All of the jobs scoring at Level D or below on TKH were rated at the bottom level of the managerial scale (MKH), indicating no need for knowledge of managerial skills. At the higher levels of TKH, a much greater percentage of job titles score high on HRKH, and by Level F of TKH, almost all jobs are at least at Level 2 for MKH (and at Level 3 for HRKH). Of the 180 jobs scoring at least at Level 2 of MKH, 166, or 92.2% score at Level F on TKH.

A related point is that the interrelationships between the ostensibly independent subfactors results in the inflation of managerial positions. The intercorrelations of three of the Hay subfactors—Know-How, Problem-Solving, and Accountability—range from 0.97 to 0.99 for Minnesota and 0.94 to 0.98 for Philadelphia (data not shown). Because these subfactors

are so highly interrelated, giving greater weight to one or another of them would not significantly affect gender bias. Under these circumstances, gender bias is largely a function of the subfactor definitions. Once the definitions are made more inclusive, it would be possible to shift the weighting to more adequately recognize the value of acknowledged job content.⁸

The gender effect of evaluations on TKH in the state of Minnesota is clear. Whereas few male or female jobs score at Levels A or B, 26.8% of female-dominated jobs score at Level C, compared to 9.3% of male jobs. By contrast, over one third (36.6%) of all male-dominated job classes score at Level F, compared with only 18.4% of female-dominated job classes.

As the data drawn from the state of Minnesota and other analyses indicate, the definitions of each of the three subfactors were constructed in ways that capture male-dominated work better than historically female work. HRKH, FTA, and TKH are oriented to treat supervisory and managerial work as more complex. Secondly, TKH defines professional work requiring a college degree as more complex than professional work requiring vocational degrees and on-the-job experience. Evaluations rely heavily on formal hierarchical relationships. This is reflected in the clustering and compression observed in actual evaluation scores. It also accords with direct observations of evaluations by Acker (1989) in Oregon and interviews about the evaluation process conducted by Burton (1987) in Australia and Haignere and Steinberg (1985) in Massachusetts.

Conclusion

The Hay system has not kept pace with changes in the nature of work and in the character and diversity of organizational forms since the 1940s and 1950s. It has failed to modify its definitions of skills to encompass the technological and knowledge changes that have taken place in many nonmanagerial jobs. The system crafted by Edward Hay and Dale Purves between 1946 and 1958 remains essentially intact. Its power and stability rest precisely in the ability of the system to carry from one organization to another a set of values that sustains high managerial wages even in the face of organizational and technological changes that might undercut this traditional wage structure.

These findings are consistent with research on organizational practices and structural arrangements, research that points to the social and economic context at the time of development as a critical determinant of its contemporary character (Baron, 1991; Bielby & Baron, 1987; Stinchcombe, 1965). For example, reflecting on almost a decade of research on the "organizational factors" that "influence the way jobs are defined, evaluated, and staffed," Baron (1991) concludes that once practices and policies are in place, "organizations exhibit inertia" (p. 135). This inertia is sustained in the absence of conditions that facilitate change (such as external pressure and likelihood of internal collective action) and in the presence of interests that seek to maintain the status quo. Viewing organizations as, in part, "arenas in which social relations, political contests, and cultural forces shape the enterprise," Baron acknowledges that a powerful in-group seeking to "institutionalize its privileged position" could do so by treating choices made by those in power as the inevitable product of rational and efficient responses to legitimate bureaucratic practices and to market forces (pp. 136-137).

The Hay Guide Chart-Profile Method of Job Evaluation is one example of an institutional practice that sustains the status quo while masking managerial control of the premises. It was developed initially to evaluate professional, managerial, and executive work. It was justified by Hay in the personnel journals as a system that would "fight for better salaries for corporate executives" (Hay, 1958, p. 63). It accomplishes this objective by treating location in the formal bureaucratic organizational hierarchy as the underlying standard of job complexity against which all other work is assessed. As a result, all nonmanagerial, nonprofessional work is treated as less complex, less responsible, and less onerous. Yet the Hay system is sold as a universal system of evaluation with the capability of evaluating all job content. Thus the Hay evaluation system protects the interests of those in positions of organizational power precisely because it gives the appearance of universality, neutrality, and objectivity.

But the findings that emerged from this assessment of the historical roots and contemporary consequences of the Hay system go beyond an analysis of organizational inertia and simple in-group/out-group interest group politics in two respects. First, job evaluation systems, such as the Hay system, are typically brought into an organization by management to rationalize a wage structure that has, for some reason, become misaligned (Treiman, 1979). For instance, in one metropolitan Toronto hospital I examined as part of my role as an expert witness in one Ontario

Pay Equity Tribunal proceeding, I found that hospital management had chosen an evaluation system and implemented it in such a way as to successfully reestablish historical wage relationships between managerial and allied health professional jobs that had been distorted by market forces. Specifically, the shortage of registered nurses, physiotherapists, respiratory therapists, and others drove up their salaries relative to health administrators. One major objective of the job evaluation exercise was to raise the wages of administrators relative to the health professionals.

Thus the introduction of off-the-shelf systems of job evaluation like the Hay system does not necessarily represent organizational inertia even as it structures wage relationships on the basis of outdated cultural values and economic assumptions. Instead, by undertaking a job evaluation exercise, organizational leadership appears to be instituting a new set of organizational practices, although, in fact, they are introducing a set of economic and cultural relationships that have their roots in the post-World War II cultural context and wage structure.

Second, and perhaps more important, organizational practices and structural arrangements are gendered. Even though the Hay Guide Chart-Profile Method does not refer to male jobs or female jobs or to male employees and female employees, its structure and subfactor definitions and the actual evaluation of jobs that results from its application cannot be fully understood without reference to its roots in the post-World War II reinstitutionalization of the gender division of labor. It is a powerful tool maintaining not only managerial power but white male power.

As Joan Acker (1989, 1990) has noted, the construction of a job implies a gender division of labor and a particular relationship between home life and work life. Definitions of job complexity build these invisible assumptions into the formal evaluation of jobs. And, Acker correctly concludes, the power of these systems derives in no small measure from their appearance of gender neutrality.

It is a problem, then, when sociological explanations of gender-based labor market discrimination ignore the significance of gender relations and gender ideologies as determinants of labor market outcomes. In reaching this conclusion, I find myself in agreement with William Bielby (1991), who, in assessing his research, concludes "that gender ideologies are a strong, semiautonomous force shaping segregation and other manifestations of socioeconomic inequality" (p. 109). Even as women enter managerial work, they enter a job designed for privileged white men whose wives perform unpaid work in the home. And despite all of the

attention that is paid to women who enter managerial work, the overwhelming majority of women engaged in paid employment continue to work in nonmanagerial jobs.

As Cockburn (1991) recognizes in her study of four British work sites in which male leadership actively sought to integrate women into their organizations, "there is active resistance by men. They generate *institutional* impediments to stall women's advance in organizations" (p. 215, emphasis in original). Systems of job evaluation that structure compensation practices are a critical institutional impediment to women's labor market equality. Although it is no longer acceptable to speak of women as working for pin money, it is still acceptable to use systems of job evaluation that build such assumptions into their conception of job complexity. Future research on labor markets needs to recognize cultural and ideological sources of discrimination along with a concern with economic forces and power relations. To do so, it is necessary to expose both the historical roots and the gendered character of seemingly innocuous organizational practices.

Notes

1. Sources of gender bias are summarized by Treiman (1979), Treiman and Hartmann (1981), Remick (1984a, 1984b), Steinberg and Haignere (1987), Pay Equity Commission (1989), and Steinberg (1990).

2. A third characteristic of the original Hay job evaluation system—namely, the process by which jobs are evaluated—has remained essentially intact in current evaluation exercises. Detailed description of these features and its continuity is beyond the scope of this chapter. Note merely that the Hay system was developed as a factor comparison system. It was designed to locate the complexity of one job along a dimension of job content relative to another job based on (a) images of content drawn from the personal knowledge of the evaluator and (b) broad job descriptions that have the effect of grounding factor-level definitions in organizational context. This approach makes it quite easy to incorporate gender stereotypes in the evaluation process. Today, the system continues to rely on "the rigorous use of pooled judgment" and the slotting of jobs relative to each other on the basis of broad and ambiguous definitions of job content. Two procedures that check specific evaluation—the use of a "profile" and "sore thumbing"—reintroduce sex stereotypes, knowledge about wages, and beliefs about the appropriate location of a job in the overall organizational hierarchy into the job evaluation process. Discussion of the process of evaluating jobs using the Hay system by Treiman (1979, pp. 26-27), Acker (1989, pp. 61-68) and Burton (1987, chap. 2) and Bellak's (1982) discussion of the system in general (p. 4) make clear the continuity in this area (for a complete discussion of these issues, see Steinberg, 1991).

3. These tables include two additional contemporary Guide Charts, as the definitions provided in the Bellak (1982) article are incomplete because of the proprietary character of the system. These two additional systems, used in the state of Idaho and the city of Philadelphia, indicate the similarity of systems used in different geographical areas and in different employment contexts.

4. In the system reported by Treiman (1979) and in Philadelphia, an eighth level measuring Professional Mastery was added.

5. Ironically, Hay consultants have introduced additional levels at the bottom of several subfactors in several pay equity studies they conducted in the past decade. Certain basic historically male jobs, such as laborer and custodian, are graded below Level A on technical skill, for example. The effect is to improve the relative positions of historically female nonmanagerial jobs to historically male nonmanagerial jobs while protecting the distance between managerial and nonmanagerial jobs in general.

6. Demonstrating the gendered character of managerial work is beyond the scope of this chapter. However, although women have made impressive gains in entering managerial work between 1980 and 1990 (Jacobs, 1992), I have argued elsewhere that managerial work is male work for four reasons (Steinberg, 1991). First, until 1980, managerial work was overwhelmingly male-dominated. It certainly was male-dominated at the time of the development of the Hay system. Second, managerial work is culturally associated with both men and women and with stereotypes of masculinity. Third, as Acker (1989) has developed, gender neutrality of hierarchy is itself a power resource enabling the continuation of male dominance in work organizations. Fourth, women have moved into managerial positions that are consistent with gendered assumptions about the appropriate division of labor, such as relatively lower paying positions in hospital and public sector administration.

7. These ratings are not unique to Minnesota. In South Dakota, staff nurse, charge nurse, registered nurse supervisor, and director of nursing all scored at Level D on FTA. In Philadelphia, for which only points are available, nursing supervisor-ambulatory care appears to have scored at Level D for FTA. Even in a pay equity study in Oregon, only registered nurse assistant director and director of nursing scored at Level E on FTA. By contrast, staff registered nurse, charge nurse, assistant nurse manager, nurse manager A, and nurse manager B all ranked at Level D.

8. Although the correlations between the Working Conditions subfactors and the other three Hay system subfactors are small and negative, shifting the distribution of weights in the direction of working conditions would only improve the relative position of male operational jobs relative to male managerial jobs (for a full examination of the gender bias in weights in the Hay system, see Steinberg, 1991).

References

- Acker, J. (1987). Sex bias in job evaluation: A comparable worth issue. In C. Bose & G. Spitze (Eds.), *Ingredients for women's employment policy* (pp. 183-196). Albany: State University of New York Press.
- Acker, J. (1989). *Doing comparable worth*. Philadelphia: Temple University Press.
- Acker, J. (1990). Hierarchies, jobs, bodies: A theory of gendered organizations. *Gender & Society*, 4, 139-158.

- Baron, J. (1991). Organizational evidence of ascription in labor markets. In R. R. Cornwall & P. V. Wunnava (Eds.), *New approaches to economic and social analyses of discrimination* (pp. 113-143). New York: Praeger.
- Baron, J., Dobbin, F., & Jennings, P. D. (1986). War and peace: The evolution of modern personnel administration in U.S. industry. *American Journal of Sociology*, 92, 350-383.
- Baron, J., Jennings, P. D., & Dobbin, F. (1988). Mission control? The development of personnel systems in U.S. industry. *American Sociological Review*, 53, 497-514.
- Beatty, R., & Beatty, J. (1984). Some problems in contemporary job evaluation. In H. Remick, (Ed.), *Comparable worth and wage discrimination* (pp. 59-78). Philadelphia: Temple University Press.
- Beechey, V. (1988). Rethinking the definition of work. In J. Jenson, E. Hagen, & C. Reddy (Eds.), *Feminization of the labour force* (pp. 45-62). Cambridge: Polity.
- Beechey, V., & Perkins, T. (1987). *A matter of hours: Women, part-time work and the labour market*. Minneapolis: University of Minnesota Press.
- Bellak, A. (1982). The Hay Guide Chart-Profile Method of Job Evaluation. In M. Rock (Ed.), *Handbook of wage and salary administration* (2nd ed., reprint). New York: McGraw-Hill.
- Bellak, A. (1984). Comparable worth: A practitioner's view. In U.S. Commission on Civil Rights (Ed.), *Comparable worth: Issue for the 80's* (Vol. 1, pp. 75-82). Washington, DC: U.S. Government Printing Office.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, CA: Addison-Wesley.
- Bielby, W. (1991). The structure and process of sex segregation. In R. R. Cornwall & P. V. Wunnava (Eds.), *New approaches to economic and social analyses of discrimination* (pp. 97-112). New York: Praeger.
- Bielby, W., & Baron, J. (1987). Undoing discrimination: Job integration and comparable worth. In C. Bose & G. Spitze (Eds.), *Ingredients for women's employment policy* (pp. 211-229). Albany: State University of New York Press.
- Burton, C. (1987). *Women's worth: Pay equity and job evaluation in Australia*. Canberra: Australian Government Publishing Service.
- Cockburn, C. (1983). *Brothers*. London: Pluto Press.
- Cockburn, C. (1991). *In the way of women: Men's resistance to sex equality in organizations*. Ithaca, NY: ILR Press.
- College of Nurses of Ontario. (1989). *Standards of nursing practice for registered nurses and registered nursing assistants*. Toronto: Author.
- Game, A., & Pringle, R. (1983). *Gender at work*. Sydney, Australia: Allen & Unwin.
- Grove, S. J. (1991). *Who cares: The crisis in Canadian nursing*. Toronto: McLelland & Stewart.
- Haignere, L., & Steinberg, R. (1985). *Review of Massachusetts statewide classification and compensation system for achieving comparable worth*. Albany, NY: Center for Women in Government.
- Hay, E. (1958). Setting salary standard for executive jobs. *Personnel*, 36(1), 63-72.
- Hay, E., & Purves, D. (1951). The profile method of high-level job evaluation. *Personnel*, 28(2), 162-170.
- Hay, E., & Purves, D. (1953). The analysis and description of high-level jobs. *Personnel*, 29(4), 344-354.
- Hubbard and Revo-Cohen, Inc. (1989). *Draft final report to the city of Philadelphia Mayor's Commission for Women*. Philadelphia: Office of the Mayor.
- Jacobs, J. A. (1992). Women's entry into management: Trends in earnings, authority, and values among salaried managers. *Administrative Science Quarterly*, 37, 282-301.
- Kessler-Harris, A. (1990). *A woman's wage: Historical meanings and social consequences*. Lexington: University of Kentucky Press.
- Kim, M. (1989). Gender bias in compensation structures: A case study of its historical basis. *Journal of Social Issues*, 45(4), 39-50.
- Melosh, B. (1982). *The physician's hand*. Philadelphia: Temple University Press.
- Patton, J. A., & Littlefield, C. L. (1957). *Job evaluation: Text and cases*. Homewood, IL: Irwin.
- Pay Equity Commission. (1989). *How to do pay equity comparisons* (Pay Equity Implementation Series, No. 9). Toronto: Author.
- Remick, H. (1979). Strategies for creating sound, bias free job evaluation plans. In Industrial Relations Counselors (Ed.), *Job evaluation and EEO: The emerging issues* (pp. 85-112). New York: Industrial Relations Counselors, Inc.
- Remick, H. (1981). The comparable worth controversy. *Public Personnel Management*, 10, 371-383.
- Remick, H. (1984a). Dilemmas of implementation: The case of nursing. In H. Remick (Ed.), *Comparable worth and wage discrimination* (pp. 90-98). Philadelphia: Temple University Press.
- Remick, H. (1984b). Major issues in *a priori* applications. In H. Remick (Ed.), *Comparable worth and wage discrimination* (pp. 99-117). Philadelphia: Temple University Press.
- Reverby, S. (1987). *Ordered to care: The dilemma of American nursing, 1850-1945*. Cambridge: Cambridge University Press.
- Riegel, J. W. (1937). *Wage determination*. Ann Arbor, MI: Bureau of Industrial Relations.
- Schatz, R. (1983). *The electrical workers: A history of labor at General Electric and Westinghouse, 1923-1960*. Urbana: University of Illinois Press.
- Schwab, D. (1985). Job evaluation research and research needs. In H. Hartmann (Ed.), *Comparable worth: New directions for research* (pp. 37-52). Washington, DC: National Academy Press.
- Scott, J. (1986). Gender: A useful category of historical analysis. *American Historical Review*, 91(5), 1053-75.
- Shils, E. (1972). Developing a perspective on job measurement. In M. Rock (Ed.), *Handbook of wage and salary administration* (pp. 3-18). New York: McGraw-Hill.
- Steinberg, R. (1990). The social construction of skill: Gender, power and comparable worth. *Work and Occupations*, 17(4), 449-482.
- Steinberg, R. (1991). *Report concerning the proposed testimony of Dr. Ronnie Steinberg concerning the appropriateness of the Hay Guide Chart-Profile Method for use at St. Michael's Hospital*. Unpublished manuscript, Department of Sociology, Temple University, Philadelphia.
- Steinberg, R., & Haignere, L. (1987). Equitable compensation: Methodological criteria for comparable worth. In C. Bose & G. Spitze (Eds.), *Ingredients for women's employment policy* (pp. 157-182). Albany: State University of New York Press.
- Stinchcombe, A. (1965). Social structure and organizations. In J. G. March (Ed.), *Handbook of organizations* (pp. 142-193). Chicago: Rand McNally.
- Taylor, S. (1989). The case for comparable worth. *Journal of Social Issues*, 45(4), 23-37.

- Treiman, D. (1979). *Job evaluation: An analytic review*. Washington, DC: National Research Council, National Academy of Sciences.
- Treiman, D., & Hartmann, H. (1981). *Women, work and wages: Equal pay for jobs of equal value*. Washington, DC: National Academy Press.
- Werwie, D. (1987). *Sex and pay in the federal government: Using job evaluation systems to implement comparable worth*. New York: Greenwood.