

GENDER AND CLASS IN MODERN EUROPE

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The Gendering of Skill as Historical Process: The Case of French Knitters in Industrial Troyes, 1880–1939

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Skill is an attribute identified historically with men's work, so its attribution to women seems a contradiction in terms. Yet gendered categories of skill prevailed in most trades. Most of the historical and sociological literature on the question of skill has relegated women to the category of unskilled worker without questioning how women came to be defined as unskilled or considering whether women in fact shared

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1. This is a short list from a vast literature on the subject: Charles More, *Skill and the English Working Class, 1870–1914* (New York, 1980); Harry Braverman, *Labor and Monopoly Capital* (New York, 1974); John Rule, "The Property of Skill in the Period of Manufacture," in *The Historical Meanings of Work*, ed. Patrick Joyce (Cambridge, 1987). Rule is attentive to the exclusion of women from the category of skilled labor. See also Paul Thompson, *The Nature of Work: An Introduction to Debates on the Labour Process* (London, 1989); Charles Sabel, *Work and Politics* (Cambridge, 1982); Joan Scott, *The Glassworkers of Carmaux* (Cambridge, Mass., 1974).

some skills with men.¹ Many scholars have come to question the assumptions on which skill distinctions are based.²

An exploration of the gendered meanings of skill contributes to the historical understanding of the transformations of work and workers' resistance to industrial capitalism. The process of skill differentiation is embedded in the nineteenth-century workplace, in the conflicting relations between capital and labor, but it is also constructed from multiple social values mediated by the family, the community, and society at large. Skill, then, is historically significant as a marker of social class, as a motor of worker mobilization, but also as a component of gender and work identity.³ It is a key category by which workers defined themselves in relation to others in the community. Women workers, however, found themselves in the problematic position of having to affirm their skills in relation to the normative male model upheld by employers. During the nineteenth century women worked alongside men in many trades; and as auxiliaries or contingent workers, they were denied power or authority despite their significant numbers in the workforce. They were segregated in separate work spaces, assigned specific tasks, and given tools of symbolic value.⁴

In France gendered skill definitions were grounded in the notion of *métier*, a skilled profession within a corporative tradition. The craft tradition—or "corporate idiom," as William Sewell has termed it—goes back to the French Revolution and was carried over in modified form into the nineteenth century as a cultural matrix for the development of the French labor movement.⁵ Craft, community, and skill became trans-

2. Anne Phillips and Barbara Taylor, "Sex and Skill: Notes towards a Feminist Economics," *Feminist Review* 6 (1980); Cynthia Cockburn, *Brothers: Male Dominance and Technological Change* (London, 1983), and *Machinery of Dominance: Women, Men and Technical Know-How* (London, 1985); Mary Freifeld, "Technological Change and the 'Self-Acting' Mule: A Study of Skill and the Sexual Division of Labour," *Social History* 11 (1986): 319-43; Ava Baron, "An 'Other' Side of Gender Antagonism at Work: Men, Boys, and the Remasculinization of Printers' Work, 1830-1920," in *Work Engendered*, ed. Baron (Ithaca, 1991).

3. Joan Scott, "Work Identities for Men and Women: The Politics of Work and Family in the Parisian Garment Trades in 1848," in her *Gender and the Politics of History* (New York, 1988), pp. 93-112. Scott makes the important point that "skill . . . was a relative rather than absolute description of certain kinds of work" (p. 95).

4. An Italian ethnologist, Paola Tabet, has argued that male domination over women has been constituted and maintained by the prescriptive use of tools and techniques for the production of goods, which has created a "technology gap" that allows men a monopoly of advanced knowledge and techniques. See "Les Mains, les outils, les armes," *L'Homme* 19 (July-December 1979): 5-61.

5. See William Sewell Jr., *Work and Revolution in France* (Cambridge, 1980), pp. 162-93. Sewell argues that the "corporate idiom" was an expression of the corporation as a moral community. Though trade corporations had been outlawed in 1791, workers continued to use corporate traditions, practices, and language in opposition to nineteenth-century employers' attempts to disorganize them.

formed by industrialization and revolution in France under historical conditions very different from those in England. The French path to industrialization, the specific pattern of French working-class formation, and the role of skilled artisan workers as leaders of French socialism make the French case of craft and community distinctive. It follows that gender and class relations, divisions between skilled and unskilled workers, were shaped by historical forces peculiar to the French industrial experience. Artisanal forms of work far outnumbered factory jobs until after the Paris Commune of 1871. Under these conditions the male model of the skilled artisan persisted long after the actual erosion of working conditions and the dilution of skills.⁶ By the turn of the century French unions in many trades clearly expressed the notion of a skilled male worker whose identity was increasingly threatened by technological advances and by women's employment.⁷ They reasoned that because skill was defined as masculine, the employment of women and children destroyed the notion of skill. Behind this reasoning lay the conflation of mechanization, deskilling, and feminization, as male workers perceived the risk of becoming redundant or of being replaced by women. As we shall see, occupational segregation of women was one measure to protect men's jobs; the gendering of tools and technology was another.

Troyes, France's primary center for the manufacture of hosiery and knitted goods, experienced intense economic growth, feminization of the workforce, and technological development from 1880 to 1939. Craft and community in Troyes created a system of internal ranking in the mills in terms of occupation and skill. This hierarchy played into a gendered work identity for men and women, valorized by class and community in the town. Skill or *métier* was one important component of work identity. In the French hosiery industry, the male model of *métier* predominated as a definition of technical aptitude, mastery, and craft. Women used the similarity of certain technical skills to claim that they too had a *métier*. But technical mastery that depended on machine-operative skills was not the only measure of skill. Women workers were also recognized as having different skills from men. This gender difference was sometimes

6. Studies on the nineteenth-century skilled artisan have focused on the connection between skill and political consciousness or between changing working conditions and proletarianization. See the debate between Jacques Rancière, "The Myth of the Artisan: Critical Reflections on a Category of Social History," in *Work in France*, ed. Steven Kaplan and Cynthia Koepp (Ithaca, 1986), pp. 317–35, and Christopher Johnson, "Response to Jacques Rancière," *International Labor and Working-Class History* 24 (Fall 1983): 21–25.

7. For just the textile industry see the reply from the Fédération Nationale Ouvrière de l'Industrie Textile de France to the Parliamentary Inquiry of 1902, Archives Nationales (AN), C 7321: "Workers' technical mastery in the textile industry is today eliminated by the progressive substitution of automatic machines . . . for hand labor and dexterity, in sum, for everything that constitutes men's technical mastery, which has been displaced by the employment of women and children."

valorized as "natural feminine aptitudes," sometimes diluted to a mere symbolic distinction, but it was always perceived as constituting a different but complementary work identity for women.⁸ It is significant and paradoxical that the mill owners of Troyes prized the only women's occupation requiring hand skills and artistry, closely identified with a feminine ideal, as the most highly skilled of women's hosiery jobs.

As increasing numbers of women workers in Troyes were employed to keep pace with growth in productivity, related changes in the work process led to the deskilling of workers of both sexes. Women had claimed that their specialized tasks demanded skills that overlapped with men's; now they could no longer do so. In 1936 a strong Popular Front movement in Troyes gave male union leaders sufficient leverage to negotiate from a position of strength the first collective bargaining agreement in the industry's history. In the process they codified the trade, effectively preserving men's skilled status to the detriment of women's and reconstructing a hierarchy of difference.

GENDER AND SKILL

Labor historians still debate the degree to which skilled workers in France became "proletarianized" during the second half of the nineteenth century, and in the process lost control over their craft status and skills. There seems to be general agreement that the process began with the spread of the factory system and intensified with mechanization and the concentration of capital and labor. Yves Lequin suggests that workers' concern for the dilution and loss of their skills appeared with the first signs of Taylorism, which he dates in the 1880s in France.⁹ Studies of skilled artisans stress the relation between the increased division of labor, changing working conditions, and the growth of classconsciousness.¹⁰ Some historians have examined the patterns of worker unrest to determine the degree of workers' resistance to industrial capitalism in various industries.¹¹ Still others assume workers' resistance

8. Scott, "Work Identities," p. 107.

9. Yves Lequin, "Le Métier," in *Les Lieux de mémoire*, ed. Pierre Nora, vol. 3, *Les France*, pt. 2 (Paris, 1992), pp. 376-419.

10. Two positions on this question are represented by Christopher Johnson in "Patterns of Proletarianization: Parisian Tailors and Lodève Woolens Workers," in *Consciousness and Class Experience in Nineteenth-Century Europe*, ed. John Merriman (New York, 1979), and Alain Cottureau, in his Introduction to Denis Poulot, *Le Sublime* (Paris, 1980). See also John Rule, "The Property of Skill in the Period of Manufacture," in Joyce, *Historical Meanings of Work*, pp. 99-118.

11. Michelle Perrot, *Les Ouvriers en grève: France, 1871-1890*, 2 vols. (La Haye, 1974); William Reddy, *The Rise of Market Culture: The Textile Trade and French Society, 1750-1900* (Cambridge, 1984).

to industrial discipline as the norm and seek to understand the meanings of a range of grievances and conflicts, from informal, silent resistance to the more formal collective action of strikes.¹² These historians presume skill to be gender neutral. Several French feminist historians, however, have analyzed the strike behavior of women workers in particular nineteenth-century labor conflicts.¹³

Feminist historians have long sought to explain the sexual segregation of women's waged work and its consequences (unskilled labeling, low wages, lack of mobility, devaluation, etc.) in other than purely economic terms. A whole generation of studies of women and work, both in sociology and in history, were based on the assumption that the key to understanding women's subordination in society lay in this fundamental inequality in the division of labor. They have attempted to demonstrate that Marxist categories of economic analysis have been, as Heidi Hartmann has affirmed, gender blind.¹⁴ It is now evident that sexual discrimination predates the capitalist system and is perpetuated in the labor market even today. In seeking to explain the nonobjective and noneconomic nature of such workplace discrimination, Anne Phillips and Barbara Taylor argue that the construction of skill is a key category in the meaning of work. "Skill definitions," they affirm, "are saturated with sexual bias. The work of women is often deemed inferior simply because it is women who do it. Women workers carry into the workplace their status as subordinate individuals, and their status comes to define the value of the work they do. Far from being an objective economic fact, skill is often an ideological category imposed on certain types of work by virtue of the sex and power of the workers who perform it."¹⁵ Phillips and Taylor point to the arbitrary way women's subordinate position in society has been used to explain women's unskilled label and low wages. Sonya Rose develops this analysis further by demonstrating how gender distinctions were constitutive of job composition and workplace organization.¹⁶ For Rose gender distinctions created antagonisms within the working class and operated as a capitalist strategy to divide and control

12. This is particularly the approach of Alain Cottureau. See his Introduction to Poulot, *Le Sublime*, and "The Distinctiveness of Working-Class Cultures in France, 1848-1900," in *Working-Class Formation: Nineteenth-Century Patterns in Western Europe and the United States*, ed. Ira Katznelson and Aristide Zolberg (Princeton, 1986).

13. See Perrot, *Ouvriers en grève*, 1: chap. 3; Claire Auzias and Annik Houel, *La Grève des ovalistes* (Paris, 1982); and esp. Madeleine Guilbert, *Les Femmes et l'organisation syndicale avant 1914* (Paris, 1966).

14. Heidi Hartmann, "Capitalism, Patriarchy, and Job Segregation by Sex," *Signs* 1 (1976).

15. Phillips and Taylor, "Sex and Skill."

16. Sonya O. Rose, *Limited Livelihoods* (Berkeley, 1992), esp. Introduction and chap. 2; and Rose, "Gender Segregation in the Transition to the Factory: The English Hosiery Industry, 1850-1910," *Feminist Studies* 13 (Spring 1987).

workers' loyalties. She uses the example of the hosiery industry in England to illustrate how men and women often competed for jobs. Joy Parr, in her comparative study of the knitting industry in Canada and England, examines the gender construction of skill in relation to many variables. She notes that the sex labeling of specific tasks is contingent, and she points to knitting as a prime example: "In the midlands and in Ontario knitting was made men's or women's work through a complex interaction which combined tradition from the workshop and the early factory with social prescription about who was entitled to work for wages at all and characteristics of the local labor market and labor organization and of both the product market and the prevailing technology."¹⁷ While "skill," then, is a key category of analysis, it is only part of a more complex configuration in the analysis of class, gender, and work.

SKILL, CRAFT, AND INDUSTRIALIZATION

What do we mean by *métier*? I use this term to define skill, knowing that the notion has its own long history and development in French working-class culture. The term *métier*, rooted in the revolutions of 1789 and 1848,¹⁸ refers to those basic social units of useful labor recognized by the republican forces. It could be said to be "at once economic, sexual and political," as Joan Scott has argued in the case of worker identity.¹⁹ At the same time, the meanings attached to *métier* were contested and have evolved over time. Workers persisted in using the customs, conventions, and practices of their trade as a way of imposing order on the competitive individualism developed by the capitalist system. "Nineteenth-century workers attempted to gain control over many aspects of their trades," Sewell notes: "job placement, the pace and processes of work, the arbitration of disputes, the quality of goods produced, recruitment into the trade, the level of wages and piece rates paid to workers, and so on."²⁰ The notion of *métier*, then, not only includes technical skills or shared *savoir-faire* but also represents a self-defined workers' community in opposition to industrial capitalism. The meanings attributed to the term were shaped by changing historical conditions in the trade. Historically two very different logics—those of capital and labor—have operated in the defining of skills, and the antagonism between the two became expressed

17. Joy Parr, *The Gender of Breadwinners* (Toronto, 1990), p. 60; and Parr, "Disaggregating the Sexual Division of Labor: A Transatlantic Case Study," *Comparative Studies in Society and History* 30 (1988).

18. Lequin, "Le Métier," p. 377. Lequin describes the processions of trade corporations in the early months of the Revolution of 1848.

19. Scott, *Gender and the Politics of History*, p. 96.

20. Sewell, *Work and Revolution*, pp. 179–80.

most explicitly in strikers' grievances.²¹ The introduction of new technology gave employers an opportunity to erode the craft knowledge and ability that workers struggled to maintain in their jobs, the same skills that union leaders defended as training and experience. Wage demands often masked contested meanings of skill.

How can we problematize skill from the perspective of gender within this historical framework? Is *métier*-as-skill exclusively a male property?²² In other words, does the notion of *métier* apply to women? If so, when does this notion appear in gendered terms in the Troyes hosiery industry? How do women workers represent themselves in terms of *métier*?

According to *Le Grand Robert* dictionary, *métier* refers to what constitutes or confers a profession, and the referent is a male model. But the term is also used to refer more generally to technical skills, both manual and intellectual, that are acquired through training and based on experience (*avoir un métier*, to have a trade). It is also used to mean work that is both recognized by society and a livelihood. This latter meaning is gendered—*métier d'homme ou de femme*—not in any indistinct way, but in reference to a social occupation.²³ If *métier* is defined narrowly as "a trade," nineteenth-century women workers would seem not to have had one, as they were considered contingent workers whose primary ascription was to home and family.²⁴ Michelle Perrot has argued that the notion

21. Danièle Kergoat underscores the opposing logics in the following terms: "[Job qualification] refers to the complex set of qualities required by employers for a specific job task, and it is this definition that serves as the basis for job classification grids (therefore the wage scale) and to legitimize the division of labor; management decisions on the job classification system depend on personnel management policy and on technological imperatives; worker qualification, on the other hand, refers to the training and experience that workers deploy in carrying out their job, and it is this definition that unions refer to when they negotiate job classification": *Les Ouvrières* (Paris, 1982), p. 53.

22. Rule argues that in mid-nineteenth-century England skill was "clearly a male 'property', and in that it was the distinguishing mark separating the artisan from the common labourer, it also represented a symbolic capital": "Property of Skill," p. 108. Thus it implicitly excludes women as unskilled labor. For Sonya Rose, "honorable manhood was equated with possessing a skill and family headship." Among British skilled artisans, notions of masculinity, skilled status, breadwinning, and respectability were interrelated. See Rose, *Limited Livelihoods*, pp. 138–53.

23. Among the quotations listed to exemplify usage, *Le Grand Robert* gives three concerning women's *métiers*: the first relates to the fact that "women have progressively gained access to professions traditionally exercised by men"; the second refers to "the oldest profession in the world"; and the third is excerpted from Zola's *La Bête humaine* and can serve only to demonstrate the devalorization of women's work: "Doubtless, he concluded, not all women would be willing to clean public restrooms. But there is no such thing as a stupid *métier*": *Le Grand Robert de la langue française*, 2d ed (Paris, 1985), 6: 416–18.

24. Lequin, "Le Métier," p. 407. Lequin quotes Michelle Perrot's argument that women rarely have a *métier* in the male sense of the term; even if they work, the job is not a

of métiers de femmes or women's occupations took shape under the moral eye of liberal social reformers who framed the "woman question" as they simultaneously denounced the dangers and evils of the factory system for women and children.²⁵ These male observers noted that certain tasks were appropriate and fitting to women's "nature" but did not necessarily describe them as skilled.²⁶

The process of creating gender distinctions discursively to circumscribe women's work went hand in hand with the occupational segregation of women in production. The increasing numbers of women working in certain sectors of the French economy by the turn of the century provide evidence that employers understood how their skills could be effectively exploited. According to the 1906 census, women represented 37.15 percent of the active population in France as a whole. By 1921 this figure had reached 39.6 percent, only to decline to 36.1 percent in 1936.²⁷ If we break down these aggregate figures for 1906, we find that 37.9 percent of women worked in agriculture, 37.7 percent in industry, and 24.4 percent in the service sector.²⁸ In the industrial sector the numbers of women workers remained fairly constant from 1906 to 1936, while the composition and distribution of their jobs changed. This is the case in the textile industry, which witnessed the decline of such women's tasks as embroidery and passementerie and the creation of more jobs for men and women as modern machine operators.²⁹

In the hosiery industry there was a steady increase in the proportion of women in the labor force in Troyes and the department of the Aube over the first half of the twentieth century: 51 percent in 1901, 61 percent in 1921, and 57.5 percent in 1936. Women swelled the ranks notably in the category of blue- and white-collar workers (ouvriers et employés) during the 1920s and 1930s. Behind these aggregate figures we can observe new work patterns emerging for women. Employers in Troyes encouraged married women to continue working while they raised their children. Low wages made a second income a virtual necessity for most couples. The feminization of the workforce in Troyes was also linked to the increased specialization and professionalization of women hosiery workers. They were no longer auxiliaries or contingent workers. Women's

lifetime commitment that confers status and identity. See Michelle Perrot, "Qu'est-ce qu'un métier de femme?" in *Mouvement Social*, no. 140 (July-September 1987).

25. Perrot, "Qu'est-ce qu'un métier de femme?" p. 5.

26. Paul Leroy-Beaulieu, *Le Travail des femmes au XIX^e siècle* (Paris, 1873).

27. Jean Daric, *L'Activité professionnelle des femmes en France* (Paris, 1947). I have calculated from Daric's figures for the active population in all occupations, table 1, p. 15.

28. Guilbert, *Les Femmes et l'organisation syndicale*, pp. 13-14.

29. Sylvie Zemer makes this point in "De la couture aux presses: L'Emploi féminin entre les deux guerres," in *Mouvement Social*, no. 140 (1987), pp. 8-25.

skills became redefined in a specific industrial and historical context: knitting frames geared to mass production created more task-specific jobs for women as loopers, seamers, quality control workers, finishers. Certain female occupations became categorized according to machine-specific skills, as we shall see. The fact of operating a specialized machine did not necessarily confer a skill label, but mechanization of special female tasks did allow women to master new skills and to perform as machine operatives as men did. Jobs that were identified with their machine conferred status.

Women workers could and did, claim to have a *métier* and a gendered work identity that overlapped to some extent with men's: *bonnetier* and *bonnetière* were generic and gendered terms for workers in the knitted-goods industry, recognized by all the Troyes industrial community. Such customary terms of collective identity connoted complementarity in the gender division of labor, similar to that employed in many old French trades, but in reality these terms blurred job composition. The generic *bonnetière* masked women's place in the production process, but it conveyed the idea of an independent wage earner in the Troyes mills. By 1939 *bonnetier* still referred to a skilled male knitter, but *bonnetière* had become an increasingly disparaging term for the local factory girl, tarnished by vulgarity and by her association with men in the workplace.³⁰ In the historical process of engendering skill, the construction of difference gradually stigmatized women hosiery workers.

Craft unions developed to defend workers' status, interests, and well-being. Even if skill was not explicitly mentioned in wage demands, the notion was implicated in this contested terrain. The question of acquiring and preserving skilled status and recognition remained a fundamental area of unresolved class and gender conflict at the end of the nineteenth century. As industrial syndicalism developed in France by the fusion between the craft workshop tradition and the new industrial proletariat, workers struggled against the leveling of working conditions in modern industry.

The textile unions in Troyes fought for employers' recognition and the right to represent labor and negotiate their demands. In the early years of the struggle to organize, the local Guesdist leaders appealed to women workers to join forces with male co-workers in strikes and to join the union. By 1895 the mixed hosiery union, the *Association Syndicale des Ouvriers et Ouvrières de Toutes les Professions Se Rattachant à la Bonneterie*, was making special appeals to raise female membership. A tract dating from this time was addressed specifically to women workers,

30. An interesting linguistic study of present-day terminology in the hosiery industry only partially raises this question. See Françoise Perdriset, "Recherches sur le vocabulaire de la bonneterie" (thesis, Université de Paris, 1980).

enumerating them by their gendered métiers and calling upon them as mothers, wives, and daughters of the working class.³¹ The union formulated its concern over female membership in explicitly gendered terms. In Troyes, however, the male leadership in both the political parties and the unions ensured that class and labor interests predominated over gender concerns. Women workers were marginal to both sorts of political institution. Union membership was modest in 1900: 2.9 percent for France as a whole, 1.06 percent for the department of the Aube; and while women represented 32.8 percent of the Aube's active population, they constituted only 13 percent of members in the two mixed unions.³² It was their central place in the production process that provided women a real workplace identity.

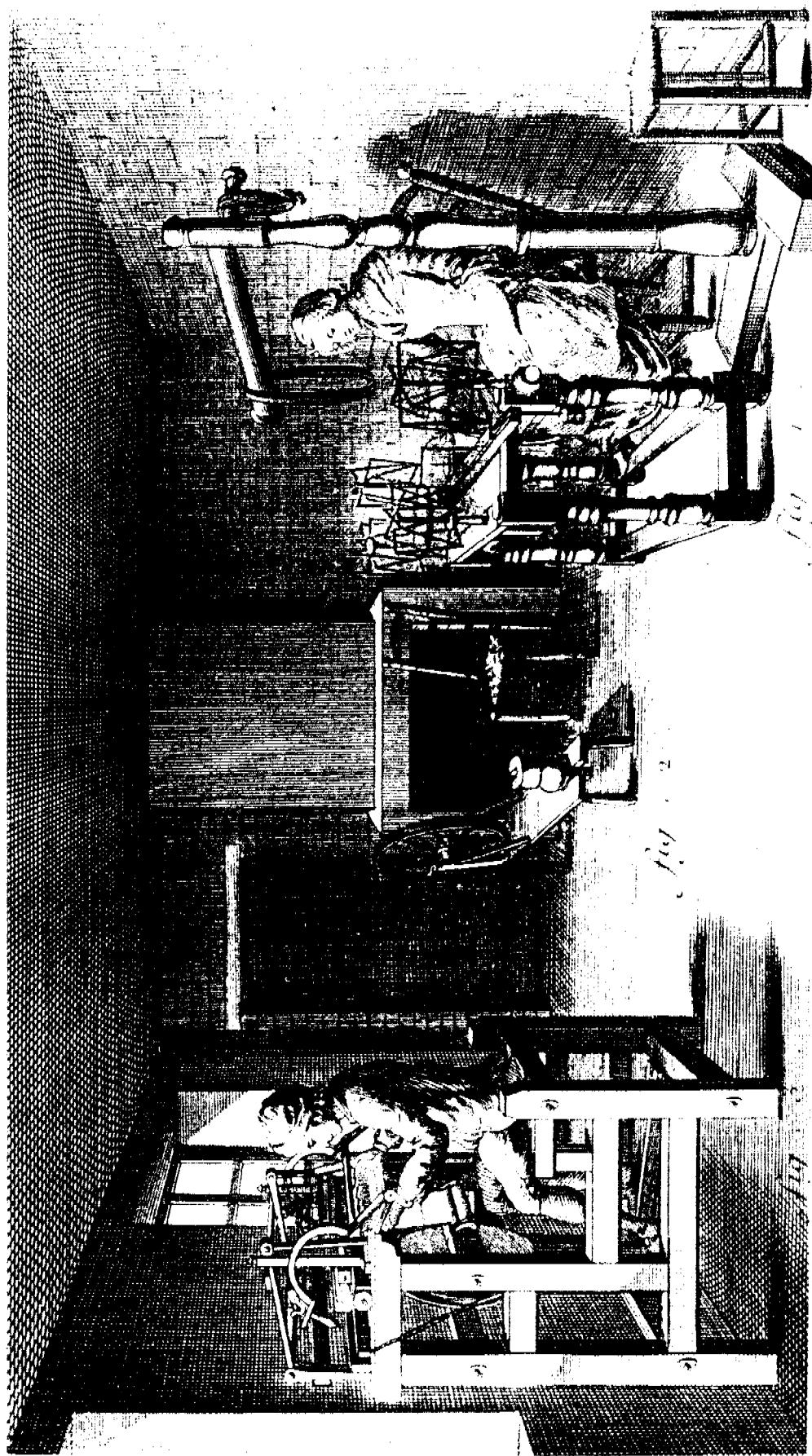
THE SEXUAL DIVISION OF LABOR

The technical complexity of knitting machines and the variety of articles they produce make knitting an intricate operation. Production in the Troyes mills was labor intensive, and that labor had to be skilled. Historically the work process had been divided into several operations assigned to men, women, and children according to their sex, age, and ability. Men appropriated the knitting frame and the technical knowledge required to repair or adjust the machine. The mechanics of knitting technology were decidedly a masculine preserve, and the technical skills so prized for their prestige and productivity were those that developed out of the craft tradition. According to the first statutes regulating the trade, established by the Corporation des Bonnetiers d'Arcis-sur-Aube in 1750, operating the hand-powered knitting frame was exclusively a male privilege.³³ The putting-out system, organized around the family unit under the direction of its male head, did not often recognize women and children as producers. In practice, however, the husband, wife, and older children operated the knitting frame as necessary to finish the week's

31. This tract can be read as a representation of women workers' place in the social order, as Joan Scott has suggested, first as members of the working class, second as members of a corporative tradition, and third as members of a family or social and economic unit in French society. See Joan Scott, "L'Ouvrière! Mot impie, sordide . . .": Women Workers in the Discourse of French Political Economy, 1840-1860," in her *Gender and the Politics of History*, pp. 139-63.

32. The basic figures come from Guilbert, *Les Femmes et l'organisation syndicale*, p. 30.

33. Julien Ricommard, *La Bonneterie à Troyes et dans le département de l'Aube* (Paris, 1934), p. 32. Ricommard's classic history of the Troyes hosiery industry cites these statutes as the origin of male knitters' appropriation of the frame, a privilege that went unchallenged until mill owners employed women knitters to replace men during World War I. See chapter 5 for a discussion of the custom governing the sexual division of labor.



The gender division of labor in domestic knitting as represented in the *Encyclopédie* of Diderot and d'Alembert. Archives départementales de l'Aube

production. The household production model tends to idealize gender relations by presenting a fixed and symmetrical image of the couple, such as we find reproduced in Diderot's *Encyclopédie* (Figure 3.1). Such self-sufficient images of complementarity are misleading, because women's work was subordinate to men's in many ways.

Mill owners reproduced the sexual division of labor developed by artisans and adapted it to their needs in the mills. In the transition from an artisan mode of production to an industrial one, the male knitter maintained his privileged position at the knitting frame, the most valorized and productive machine, while women were employed to prepare the raw materials (spinning) and to seam and finish by hand the articles produced. The fact that women's tasks were only partially mechanized led to a need for increasing numbers of "nimble fingers" to sew and finish knitted goods. Seaming was labor-intensive. Employers recruited a growing number of women to execute increasingly fragmented tasks.

The first step in the work process was winding the yarn. The bobbin winder worked in tandem with the knitter and provided him with the raw material for his frame. As a women's job, bobbin winding was poorly paid and physically demanding, and it carried the social stigma attached to hard physical labor in proximity to men. Knitting was the next stage of production. Male knitters or stockingers operated both flat-bed frames for the production of fully fashioned goods and small circular machines that produced tubular stockings or continuous fabric. Most women's jobs were grouped around finishing: seaming, looping, mending, and quality control, all labor-intensive subdivided tasks that were mechanized in stages. The skills required were good eyesight, taste, the dexterity needed to work with the elasticity of knitted fabric, and knowledge of the knitting process. As we shall see, mill owners prized one group of female workers above all others: skilled menders (*raccoutreuses*), trained in the fine needlework skills of repairing flawed or damaged goods. When one considers that such goods included the expensive luxury silk stockings of the 1920s, it is easy to understand how manufacturers ranked this work as both highly profitable and the ultimate women's *métier*. The final operations, from matching pairs to packaging, were mainly executed by women.

The growing feminization of the Troyes workforce can also be explained by the highly organized practice of outwork in the knitting industry. Some tasks assigned to women could be done at home. Small portable seamers had been introduced around 1890 to seam heels and toes. Specialized mending of flawed products by hand was routinely done at home. Employers delivered such unfinished socks and stockings to mothers with small children to care for at home. The fact that the

outwork system persisted well into the 1930s is confirmed by the collective bargaining agreement of 1936 concerning homeworkers.

The sexual division of labor in this production process evolved out of custom, craft, and convention. In comparison with women who worked in the hosiery industries of England and Canada, where operation of the circular knitting frame became a "mixed gender occupation,"³⁴ French women in the Troyes mills never challenged this male monopoly. During World War I, when women in industries all over France substituted for men at the front, women in Troyes replaced men on small flat-bed knitters, reputed to be simpler and lighter to operate than the large knitting frame. The substitution in this case was recognized as a response to exceptional wartime circumstances, and when the men returned to their prewar occupations, women returned to theirs. The knitting frame remained gendered as a male machine. Women continued to follow in the customary female occupations for which they had been trained by their mothers and fathers. In this hierarchy of difference, formal and informal skill training played a crucial role in the gendering of the Troyes work culture.

APPRENTICESHIP AND TRAINING IN THE SKILLING PROCESS

By the turn of the century two forms of traditional apprenticeship and training coexisted in the Troyes knitting industry, one for technicians and workshop foremen, one for the various production jobs. The first consisted of formal training in a professional school founded by the bourgeois entrepreneurs of Troyes in 1888; the second was grounded in the emulation and example of family members or friends who worked in the trade. Obviously the second route, informal and family apprenticeship, has left little written record for historians to evaluate; we have only the experienced hand, or what the French call *la mémoire de la main*.³⁵

Measures for institutionalized apprenticeship and training were directed almost exclusively toward men. Troyes's entrepreneurs combined foresight and personal interest in establishing the *Ecole Française de Bonneterie* in 1888. Many of them had attended engineering schools or

34. Parr, *Gender of Breadwinners*, p. 60.

35. This evocative phrase comes from a watchmaker cited by François Caron during a public thesis defense in June 1986 at the Sorbonne. The following paragraphs on informal training and apprenticeship are based on oral history testimony collected from a sample of men and women operatives who had worked in the Troyes mills in the 1920s and 1930s. For further discussion see Helen Chenut, "La Formation d'une culture ouvrière féminine: Les Bonnetières troyennes" (doctorat de 3^{ème} cycle, Université de Paris VII, 1988).

the regional école des arts et métiers, and this experience led them to seek state and municipal aid for their project. Their purpose was to train young men to become captains of their industry, the model being, of course, the army.³⁶ The entrepreneurs were committed to a two-to-three-year general and technical education program to train a small male elite for their immediate needs in the mills. Two-thirds of the twenty students enrolled had scholarships, but the mill owners maintained absolute control over admissions. What was at stake was the kind of professional savoir-faire and autonomy that artisan knitters had sought to protect against the inroads of industrial capitalism. Workers perceived the school as an attempt by manufacturers to train their own sons, along with overseers, in the specialized and technical knowledge of the trade, thereby dividing the workforce even further into supervisors, technicians, and manual operatives. One worker delegate from Troyes to the Paris World's Fair of 1889 argued for training that would transmit an integral vision of the trade, together with a general education, free and guaranteed by the state.³⁷

The norms established by mill owners for the administration of their private professional school in Troyes were contested by the Socialists when they came to power there at the turn of the century, but the town's subsidy was never called into question. Rather, local elected officials sought to strengthen the technical education programs of the public schools, and called upon individual public-spirited entrepreneurs to make inspection missions and recommendations. Ultimately the state stepped in to establish the norms that would give a legal status to apprenticeship. The state school system was to coordinate the various forms of training and administer examinations. These directives were embodied in the law of 1928 on apprenticeship. There was a price to pay, of course: workers' testimony confirmed that their families had to advance the money for their apprenticeship, and that they earned no wages during the training period.³⁸

Informal and family apprenticeship provided most production workers entry into the mills. Like many nineteenth-century trades, the Troyes knitting industry was grounded in professional intermarriage or endogamy, which ensured the continuity of work skills and culture from

36. Emmanuel Buxtorf, engineer-mechanic, inventor of several accessory machines, and the school's first director, expressed their aim in these terms: "Les contre-mâîtres sont à l'industrie ce que les officiers sont à l'armée": "Inauguration de l'Ecole Française de Bonneterie," *Journal de la Bonneterie Française*, November 15, 1890, Archives Municipales de Troyes (AMT), R257.

37. Report by M. Foin, "Rapport des délégués ouvriers à l'Exposition universelle de 1889," AMT, F140.

38. Testimony from Madame Aubron (August 28, 1982) and Madame Binet (August 4, 1983). See also n. 35.

one generation to the next. Children were initiated into the hand skills and work processes of the trade in the family workshop. The father as head of household trained the members of his own family.³⁹ But some mothers who did handwork or seaming at home trained their children to help finish certain manual tasks. Once they entered the mills, most young workers were trained on the job to acquire the factory experience that qualified workers of both sexes in the eyes of the foreman. The family network served to gain access to this type of employment at the early age of 13 (the legal school-leaving age).

For young men the first step on the established career ladder was to serve as a rebrousseur in tandem with a bonnetier, or hosier; then, around the age of 16, he became the *bonnetier's* official apprentice. Rebrousseage was a stopgap job. It was a manual task between two stages in the production of socks and stockings on the flat-bed knitter, and required nimble fingers and good eyesight. The bonnetier subcontracted the work to his rebrousseur. This practice of making a skilled worker the actual employer of his unskilled helper created tension and competition, which often resulted in conflicts over wages. Young rebrousseurs could walk off the job and effectively halt production.

Women's professions did not benefit from either institutional training or long apprenticeship in the mills. When women's work was first mechanized, on-the-job training directed by an experienced worker or forewoman provided the only formal training outside the family workshop. By the 1920s women workers spent three to six months acquiring the skills and speed necessary to earn their living at piecework. This relatively short training period implied lower skill content and contrasted noticeably with the longer training required for men's work. The increasing subdivision of women's work into fragmented tasks diminished their opportunity to learn and improve their skills. Technical improvements introduced during the 1920s and 1930s mechanized such small operations that women learned little more than specialized mechanical high-speed tasks, such as operating buttonholing and button-sewing machines.

There was one notable exception to this pattern of female apprenticeship: the fine needlework skills of the mender or raccoutreuse required months of patient on-the-job training and practical experience with knitted fabrics. Apprentices had to learn to identify flaws in the finished knitted product, then reconstruct the stitches in such a way as to render

39. A description of the family workshop in 1900 has survived through the monograph of a rural primary schoolteacher who served twenty-two years in his community: M. Jamerey, *monographie de la Commune de Maizières-La-Grande-Paroisse, Petite Industrie, Bonneterie, l'Exposition universelle de 1900, groupe XVI, classe 103, La Chambre de Commerce de Troyes*.

the repair invisible. Such Penelope-like skills were highly valorized both socially and professionally. In contrast to the worker whose machine skills were gendered as masculine, the mender embodied consummate hand skills and artistry with the needle. Such skills, even if developed over a long apprenticeship, were intimately associated in mill owners' minds with women's natural attributes. Embroiderers worked alongside menders to decorate the elaborate silk stockings of the Belle Epoque. Rozsika Parker has remarked that "the art of embroidery has been the means of educating women into the feminine ideal, and of proving that they have attained it."⁴⁰ The skilled menders of the Troyes mills certainly embodied such a feminine ideal. We shall soon see how mill owners exploited this ideal in a skill competition they organized in 1930.

The short training that women received, on the job and informally, contrasts sharply with the professional training developed for valorizing and legitimizing men's skills. Women's career patterns differed from men's. More important, their informal family training did not automatically confer social status and a sense of *métier*. It was a status they had to legitimize through on-the-job training in the workplace. At the outset the requisite skills for their professions—hand skills and the use of tools of symbolic importance—were identified with customary feminine domestic occupations. The mechanization of knitting, together with the improvement of knitting technology, did little to reverse the historical pattern of occupational segregation. It did, however, give new meaning to specific women's occupations in the industry and empower them to claim skills that overlapped men's. Women became operatives of machines designed for their specific tasks.

GENDERED TOOLS AND TECHNOLOGY

The gendering of technology and tools provides just one strategy for creating and maintaining gender distinctions in skill. The evolution of knitting technology structured the organization of work in the Troyes mills.⁴¹ During the period we are examining knitting frames were equipped with automatic functions and became capable of producing goods rapidly and in series. The most important invention of this period was the Cotton frame knitter from England, displayed at the Paris

40. Rozsika Parker, *The Subversive Stitch* (London, 1984), p. 1.

41. For the evolution of knitting technology see Georges Ude, *Etude générale de bonneterie* (Paris, n.d.); M. Hamant, "Les Diverses Opérations de fabrication et le matériel de finissage et d'apprêt," conférence faite à la Chambre de Commerce de Troyes, April 10, 1944; and William Felkin, *The History of the Machine Wrought Hosiery and Lace-Manufacture* (London, 1867).

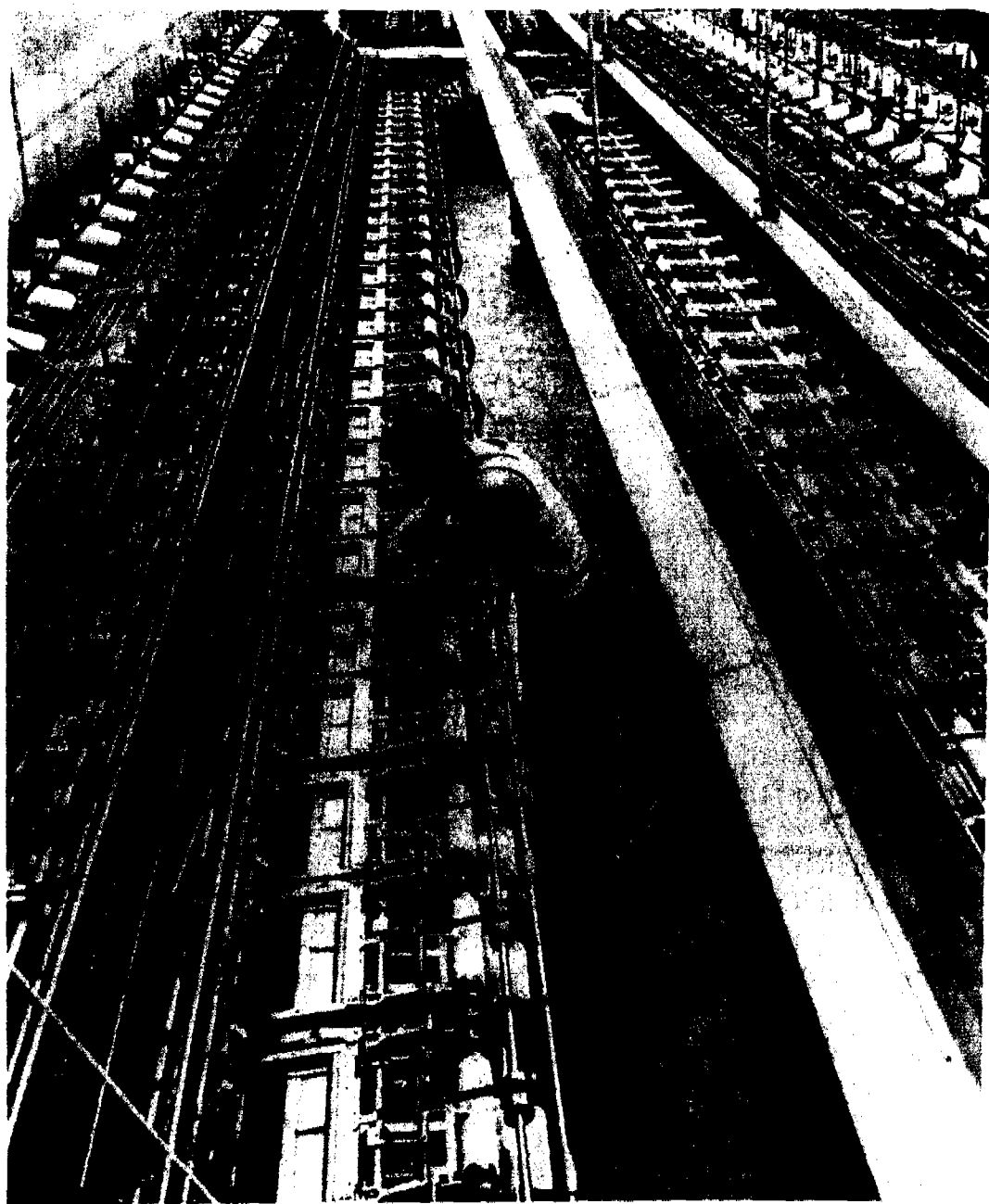
World's Fair of 1867 and constructed in Troyes from 1878. The Cotton frame became the mass-production knitter of the modern mill. Once improved, it produced a wide variety of goods in series. Manufacturers were thus able to diversify production and adapt more quickly to the changing needs of fashion, while also maintaining high productivity. The Cotton frame knitter became the consummate masculine machine.

Mechanization affected both men's and women's work by increasing specialization.⁴² Fewer men were needed to tend the mass-production knitters and fewer mechanical skills were needed to maintain production runs, resulting in slowdowns in production and periods of layoff. For women the number of specialized tasks increased as their work was subdivided, creating more gender-specific jobs. At the time of the Parliamentary Enquiry of 1904, the *Chambre Syndicale Patronale* (Employers' Hosiery Association) of Troyes listed three categories of male knitters and some twelve women's occupations with craft-specific titles.⁴³ The technical innovations of this period did little to upgrade the skill content of women's work. Rather, the female tasks that had been partially mechanized became valorized socially through their machine-related skills. By the interwar period employers were bridging technological gaps in the production process with semiskilled women's jobs. Production shifted from hosiery to a greater diversity of fashion clothing made from cut-up knitted fabric sewn together along an assembly line.

If we analyze two occupations, one masculine and one feminine, we can understand how women's skills, contrary to men's, were diluted when technological innovations were introduced. The "bonnetier Cotton" or knitter on the Cotton Patent frame operated the most prestigious mechanical knitting machine of the modern hosiery industry. His work required physical strength in the 1880s and 1890s because heavy gears had to be shifted between operations. The physical-strength argument underpinned the male monopoly of the machine. With the introduction of automatic commands before 1914, the Cotton Patent operator became more of a machine minder and a supervisor of the knitting process. His mechanical skills came into play at best when he had to repair or replace broken needles, for example, or to set up and restart a machine. The knitter could sit down to wait until the machine stopped for the next operation. Finally, mill owners required knitters to oversee two frames, or even the ultra-long Cotton, with twenty-four or thirty-six heads knitting simultaneously (Figure 3.2). These mass-production knitting frames

42. "Specialization" implies the fragmenting of an operation into a series of repetitive tasks that require little skill. The term reveals some of the ambiguity of skill definitions. In fact, the modern French term for unskilled worker is *ouvrier spécialisé*, or O.S.

43. "L'Enquête parlementaire sur l'état de l'industrie textile et la condition des ouvriers tisseurs" (1906), AN, C7318.



3.2. A Cotton Patent knitter at work in the 1950s. From an advertising brochure for Vitos, manufacturer of knitted goods, Troyes, published in 1963. (Archives départementales de l'Aube)

accelerated the work pace but still allowed the operator to intervene in the process and preserve some technical competence. The lengthy training and workshop apprenticeship, combined with the rites of passage both into the profession and up the career ladder, all gave the Cotton Patent knitter the social and professional status of a skilled worker. As the work evolved, his skills were diluted but transferable. He was able to

maintain a skill label through job recomposition over the sixty-year period dominated by the Cotton Patent frame. Ultimately, he could look back and identify with the skilled worker of the corporate tradition. In short, he belonged to a craft fraternity.⁴⁴

If we examine the work of a typical woman machine operator, the looper or remmailleuse, and trace its evolution over the same period, the divergencies in the skilling process become clear: shorter factory apprenticeship, no formal recognition of previous sewing machine experience, a specialized piecework task, no reference to the craft tradition. It is also evident why this work was assigned to women at the outset: it involves joining two edges, stitch by stitch, onto poinçons or hooks and sewing them together. In the nineteenth century this work was done by hand with a crochet hook. It became mechanized around 1880, when the sewing machine was adapted to the seaming of knitted goods (Figure 3.3). The introduction of a specialized machine allowed women to master new technical skills. In social and cultural terms, it created a new primary identity for loopers in the workplace as machine operatives, similar to the male model. Apprenticeship on this specialized machine took place in the factory, but a significant number of women loopers were trained in the family workshop or at home by their mothers. One obvious advantage of this small seamer was its compact size and shape, which permitted it to fit easily into a domestic environment. As we have seen, many loopers were outworkers, combining child care with industrial work.

The machine-operative skills involved in this work were recognized, but there were hidden difficulties to the job that were less obvious. The manual dexterity and good eyesight needed to produce a flat, invisible stocking seam that could stretch around the heel, for example, made the looper's job a delicate one. The looper worked with her eyes riveted on tiny metal poinçons that reflected the light; working with black thread on fine knitted goods diminished her productivity; and problems with the tension of her precision machine could prevent her from making her quota for the day. Loopers were paid by the piece, and they had to pace themselves to make a living. Mill owners gradually forced the pace by the 1930s, and after 1945 a worker's productivity was controlled by a stopwatch. She had no career ladder to climb, no technical improvements to her machine to master, only an accelerating productivity norm to meet.⁴⁵

The gendering of technology strengthened existing occupational segregation and preserved the skilled status of male knitters on the Cotton

44. Testimony from Monsieur Laborie (May 18, 1987).

45. Testimony from Madame Fournet (August 28, 1982).



3.3. A looper at work on a machine developed by Valton et Fils. (From Louis and Marie-Madeleine Boucraut's *Pierre Valton et ses fils* [Troyes, 1986], p. 114, by kind permission of Mme Boucraut)

frame machine. For women workers, mechanization brought upgraded mechanical skills that employers harnessed to production norms and to increasingly specialized and subdivided tasks. While both knitters and loopers progressively lost control over the pace and progress of work, they struggled to maintain some degree of control over the product's quality. Skill and craft sense were embedded in quality control. Labor conflicts in the Troyes mills inevitably became the means of expressing grievances over both wages and skill.

SKILL CONTESTED

By the turn of the century Troyes mill owners had established a multiplicity of wage rates for the production of knitted goods. This situation reflected the changing structure of production in the mills and

the diversity of goods produced. Workers and their unions demanded uniform piece rates throughout the mills, but competition among employers and a large labor pool kept wages down. Mill owners played on the competition between male and female workers, between workers of different professions, and between factory workers and those employed in rural workshops or at home. A two-month strike erupted in February 1900 as workers demanded wage increases and uniform piece rates that would apply to all the mill workshops. In demanding unified piece rates they appealed to workers' sense of unity and craft solidarity. But they also voiced secondary grievances that revealed underlying dissatisfaction over divisions of labor, quality control, and recognition of skill. The youngest male workers, the *rebrousseurs*, sparked the strike in a sudden revolt against the subcontracting that bound them as unskilled helpers paid piecework rates directly by the knitters.

Twelve thousand workers left their jobs in an important demonstration of solidarity. Strikers organized according to *métier* and to factory workshop for the purpose of electing delegates to a general strike committee, which would present their grievances. This male pattern of corporative representation, reminiscent of the organizing strategy of workers' associations during the Revolution of 1848, was imitated by the women. Thus gender and class solidarity were framed in terms of the corporative community, embodied in a general strike committee composed of roughly equal numbers of men and women and large numbers of young *rebrousseurs*. The organization of the strike is significant in its reliance on craft practice for collective action to dispute age-old methods of payment, subcontracting, and workers' control over the quality of the goods they produced.⁴⁶ Union involvement was minimal. Once the strike had been declared, the unions sought to use the mobilization to recruit new members.

Critical to our understanding of the strike are the employers' practices that skilled men and women were contesting. These grievances touched on their sense of quality workmanship above and beyond the question of wages. At issue was the employers' practice of punishing what they saw as poorly executed work by peremptory wage deductions known as *pour comptes*. This practice was bitterly resented by women pieceworkers, who claimed the right to quality control over their own production. Seamers in the Raguet mills, for example, refused to machine-stitch camisoles without first basting them by hand.⁴⁷ They were defending their craft skills in the production of luxury knitted goods. Grievances of

46. "Grève de 1900," Archives Départementales de l'Aube (ADA), série continue 417. See also Reddy, *Rise of Market Culture*, chap. 10.

47. ADA, SC417.

this kind demonstrate workers' growing anger over the levying of fines for work over which they had less and less control.

Male knitters and other machine operatives protested fees for lighting and for the replacement of machine needles broken during production. Mill owners, they charged, were deducting more from their pay than the needles cost. Knitters were also subject to *pour comptes* for any defects in the knitted fabric. They, too, voiced pride in their ability to judge the quality of the products they produced. A worker delegate sent to the Paris World's Fair several months after the end of the strike complained: "All the knitted goods were locked up in display cases so it was impossible to touch them, and in the hosiery industry, touching is one of the main ways of knowing if the fabric has all the properties that appear to the eye."⁴⁸ Workers were not so alienated from the products of their labor as labor historians have thought.⁴⁹

Mill owners, calling workers' demands "incoherent," refused to consider unifying piece rates by job category throughout the Troyes mills on the grounds that the existing system accurately reflected the diversity of hosiery production in the town. The strike took them by surprise, at a historical moment of intense capitalistic competition and restructuring locally, and of increasing government intervention through protective legislation. They refused all contact with the strike committee, denying its claim to represent "their" workers, and imposed a general lockout. After two months the workers gave in and returned to work.

From the Troyes workers' viewpoint, the strike failed in its attempt to defend the level of wages and skill and, more important, to overcome divisions within the working class. Workers had counted on a favorable political context, both locally with the Guesdist socialists seeking electoral victory in Troyes and nationally with the Waldeck-Rousseau government in power.⁵⁰ Their demands were in fact presented in piecemeal fashion by the various occupational groups and workshops. The strikers had tried to unite a craft community that in the long run was made up of separate corporative interests divided by the work process. The embryonic union, backed by the Guesdist Socialist Parti Ouvrier Français,

48. Report by Emile Caillot, "Rapports des délégués ouvriers de la ville de Troyes à l'Exposition universelle de 1900," AMT, F141.

49. Leora Auslander makes this point in her essay on furniture makers and extends it to include workers' sense of the aesthetics of the products they produced. See her "Perceptions of Beauty and the Problem of Consciousness: Parisian Furniture Makers," in *Rethinking Labor History: Essays on Discourse and Class Analysis*, ed. Lenard Berlanstein (Urbana, 1993), pp. 149-81.

50. The strike committee sent a delegation to Paris to meet with Waldeck-Rousseau and the Socialists in the Chambre des Députés. Waldeck-Rousseau refused to intervene on their behalf. The worker delegation was composed of four male knitters and one woman seamer.

never controlled the strike, because the workers refused to consider a more vertical political structure to represent their interests. Skilled and semiskilled workers were not yet organized together in sufficient numbers in an industrial union. But among the strikers there was overall solidarity between men and women in defense of wages and skill.

The strikes of 1936 were altogether different in content and style, reflecting the historical development of industrial capitalism in Troyes, with increased feminization of the workforce and development of mass-production technology. Yet wage rates and skill definitions were still major issues of dispute. A weakened labor movement, divided between Socialist-backed and Communist-led unions, had struggled in the 1930s to improve wages in Troyes, while layoffs and wage reductions at the mills kept workers of both sexes in constant flux. A reunified labor movement in 1936 and the victory of the Popular Front both in Paris and in Troyes ensured an alignment of political forces favorable to the workers' demands. Mill owners capitulated early in June, turning to the bargaining table after a relatively short period of conflict and factory occupation by strikers. They agreed to apply government reforms, granting recognition of the unions, a 40-hour workweek, paid vacations, and a 10 percent increase in wages. More important, they agreed to negotiate a collective bargaining agreement covering many practices contested by workers in the Troyes knitting industry.

The historic collective bargaining agreement of September 1936 can be said to have codified skills in the profession.⁵¹ At least, union representatives set out to do just that in an unprecedented social and political context. The agreement produced a definition of job composition and wage rates for the entire hosiery industry: an hourly rate was to be combined with a piece rate, based on the article produced and on the type and gauge of knitting machine used. Clearly the wage part of the agreement represented a victory for the workers, who had struggled for many years to escape from employers' arbitrary practices in this regard. The hourly rate provided in principle a guaranteed minimum wage, and the piece rate rewarded productivity. Moreover, an indemnity was to be granted in the case of any work stoppages "independent of male and female workers' volition." Workers might have lost control over the work process, but they would no longer be penalized for technical incidents or accidents that halted the production process.

The agreement legitimized the existing gender division of labor and skill. It can be read as both a technical and a gender description of

51. "Convention collective passée à Troyes le 18 Septembre 1936 entre les organisations patronales et ouvrières de la Bonneterie et Industries annexes du département de l'Aube, modifiée et complétée par l'additif du 3 Novembre 1936," Troyes, 1936, ADA, SC 4334A.

production jobs. Women's work was, as usual, sharply distinguished from men's. Tasks were divided, even subdivided, and then labeled by gender. Thus women would be "knitter-minders" but not "knitter-operators," the distinction being that women could not intervene to fix the circular frames on which a small number of women now worked.⁵²

Customary women's occupations were classified on a scale from 1 to 8, ranging from the unskilled finishing tasks of *petites mains* to fine-gauge seaming on more difficult and delicate knitted fabric. Under the circumstances, skill distinctions stood out ever more sharply in the effort to define more uniform job categories. One job category was identified simply as *travaux féminins*, or "women's work," characterized as unskilled, task-oriented, and manual.

Though it is obvious from this account that male union leaders protected male jobs and skills, they did struggle to raise what they called the "abnormally low" wages of "women, laborers, and less skilled workers in the spinning mills and dyeworks." The unions and the mill owners' association even broke off negotiations for a short period over this question. Union leaders explained that they were pressing for a revision of women's wages and greater uniformity of compensation for the same jobs throughout the Troyes mills.⁵³ The unions obtained satisfaction on both demands, only to find that mill owners eroded these and other worker gains as the balance of power shifted in the following years.

GENDER AND SKILL CELEBRATED

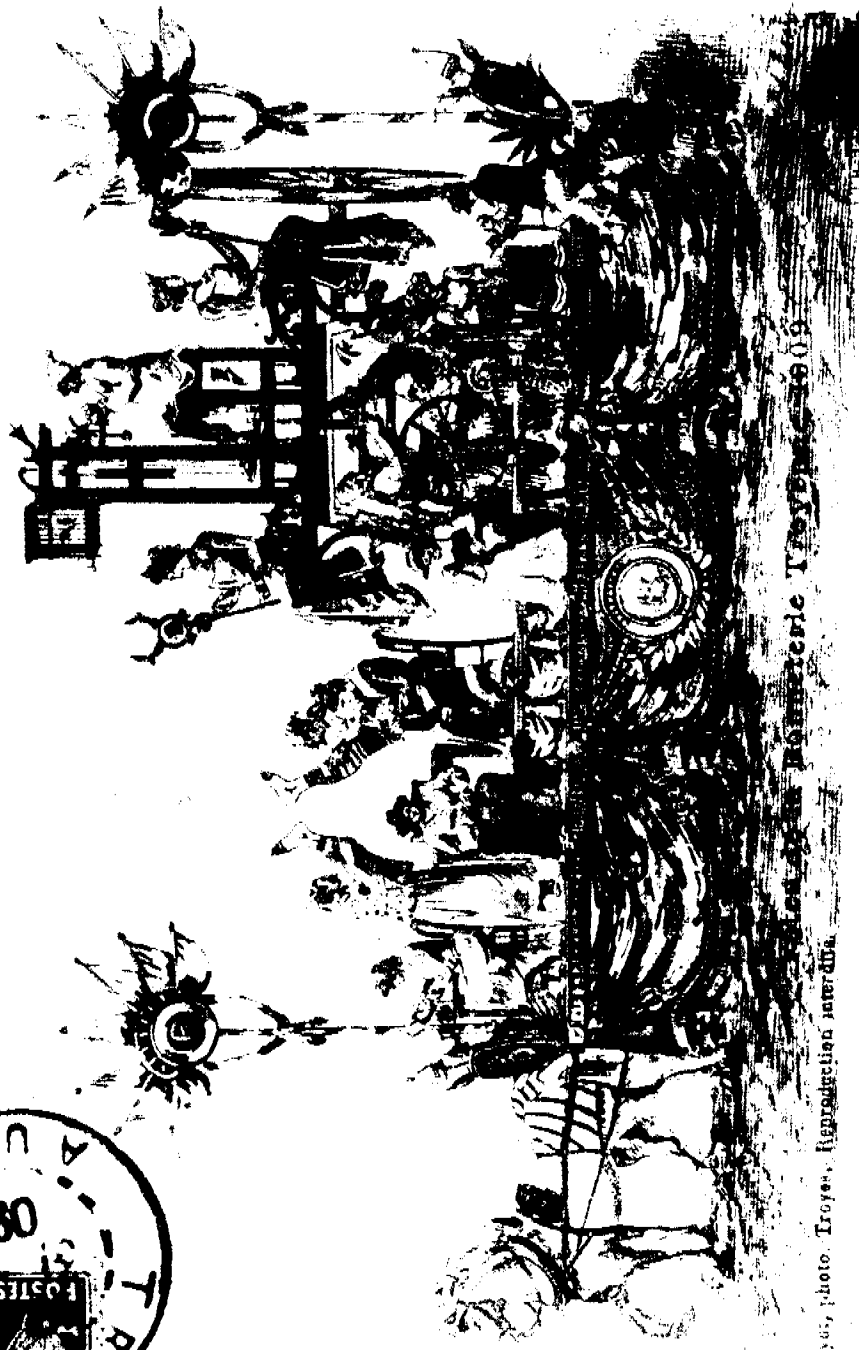
Beyond the language of the workplace lies an elaborate cultural system of gender representations informing skill. The Troyes hosiery industry celebrated its skilled workers in two events. In 1909 the annual corporative festival called the *Fête de la Bonneterie* was transformed by the election of a queen by her co-workers (Figure 3.4). The festival became a popular ritual, richly symbolic in character and spectacle. Eight queens were elected over the next two decades (Figure 3.5). Then in 1930 the mill owners organized a public competition among skilled workers of certain *métiers* to celebrate their industry. Both of these events provided means for representing, through ritual, practice, and symbol, the social and cultural meanings of skilled work. In both celebrations we see that definitions of skilled and unskilled work were embedded as deeply in social values and gender distinctions as in the technical aptitudes of the workplace.

52. Job composition on the circular knitter was the same in the Canadian hosiery industry. See Parr's account in *Gender of Breadwinners*, pp. 72-76.

53. *Aube Ouvrière*, September 1936.



CHAK DE LA BONNETERIE



Troyes, photo. Troyes. Reproduction interdite.

100. A commemorative postcard of the first Fête de la Bonneterie in 1909. This elaborate float depicts the craft tradition, with the stockinger or knitter at his frame surrounded by the women at work at their various subordinate tasks. Archives départementales de l'Aube



3.5. Seven queens are celebrated in *Le Petit Troyen's* almanac for 1937. (Archives départementales de l'Aube)

The Fête de la Bonneterie was an annual tradition, held in September since the days of the guild and promoted by the decidedly male craft union, or Confrérie des Bonnetiers. Troyes mill owners decided to mark the occasion with symbols of the industrial era. By crowning a woman worker as queen for the day to preside over this festival, they hoped to bridge class differences between employers, artisans, and workers in the aftermath of the bitter strike of 1900. The renewal of the festival tradition with the election of a new queen, each time in a different historical and political context, gave new gendered meanings to women's work. Like the strike, the traditional craft festival was a means for the working class to affirm its identity in a political context.⁵⁴ At the same time, the election provided women workers with the means to fashion a positive self-identity through the recognition of a skilled woman worker as queen.

The new version of the festival took place at a time when Troyes mill owners were attempting to consolidate their gains, mitigate social strife, and gain recognition of their town as the capital of the hosiery industry. The organizers were also eager to reconstitute the history of the Troyes industry, judging by the number of floats that evoked the origins of the trade corporation in pageantry and costume. One float featured the various métiers in a series of tableaux vivants. For the working class of Troyes the festival affirmed their identity as workers.

The first queen, chosen by ballots distributed among women workers in the factory workshops, was a skilled mender. We know from newspaper accounts that her co-workers invested a great deal of themselves in her symbolic triumph, choosing a colleague who was worthy as well as young and beautiful.⁵⁵ This form of social recognition in a small textile town stamped the young queen as representative of a skilled métier and as an independent wage earner. As the festival evolved in later decades, these symbolic meanings changed. In 1925 and 1926 the festivals were revived by the local tourist office, and commerce and consumption became their main purpose. We do not know how the new queen was selected, but in the official discourse of the festival the queen was la Reine des Travailleurs, "Queen of the Workers," symbol of an almost androgynous worker. By the 1930s the festival was once again organized by local tourism and commerce. The election of the queen took place appropriately at the Bourse du Travail, but she was chosen by an all-male jury according to obvious beauty-contest criteria. A new generation of young women had joined the workforce to fill semiskilled jobs. The

54. Didier Bigorne, "Mouvement ouvrier et fêtes dans les Ardennes (1885-1936)," in *Fêtes et politique en Champagne à travers les siècles*, ed. Sylvette Guilbert (Nancy, 1992).

55. *Le Petit Troyen* August 4 and September 13, 1909. See also "Fêtes de la bonneterie (1909)," AMT, série I, 1157-58.

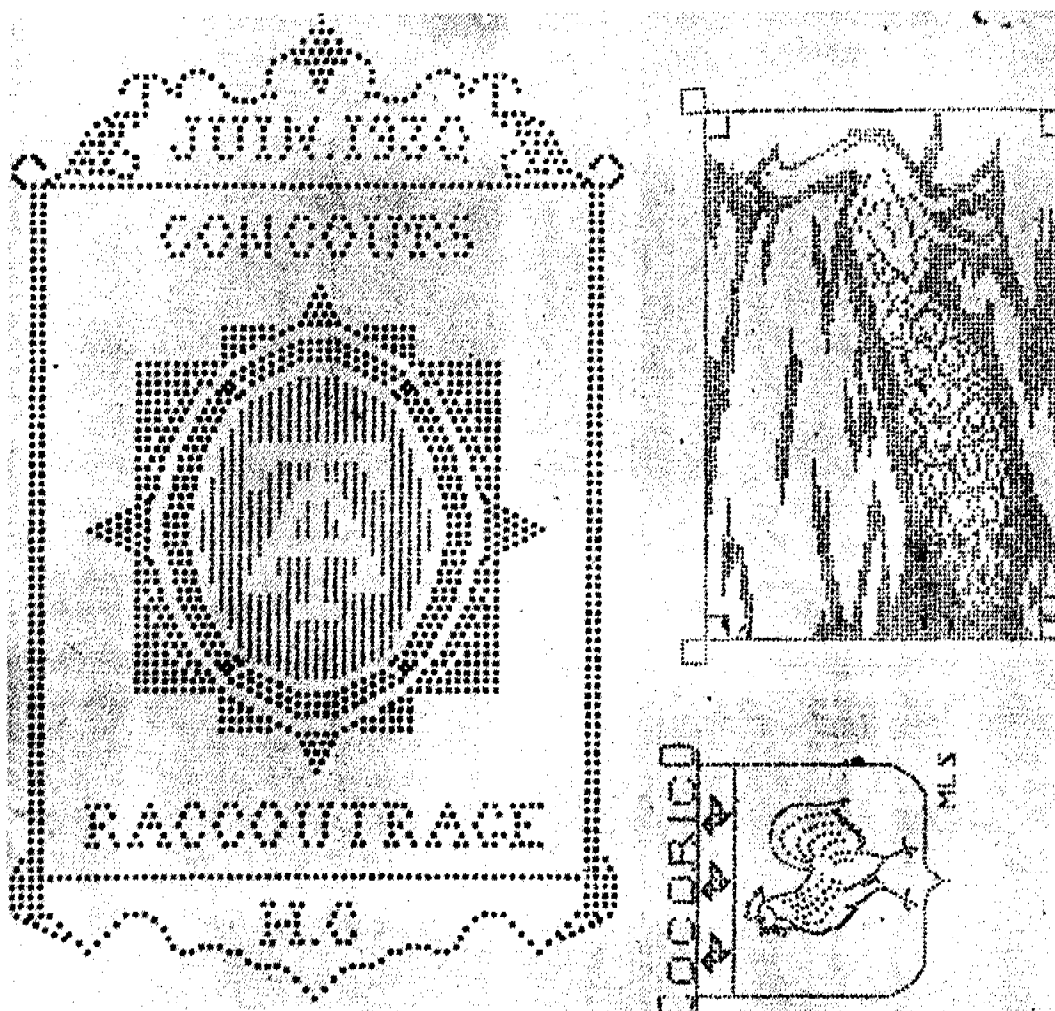
queen no longer represented a skilled female *métier*. The social status of women on which this skill distinction was based had all but disappeared. The term *bonnetière* now connoted "factory girl." In the political context of the Popular Front, however, the festival queen did become an abstract symbol of the social and political order: *la fille du peuple*, or the body politic as legitimized by working-class unity under the Popular Front government. Politics had created a new pageant and strengthened a local symbol for reasons of legitimizing power.⁵⁶

Thus the representations of the queen, crowned as both feminine cipher and idealized woman worker, changed over time from skilled worker to beauty queen, from class and gender symbol to consumer image. The mediated image of women and their professional skills is decidedly vulnerable in comparison with men's. Troyes women workers were celebrated as skilled when their gendered work identity was constructed as overlapping with men's within the craft tradition. In later years, as the festival became a commercial spectacle, women's skills were recast as "special natural abilities" and relegated to the symbolic.

An analysis of the skill competition of 1930 raises similar questions as to the contingency of the distinctions in women's skills. It was an exceptional event organized at the initiative of the local deputy and mill owner Léon Boisseau to reward the most skilled workers of the Troyes hosiery industry. The competition was designed to test technical, manual, and artistic skills in both male and female occupations: for men, the test combined pattern making, laymaking, and cutting garment pieces from knitted fabric; for women, mending with consummate taste specific flaws in the pattern of finely knitted silk fabric and creating an openwork design. Both tests were to be executed in the best time. An all-male jury consisted of mill owners, overseers, and workers. Newspaper accounts centered almost exclusively on the extraordinary artistry of the menders, whose openwork designs were comparable to those of the best lacemakers.⁵⁷ The organizing committee noted that some women menders in the competition had been handicapped by "timidity, fatigue, or nervousness," and urged them to demonstrate their skills by displaying their best work at a local professional exhibit (Figure 3.6). The commentary tells us more about gender distinctions than about the women who performed the work: "Our women workers are really little fairies . . . daughters of Penelope with prodigiously nimble fingers," the local

56. "Fêtes de la bonneterie (1925-1926)," AMT, série I, 1159; "Fêtes (1936)," *ibid.*, 11511.

57. The comparison was drawn by the commentator of the *Tribune de l'Aube*, which cosponsored the competition. In fact, the mending operation is the opposite of lacemaking, for the mender must create holes to form a pattern in the existing knitted fabric. See *L'Annuaire de la Tribune de l'Aube*, 1930, p. 85.



3.6. Examples of a mender's work displayed after the 1930 competition. (Courtesy of the Musée de la bonneterie de Troyes)

newspaper boasted.⁵⁸ When the vocabulary of skill is applied to women's work, it evokes mythical images of patience, perseverance, and silent craft. Penelope becomes a timeless signifier of femininity. After mill owners lavished praise and recognition on the two prize winners, both women returned to the mill, requested promotion, and were refused.⁵⁹

The evolution of knitting technology after 1945 was to dilute the skills required of women menders. The invention of a new tool partially mechanized their task, making it possible to speed up the work and thus to raise productivity norms. The introduction of synthetic fibers in the

58. *Tribune de l'Aube*, June 28, 1930.

59. In oral history interviews with both women I learned how difficult it was to obtain promotions in this highly skilled profession. After many years of waiting, one mender was moved in 1947 into a training position where she was to instruct apprentices in her trade. Testimony from Madame Aubron and Madame Binet; see n. 38.

production of stockings made their work less important. Nylon stockings were so cheap and resistant that they were discarded rather than mended. Skilled menders were still in demand to ensure the quality of other knitted articles, but the greater Taylorization of their training and their tasks in those postwar years represented a loss in the transmission of knitted textile culture.

THE CONTINGENCY OF SKILL DEFINITIONS

The history of the skilling process in the Troyes hosiery industry demonstrates the complex interaction between men's and women's skills, on the one hand, and variables specific to the craft culture of Troyes, to the distinctiveness of French working-class formation, and to the pattern of industrial capitalism in France on the other. To a degree it was possible for women to claim skilled status alongside men because their mastery of the new machines introduced into their *métier* created technical competence similar to men's. Skill was not exclusively a male property, then, since women could represent themselves as having it too. Women's skills, however, were not legitimized by formal training as men's were. Moreover, women were acknowledged as having exclusive mastery over needlework, as men could claim skilled status as operators of the Cotton Patent knitter. Occupational segregation, combined with class solidarity, reduced the possibility of gender conflict. Certainly working conditions before World War I strengthened the grounds for a shared work culture. Troyes women workers felt that their community valued their social roles, work skills, and gendered work identity together with men's.

By the 1920s, however technological changes had diluted men's and women's skills alike, while fragmentation of tasks created greater specialization and blurred skill distinctions. The number of women in the workforce employed at semiskilled tasks far outnumbered men, and this process of feminization affected the way men perceived their own skilled status. Male union leaders sought to preserve masculine skills in the first collective bargaining agreement governing the industry in 1936. The same agreement established a code of skill distinctions that segregated most of women's work in a category of unskilled tasks. It became impossible for women to claim skills that overlapped men's or to cross over into male jobs.

The engendering of skill in the Troyes knitting industry shows how problematic the meanings attached to women's work are. Gender distinctions between men's and women's skills, rooted in social and cultural values extending beyond the workplace, devalue women when

conflict threatens. Men struggle to distinguish themselves from women, particularly when the feminization of their trade threatens their jobs and skilled status. Where women are concerned, skill distinctions are highly contingent on social factors related to their power and status in society. Women's skills become divorced from workplace recognition and embedded in "natural" aptitudes associated with their place in society.

The tension between the contingency of social values and gender distinctions on the one hand, and the determinism of technology coupled with deskilling on the other, need not be resolved in favor of the latter. When such problems are seen in historical perspective, it is evident that they depend on human agents of change. A nationwide nurses' strike in France in 1988 raised the question of recognition and revalorization of an ancient feminized profession. Formulating their demands outside the unions, the nurses sought to construct a new professional identity, one divorced from prescribed gender roles for women and grounded in new medical technology. They stressed the contradictions in their status and demanded retraining. In the process they appealed directly to their few male nurse colleagues for support, recognizing that the status of their profession would obtain recognition as skilled only if it were more effectively mixed.⁶⁰ The notion of separate skill tracks for men and women accounts for differences in training and technical aptitudes. But it does not deal with the contingency of social and cultural values that continues to impede real change in the engendering of skill.

60. Danièle Kergoat et al., "Les infirmières et leur coordination," research report, GEDISST-CNRS, Paris, 1990.