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WOMEN'S EMPLOYMENT IN MILAN, ITALY,
1881-1911

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The historian who wishes to study women's employment in the industrializing urban setting is hard pressed for useful models. One possible approach is to take the economic development model developed for larger units and apply it at the urban level. Many urban economies, like industrializing economies in the aggregate, came over time to specialize in tertiary activities -- services like commerce, banking, professions, transportation and communications. Industrialization, the analogy would suggest, modified the occupational structure of cities and feminized it over the long run, for women were disproportionately employed in such tertiary sector jobs. Rapidly growing cities whose occupational structure was industrializing and feminizing were an important component of aggregate structural shifts.¹ Yet such a generalization is, after all, the sum of many diverse local experiences, and local history can only be expected to roughly approximate aggregate structural change. A more appropriate method for building models for urban history is to derive generalizations from urban case studies.

This paper is based on such a case study. It examines the level and patterns of women's paid employment in Milan, Italy, at the end of the nineteenth and the beginning of the twentieth centuries. During this period, Milan developed from a commercial, administrative city with small scale, artisanal manufacture, into a city with a large scale industrial plant. There was a close link between both the pattern of women's paid employment and the occupational structure of the city. The pattern of women's work in Milan in the 1880's was preindustrial -- domestic service and garment making were the chief employers of women, just as they had been in European cities

for centuries. Demand for service and consumer products depended on a prosperous bourgeois population occupied in the trade and administration of business which were Milan's chief economic activities. This demand for women workers tapped a ready supply of females -- young rural migrants and the daughters of urban workers. With industrialization of the city, both demand patterns and supply were modified. As a consequence, over the short run, the level of female employment went not up, but down. In Milan, there was no link between feminization of the workforce, industrialization and growth of the tertiary sector.

The Occupational Structure of Preindustrial Cities and a Typology of Change

Urban populations are a relatively small part of the total population of preindustrial economies. Yet preindustrial cities, like industrialized cities, tend to have a large tertiary sector. Carle Cipolla notes that "in a preindustrial society, the tertiary, or 'residual' group, is also fairly large, with the difference that, instead of including bankers and insurance agents, it includes a picturesque variety of people..."² Women and girls were a large proportion of the unskilled, often part-time, non-specialized workers in these "old-fashioned", but not always picturesque services: domestic service, work in public accommodations (hotels and restaurants), personal service (hairdressers, masseuses, prostitutes, public letter writers), street entertainment (flower sellers, wandering acrobats, street singers). Such old-fashioned services have been crisply described as "residuary employment which people do when there is nothing else for them to do and give up when there

is."³ This definition is very apt, but it sees employment in such services primarily from the point of view of demand. An important corollary is that people are willing to do this work because they are too poor to have a choice.

Industrialization, with its differentiation and specialization of production, brought about higher productivity. It eventually increased per capita income. Then the familiar "modern" services developed -- large scale commerce and distribution, communications, utilities, finance. The industrialization of cities involved a shift in employment from old fashioned services to manufacturing and modern services. What happened in the preindustrial city in this process?

Industrialized cities evolved in several ways, each of which had its characteristic pattern of male and female labor force participation. Sometimes, as in the case of most textile cities, new cities developed in formerly small centers. There, good sources of power, entrepreneurial skill and capital, available labor and good potential exchange networks came together. There was an early period of heavy employment of women and children in the growth of textile cities in nineteenth century England, France, and Italy. Later, technological change substituted for children's labor; with the development of heavy and rapid machines, the work force became less predominantly female. Another case is that of the mining and metal working city, which grew at the location of mineral deposits. Mines have had an almost exclusively male labor force, and such cities reflect this sex characteristic in their urban occupational structure.

The sprawling textile cities and grimy mining towns were the prototypes of industrial transformation. Yet they account for a relatively small part of urban population growth. Artisanal manufacturing cities were also transformed with industrialization, along the lines of two alternative patterns. In the case of metropolitan cities like New York, London or Paris, the consumer-oriented industry grew in scale but employment patterns tended to change in less spectacular ways than those of textile or mining centers. Jobs in consumer industry (in particular, the garment industry) replaced old-fashioned service jobs. A modern tertiary sector grew later. To some extent, it displaced the consumer industry. Levels of female employment in this case remained rather constant. The many female servants of the administrative and consumer production city were replaced by female garment makers who were replaced in turn by clerks in stores and office workers.⁴ Another variant of the way artisanal manufacturing cities changed is illustrated by the case of Milan. There the artisanally organized machine industry industrialized in the city itself. In Milan, rather than a simple upward curve of increasing female employment or a steady level of female employment, there was a decline in women's employment. This decline paralleled the increase in scale of heavy industry and construction, the increased share of the labor force which employed skilled and specialized workers and the decline of unskilled migration to the city which reduced the supply of willing women workers.

How and why this happened in Milan is the chief focus of this paper, which falls into four parts. First, there is an overview of the urban environment and industrial organization and how it changed

between the 1870's and 1910. The changing urban geography of the city reflected the transformation of its industrial activity. Then comes an examination of the evolution of the labor force and some of its characteristics in Milan by means of analysis of occupational structure in the censuses of 1881, 1901, and 1911. The third part traces women's employment, and how it changed. The conclusion returns to questions about the reasons for change and shows how this urban case study contributes to models based on long trends and aggregate data.

Milan's Urban Environment

The heart of Milan was (and is) the quarter of its two major squares, the Cathedral Square and the nearby Piazza Scala. This relatively small old city was encircled by an open canal, the Naviglio Interno. The old fort -- the Castello Sforzesco -- stood at the northwest border of this circle.

Sixteenth-century Spanish walls surrounded the inner city of bourgeois neighborhoods and old artisans' quarters. In the early 1870's the commune of Milan was still the relatively small city contained within these walls. It was surrounded by an irregularly shaped suburban commune, dispersed small settlements and farmland, known as the Corpi Santi. The Corpi Santi were incorporated into the commune of Milan in 1873, forming the sparsely settled External District of the city. This External District offered quite a contrast to the much more densely settled area within the walls. Much of Milan's new industry located in the External District, and the area was the receiver of the greater part of working-class migration, for it was the only place where new housing was being

built in the 1880's. The population of the Internal District was more often native born. The major exception was the domestic servants, who lived there along with their prosperous employers. Economic activity in the center was mostly commerce and consumer production. Although the actual boundary of the commune then lay way beyond the walls, the Spanish walls remained standing throughout the period studied, even as the city changed with increasing industrial activity and physical expansion.

Shortly after Lombardy had joined the new Kingdom of Italy in 1859, Milan had built a new railroad station to the north, just outside the walls; it then turned to the urban center to clear the space around the Duomo, the elaborate Gothic cathedral, and the Piazza Scala. An urban clearance program was launched, and the sparkling Galleria was built between the two squares as a monument "from the Milanese" to King Victor Emmanuel, unifier of Italy. This high domed, glass-covered arcade was lined with elaborately decorated walls, elegant shop windows, and cafes; since its dedication in 1867, it has been a favorite place for strolling, impromptu speeches or demonstrations. In the Piazza della Scala, buildings were torn down to set off the city hall, the Palazzo Marino, and the Opera House. Nearby, the merchant brothers Bocconi built their large new department store and workshops, joined by arcades to the Galleria.

A new burst of urban growth came in the 1880's. Handsome new streets were developed around the Castello. The Castello itself was restored in quasi-medieval style, and a new park was laid out where the drill grounds of the fort had been. In the late 1880's and

early 1890's, solid, elegant housing was built in the neighborhood of the Castello and the park. Most of the housing was austere, though costly. These new gray and brown stone buildings came to be the dominant architectural type of the city. Over the years they outnumbered the older style of the "giallo milanese," yellow wash over stucco, which lingered on in buildings like La Scala or the Palazzo Sormani, later to be the communal library.

How and where did poor people live? One old artisan neighborhood lay to the south, towards the Porta Ticinese. There crowded streets edged the Naviglio di Pavia, a canal which went south to Pavia and the River Ticino. Four or five storied tenements lined the streets, each large building with its interior courtyard. Artisans' work shops, food stores and small businesses were common. Along the canal, women did laundry for their families and for clients. Outside the city gate, the Porta Ticinese, there were inns along the canal where one could eat, drink and play bocce. In the north of the city, just inside the Porta Garibaldi, was a newer working class neighborhood. It sprawled to the north of the gate into the factory area. Here also were tenements, the small size of the rooms inside indicated by the crowded rows of shuttered windows. The buildings had shallowly pitched roofs with tiny garret windows under them. Large central double entrance doors led into the courtyard. The ground and basement floors sometimes had small shops or cafes, their function announced by crude wooden signs. By the handsome Porta Garibaldi, decorated with carvings and an inscription to the hero, stood the yellow washed office of the collectors of the dazio (entry duty) of the days before the tax barrier was moved out from the

walls. Just beyond the walls, several large factories were located, plants like the Elvetica machine works and the Pirelli rubber plant. Close by was another building typical of the urban environment of the poor: a charitable soup kitchen, a yellow brick building decorated with darker orange brick work around the windows. This was the O.P. (opera pia) Cucine economiche, established in 1886 and constructed to last forever as a pious service to the poor. At the end of the century, although the city center preserved its urbanity and wealth, the space to the north and south of the walls were filling with new kinds of inhabitants -- industrial workers.

The Urban Economy

A report written by the Milanese engineer-entrepreneur [Giuseppe Colombo at the time of the Exposition of 1881 noted there was little large-scale manufacturing in Milan at that time. He explained that there was no cheap labor in the city, no easily tapped sources of power. What the city did have was an imposing population. This population produced the demand for many consumer products,

to satisfy the many exigencies of civil life, the increased prosperity, the refinement produced by the diffusion of culture into all social classes. Here [Colombo writes] I speak not only of industries which produce luxury objects, but of industries producing objects of basic necessity, to satisfy those needs generated by urban taste and style. 6

Colombo understood that the ready urban market of the commercial city meant that it had an important manufacturing sector, one which he rightly recognized as largely small scale, artisanally organized. He noted, "one tends often to overlook small businesses because they don't employ hundreds of motor horsepower or the thousands of workers collected in huge plants."⁷

Nevertheless, the guidebooks to the 1881 Exposition described only the 20 or 30 large businesses of the city and their enterprising founders. Although relatively few persons were employed in these big plants, they were the ones Milanese publicists emphasized. Colombo concluded his comments by returning to his first points: 1) that Milan had a special industrial character, and 2) that the city should promote industry which supplied consumer needs, but in which neither large work forces nor extensive use of motor power were required. He argued that it would be impractical and costly to bring the needed energy to Milan; furthermore, any increase in the amount of large-scale manufacturing would have a baleful effect on the city. Home industry and small scale units were desirable, for they kept workers separated, "strengthened family ties and [were] a guarantee of morality and social peace."⁸

Colombo was one of the businessmen who launched the Societa Edison's first electric generating plant in Italy, and indeed in Europe, near Milan, in 1883. The availability of electric power opened up new possibilities for industrial development in Milan. The mayor optimistically declared in his inaugural speech in 1885:

How Milan was changing: the city of luxury and amusements was turning into an eminently commercial city, becoming a most active center of industry and commerce, with capital flowing into it. 9

As it happened, a long depression followed, but by the end of the 1890's, Milan was growing again and optimism returned.

Colombo reported on the booming engineering business in Italy, and particularly, of Milan in another article published in 1898. He credited the dramatic growth of industry there to the development

of electrotechnology. This helped Milan in two ways. First, Milanese companies had taken a leading role in manufacturing electric machines and equipment for generating electricity. Second, the availability of electric power had provided inexpensive energy for nearly all kinds of industry, and the use of motor force had increased greatly.¹⁰

Statistical comparisons of size of plant and use of power by industry in 1893 and 1911 confirm Colombo's view. There was an across-the-board concentration of industry and growth of plant size between 1893 and 1911. There were still many small plants in 1911, so mean size was still unimpressive even in that year. But, if we look only at plants with 10 or more employees, the large scale industries were these: engineering (87 per plant, a mixture of medium-sized plants and a few very large ones) and utilities (very few, but very large, plants). The engineering sector had multiplied plant size by 2 1/2 in the period, and tripled its available motor power, largely by increased utilization of electricity.¹¹

By 1911, the biggest new industrial plants were being built outside the borders of the commune of Milan proper. This put a limit to continuing expansion of plant size within the commune. In the case of Milan, industry grew and expanded first within the commune and then without. No wonder an observer lamented about the urban landscape in 1900: "The Milanese horizon had become populated by smokestacks and factories, blast furnaces, gas works, rooted in the soil in which gardens were dying..."¹²

The Milanese Labor Force: 1881-1911¹³

The Evolution of the Labor Force

The structure of the labor force in Milan changed from 1881 to

1911 along these broad lines. There was a proportionate (and in the case of domestic and personal service, an absolute) decrease of the numbers of persons employed in old-fashioned services. There was also a proportionate decrease of persons employed in small scale poorly capitalized industry. On the other hand, there was a great increase in employment in heavy industry, construction, and utilities.

In 1881, 46% of the total labor force was employed in commerce, professions and services, 47% in manufacturing. The tertiary sector of Milan in 1881 was preindustrial. Huge numbers of persons were employed in personal and domestic services, and in public accommodations, all old fashioned services. Domestic and personal service was the largest single labor force category in the city that year; it employed more than 20% of the labor force.

The manufacturing industries which employed most workers in 1881 were small scale and underproductive. The largest numbers of workers were employed in garment making, which was to a large degree carried out in small shops or homes. The 1893 survey (cited above, footnote 11) of industrial plants in Milan with over 10 employees accounted for only 10% -- 3,000 workers -- out of perhaps 30,000 garment workers in the city. Small shops for working wood, straw, leather and fur, and food processing contained another 16% of the labor force. Even though there were several very large machine shops, two paper mills and a pottery factory, the work experience of the majority of Milanese in 1881 was outside factory industry.

The 1901 occupational census reports show some changes. Then 51% of the labor force was employed in manufacturing, 45% in total services. The largest single occupational category was still

domestic and personal service, but its proportion of the labor force had slipped by almost five points since 1881. The garment industry was still the second largest employer of workers, but its share had also declined, from 15.4% to 12.6% of the labor force. The industries which were growing rapidly -- more than twice as many persons were employed in them in 1901 than had been in 1881 -- were metallurgy and engineering, chemicals, rubber and glass, utilities, transportation and communications, public accommodations. The largest numeric increase of workers had occurred in metallurgy and engineering.

The 1911 occupational census reflects the economic transformation of the city in terms of scale of enterprise and productive capacity already described. The manufacturing sector employed 55% of the labor force in 1911. The largest number of workers were in the metal and engineering industries; the work force of this industry had increased by 83% since 1901. Garment making still stood second in number of workers, but this industry had increased its work force by only 22% in the decade. The other industry where employment had increased very rapidly was construction, with an 87% increase.

The tertiary sector, which in 1911 employed 43% of the labor force, showed a shift toward employment in modern services: utilities, transportation, communications. Domestic and personal service workers were still the largest group of workers in the tertiary sector, but the absolute number had gone down by 11% since 1901. In the same years, employment in the modern services had doubled.

Because it was an urban center populated by prosperous consumers, Milan continued to employ large numbers of workers in services and commerce but modern services eventually came to predom-

inate. Because Milan continued to be an enormous market for consumer goods, Milan continued to be a center for producing them. For these reasons, and because space for industrial expansion within the city limits ran out, the Milanese urban economy was never wholly dominated by heavy industry. Nevertheless, by 1911, the changes in the labor force of the city mirrored the deep changes in Milan's economic activity.

Age and Nativity of the Labor Force

The Milan labor force showed certain characteristic patterns of age distribution in 1881 and 1901.¹⁴ Older workers were most common in the tiny agricultural sector and in the large tertiary sector than in manufacturing. The professions and arts, domestic service, public accommodations and retail merchandising had relatively old workers. In the case of the professions and arts, training and education contributed to the relatively high age of workers. In the case of retail merchandising, there was a connection between the common pattern of retailing in small owner-operated units and age, for shopkeepers had to accumulate capital before they could start their businesses. Domestic service and public accommodations workers were like agricultural workers. They were unskilled and often non-native Milanese. These industries employed older adult migrants to the city, persons without skill qualifications.

Workers under 20 were more common in manufacturing. The clearest such case was the garment industry, in which 11 thousand women workers were under 20, almost 4,500 girls under 15 in 1901. The other manufacturing category with a large number of young workers was metal and engineering, which in 1901 claimed almost 8,000 men

and boys under 20. Unlike agricultural and tertiary occupations, these two manufacturing groups also had high percentages of native-born Milanese. The young are proportionately more often native born in a city which is growing by the migration of adults. The youthful workers in Milanese industry were the children of migrants.

Age was also connected with patterns of employment. In 1881, 88% of males and 73% of females aged 15-20 worked; the proportions were almost identical in 1901. Ninety-five per cent of men aged 21-60 worked in each census, while for women, 56% in this age group worked in 1881, 48% in 1901. Aging (and marriage) greatly decreased women's likelihood of working. From 1881 to 1901 there was a greater decline of older women working than among younger.

Since there was considerable migration between 1881 and 1901, it is not surprising that the native born share of the population declined over these years. The proportion of native-born went down in all categories of workers between 1881 and 1901. More and more of the working population were born outside the city. Yet the migrant workers continued to be highly concentrated in the primary and tertiary sectors. It was not uprooted peasant migrants who worked in Milan's factories. Workers in manufacturing were much more likely to be native born workers than were workers in the other two sectors.

Working Girls and Women

What happened to female employment as the labor force came to reflect the growth of heavy industry and modern services? At each succeeding census time, fewer girls and women worked despite the fact that the population of Milan was becoming proportionately more female. The resident male population grew by 82% between 1881 and

1911, the female by 90%. From a population with a sex ratio of 103, the Milanese resident population was feminized over the years so that the ratio went down to 99. The male working population grew in the same period by 75%, the female by 48%. The percentage of females over 10 working went down from 54% in 1881 to 50.5% in 1901, 42% in 1911. Why was there proportionately less female employment in 1911 despite feminization of the population?

Female employment was most common in certain industrial categories, and those categories were relatively unchanging over the time period. In manufacturing, there was high female participation in textiles, garment making, tobacco, chemicals, rubber and paper. In the tertiary sector, about 30% of professional workers were women; they were primarily teachers, mid-wives or performers. There was little female employment in business or commerce, even in 1911. The really large numbers of women in the tertiary sector were employed in domestic and personal service.

The female share of the labor force as a whole was between 30 and 40% at the three census dates. Rather than being evenly distributed through industrial categories, however, female employment tended to be clustered in certain industries; similarly, certain industries almost excluded female workers altogether. Let us call the industries which had higher female participation than average "female industries." They were textiles, garment-making, tobacco, rubber, paper and personal and domestic service. The inverse of the "female industries" were the "male industries" in which women were less than 30% of the labor force. These included most of the crafts, metal and engineering, construction, business, government, trans-

portation and utilities. In Milan, as elsewhere, there was a segregated division of labor at the level of the labor force.

The bipolar pattern was present in the three censuses. There is no sign of significant female participation in other categories of work in any census. The same patterns held for all age groups of women workers, also. There was a clear pattern of industrial segregation by sex for female workers during the entire period under review.

The only "female industries" which employed considerable numbers of persons were textiles, garment-making, and domestic service. In 1881, 3/4 of all women working were crowded into these industries: almost 6,000 in textiles,¹⁵ 25,000 in garment making, and 23,000 in domestic and personal service. Although the proportion of women in the labor force went down over the period, the pattern was still the same in 1911: three quarters of all employed girls and women were in female industries. Both the textile industry and domestic service were proportionately more female than in 1881. Garment making, the only female industry which had grown, became larger scale and more capitalized, had a higher proportion of male workers in 1911 than it had had earlier. The pattern of demand for female workers changed only slightly in Milan in the period we are examining.

Age patterns by industry can tell us something about the life cycle experience of female employment. Young women were most likely to work; the following table shows how their employment was distributed in the female industries in 1881 and 1901, and how this compared with employment patterns of women aged 21-60.

<u>Industry</u>	<u>Per cent of female age cohort working in:</u>			
	<u>Age 15-20</u>		<u>Age 21-60</u>	
	<u>1881</u>	<u>1901</u>	<u>1881</u>	<u>1901</u>
manufacturing (total)	48.9	53.5	26.2	22.3
garment making	31.0	29.1	17.4	12.3
textiles	8.9	10.6	3.7	3.8
Commerce, service (total)	22.8	20.4	25.5	23.2
Domestic service	18.9	16.0	19.1	15.5

There was a clear pattern: younger women were in manufacturing rather than service. Older women were very unlikely to work in textiles (almost exclusively factory work) or even in the garment industry. We can assume that those who did do garment work were quite likely to do it in their homes rather than in shops. The percentage of younger and older women in domestic service, on the other hand, was nearly identical. Working in shops outside the home was a pattern of young, unmarried women's work. Older women (who were more likely to be married) worked, when they did, primarily in service. The domestic service category of the census does not clearly separate live-in service from day work such as cleaning and laundry. If that were done, we would most likely find that the younger women were predominantly live-in servants, the older, day servants. Note also that the decline in women's employment propensity between 1881 and 1901 is wholly in the older age group.

From these patterns of labor force participation by age, two typical life cycles, of urban born and migrant women, can be deduced. The city born woman worked while she was young in manufacturing,

most likely garment making or textiles. She started to work very young, and left paid employment in her mid-twenties with marriage and birth of children. Since the young urban born were disproportionately the children of earlier migrants, whose own employment prospects were poor, children's work was an important resource in these families. Young women and girls could contribute to their family's collective needs in this way. A young woman migrant to the city was more likely to enter service than to do industrial work. Service was an occupation which involved a family-like dependency and control. But, more positively, offered sponsorship for migration and potential protection to a young girl in her move.¹⁶

Older, married women, whether urban born or migrant, had child rearing and household responsibilities which made it difficult for them to do paid work outside the home. Factory work was most difficult to handle; doing laundry or cleaning, which might be closer to home, have more flexible hours, be easier to combine with her own housework, and be easier to move in and out of, as need occurred, was a more desirable kind of work for older women. The women often had to work because of death or sickness of their husbands or their low wages, especially in the case of migrant husbands. They tended to work episodically, entering and leaving the labor force depending on circumstances other than their personal desire to work or not to work. It is quite likely that a lot of this kind of work never appears as employment in the census. As girls and as mature women, females, whether native-born or migrant, had few choices in turn of the century Milan about what kinds of jobs they could take. Their work, at whatever age and under whatever circumstances, tended

to be very little in their own individual interest, very much in the interest of their families. It was family economic need that sent most Milanese women out to work. If female employment went down, can we assume that family need was probably reduced?

Why There Were Fewer Women in the Labor Force in 1911

The segregation of women workers in a limited number of "female" industries is one factor in understanding why women's employment went down. Such segregation characteristically increased with industrialization. Employers and employees alike develop more rigid notions of appropriate employment for women and girls. (It is possible, of course, that these notions were always present, but that neither employers or employees could act on them, because of need -- of employers for workers, and of employees for wages.) In any case, in Milan the chief female employing industries were either old-fashioned services or consumer industries which did not share fully in industrial growth. The third factor is the slackening attraction of the city for unskilled rural migrants and increased prosperity of the working population.

Let us look first at the old fashioned service jobs which were typical of female industries. Migrant girls and women crowded into jobs as domestics in the 1890's. Few skills were required. Yet these jobs were attractive to the surplus population of rural Lombardy, where peasants with small holdings were losing their economic bases as agriculture grew in scale and capitalization. The city absorbed rural migrants, not in its skilled or most productive jobs, but in unskilled and marginally productive ones.

As the city's economy industrialized in the late 1890's, with the growth of large scale, mechanized industry and the infrastructure

that went along with it, manufacturing and modern services became larger employers of workers. Between 1901 and 1911, on the other hand, the number of persons employed in the old-fashioned services went down absolutely and proportionately.

There was considerable growth in male-employing industry such as engineering, construction, utilities and transport. More skilled workers were needed for industries in which job opportunities were growing.¹⁷ Fewer men were employed in old-fashioned services because great growth elsewhere in the urban economy made better jobs available to them.

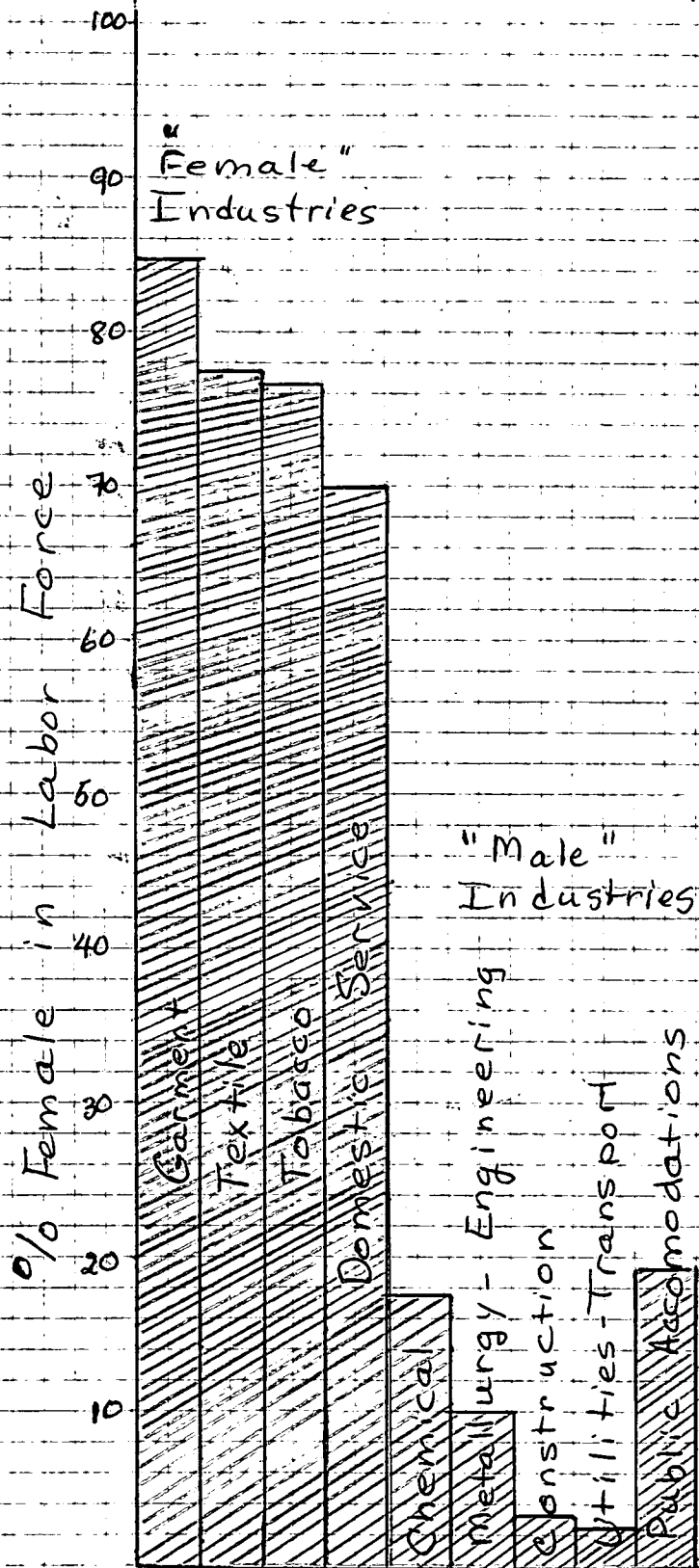
In the case of women's employment, there was both a decline of old-fashioned service jobs and unwillingness to work, particularly as servants. Economic growth and prosperity brought changes in the character and habits of the population which labor force analysis can only suggest. Census comparisons suggest an upgrading of status in the population between 1901 and 1911 (as between 1881 and 1901). This finding is clear if we trace status of workers by means of the simple census labels: "worker," "employee," "owner," over the three censuses. There were proportionately more high status employees in 1911 as compared to 1901 or 1881.¹⁸ By 1911, poor migrants were settling outside the city proper. This meant that the income differential between rich and poor in the commune became less pronounced. The population of Milan in 1911 contained fewer very rich (servant-employers) or very poor (possible servants) persons.

Unwillingness to work in domestic service was common in most Western European countries and the United States in the early years of this century. Similarly, in Milan a public employment agency

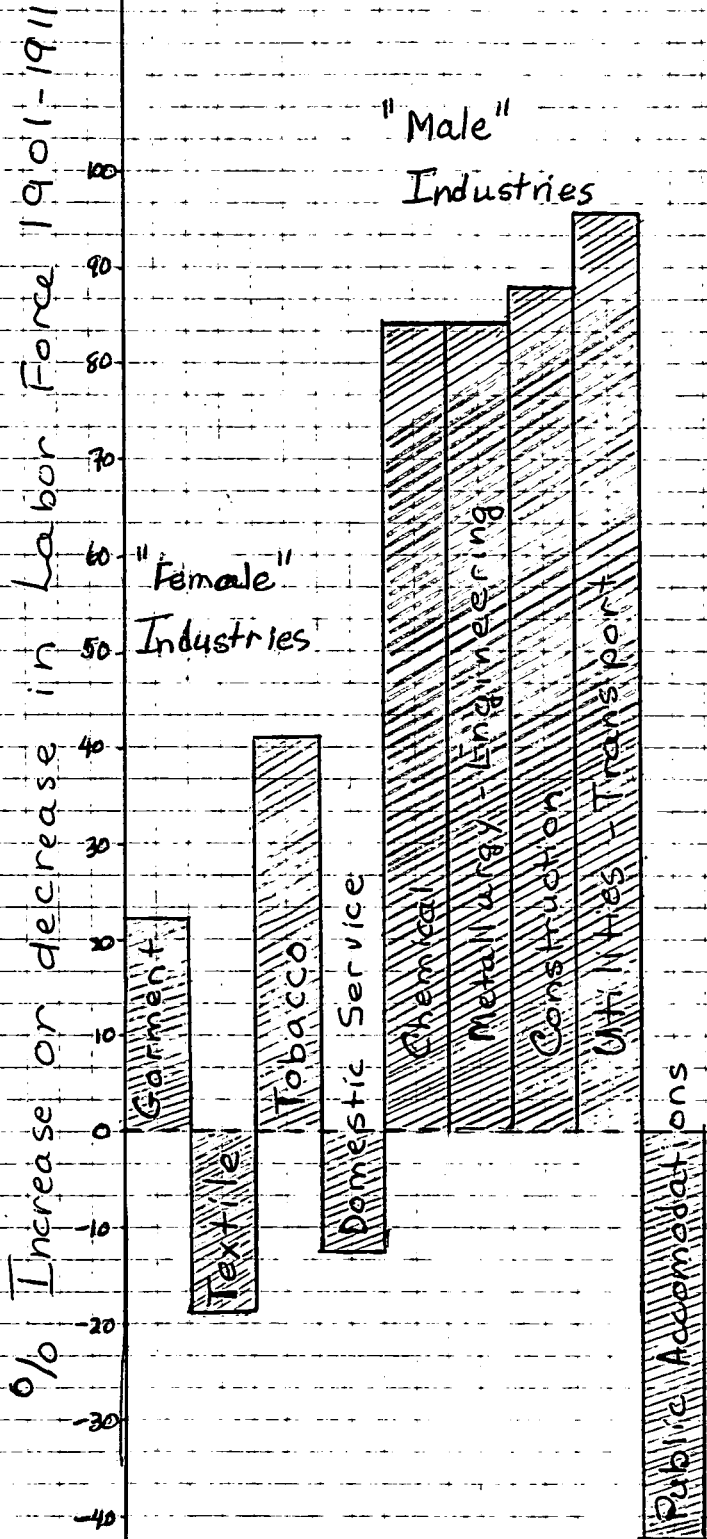
for domestics was established in 1905, partly because of a servant shortage. Servants' wage rates were increasing. There were complaints about the difficulty of finding and keeping servants. In La Difesa della Lavoratrice,¹⁹ a working women's newspaper published by socialist women, there was a wave of comment on servants as exploited workers. The newspaper carried interviews with servants in which they testified to their precarious tenure. One of the paper's story features printed a fictional dialogue between a daughter and mother. The daughter complains that her father is willing to send her into service in the city, "without support, into a place I don't know, among people who don't care about me," and she refuses to go. Although such refusal in defiance of family wishes may have occurred more often in the imagination of middle class women socialists than in reality, there were in fact fewer young women servants. A more likely reason was that migrant families coming into the city were less dependent on financial contributions from all members. There were increased real wages for adult male workers in many occupations in the decade or so after 1900,²⁰ and the labor force reveals a more prosperous mix of male occupations. Families could choose not to press their daughters into service. Married women might less often be constrained to work as laundresses or cleaning women in order to help their families through economic crises. By about 1910, the heavy unskilled rural-urban migration was ending. There were many fewer surplus females (and males) who left agricultural areas for any job in the city of Milan.

Thriving industry or services connected to industrial growth absorbed male workers. Women's jobs were narrowly defined within

% Female by Industrial Categories Milan, 1911



Growth in the Labor Force of Milan 1901-1911



segregated industries. Garment making was the only large female - employing industry which offered increased employment opportunities in 1911 over 1901. Employment in the garment industry increased by 22% between 1901 and 1911. The vigorously prospering industries of metallurgy, engineering, utilities and transport, construction increased by percentages ranging from 84% to 97%. The decreasing proportion of economic activity of the city in female industry meant that proportionately fewer women were employed in Milan in 1911 than in the two previous censuses. Women's jobs, their availability linked to the consumption patterns of the preindustrial city, either decreased or grew very slowly. As heavy industry became more important in the city, opportunities for migrants were more commonly opportunities for men workers. As daughters and as wives of these men, women were less likely to make themselves available for those female jobs which remained.

Female Employment in Urban Growth and Industrialization

The downward trend in women's employment in the case of Milan leads to several generalizations about women's paid employment in nineteenth century cities. Given the constraints of occupational or industrial segregation, the pattern of women's work in cities varied with the mix of economic activity and occupational structure which dictated the demand for workers. Demand, then, was shaped by economic structure and modified by structural shifts. The tertiary sector in preindustrial and industrializing cities employed women in old fashioned services and consumer industry; women's employment declined with the growth of large scale manufacturing in a city. The level of women's employment was linked to the availability of

women workers. That availability varied with the economic circumstances of the family units in which they were located, whether as daughters or wives, and demographic factors, in particular proportion married. The family position of women was a defining factor in their participation in the labor force. Most women workers were unmarried. Supply, then, depended on the relative availability of single women, and on the wealth of family units. A population with a heavy migrant component was likely to have a high proportion of families with need to tap all members' earning capacity.

This almost simplistic model helps us to understand female employment in one nineteenth century city. Is it a valid general model for women's employment in other European cities of the period? Further comparative studies of women's work in urban growth and industrialization will answer this question.²¹ Can the model be of use also in understanding aggregate changes in women's employment on the national level during industrialization? It can. Careful comparisons of women's participation in aggregate labor force changes show a rising trend in women's paid employment over the long run with the rise of modern services. But female employment in nineteenth century European economies did not increase in simple correlation to industrialization. The proportionate size of the sectors, including agriculture, and the distribution between old fashioned and modern services within the tertiary sector, explain national female employment patterns as well as urban ones. Proportion married, family economic circumstances, rising wages and living standards account for the level of women workers during the process of industrialization.²²

Footnotes

1. Sam Bass Warner, Jr., "If All the World Were Philadelphia: A Scaffolding For Urban History, 1774-1930," American Historical Review, 74 (1968). This evocative yet carefully schematic article is a useful corrective to many urban historians' tendency to see each city as a unique case.
2. Carlo M. Cipolla, Before the Industrial Revolution. European Society and Economy, 1000-1700, New York: Norton, 1976, p. 73.
3. John D. Gould, Economic Growth in History: Survey and Analysis, London: Methuen, 1972, p. 60.
4. See Miriam Cohen, "Italian-American Women in New York City, 1900-1950: Work and School," forthcoming in Milton Cantor, ed., Class, Sex, and Women Workers.
5. E.J. Hobsbawn, Industry and Empire. An Economic History of Britain since 1750, London: Weidenfeld and Nicolson, 1968, p. 20, argues as follows: ...the Industrial Revolution is not merely an acceleration of economic growth, but an acceleration of growth because of, and through, economic and social transformation. The early observers, who concentrated their attention on the qualitatively new ways of producing -- the machines, the factory system and the rest -- had the right instinct, though sometimes followed it too uncritically. It was not Birmingham, a city which produced a great deal more in 1850 than in 1750, but essentially in the old way, which made contemporaries speak of an industrial revolution, but Manchester, a city which produced more in a more obviously revolutionary manner." Hobsbawn here emphasizes the organization of production aspect of the First Industrial Revolution in England. By this emphasis, he slights the fact that as a process, industrialization eventually transformed the entire economy, all kinds of cities. In England, the industrialization of the metal and machine industry was discontinuous with the transformation of textile production. In Italy, this was true to a much lesser degree.
6. Giuseppe Colombo, "Milano industriale," in Mediolanum, III, Milan, 1881, p. 40.
7. P. 51.
8. Colombo, pp. 61-62.
9. Giancarlo Galli, Il movimento operaio milanese alla fine dell'ottocento, Pubblicazione edita dell'Ufficio Stampa del Comune di Milano, Milan: IGIS, 1971, p. 15.
10. Giuseppe Colombo, "Le industrie meccaniche italiane all'Esposizione di Torino," Nuova Antologia, IV series, LXXVII (1898), pp. 388-95.

11. The first attempt to count, accurately and exhaustively, the industries of Milan and to enumerate their characteristics was that by Leopoldo Sabbatini, secretary of the Milan Chamber of Commerce. His findings were published by the Direzione Generale della Statistica in Rome as "Notizie sulle condizioni industriali all Provincia di Milano," 1893. These were compared with the Censimento degli opifici e delle imprese industriale al 10 giugno 1911, Vol. III, shops with over ten workers. The industrial categories used, for this analysis and for the labor force analysis are as follows:

- 100 Primary sector: (Agriculture and mining)
- 200 Secondary sector: Manufacturing
 - 201 Food
 - 202 Wood, straw
 - 203 Leather, fur
 - 204 Textiles
 - 205 Garment making (excluding shoes, gloves, furs, which are under 203)
 - 206 Other products of agriculture (mainly tobacco)
 - 207 Glass, ceramic
 - 208 Metal and machine making (208A metallurgy, 208B engineering)
 - 209 Precious metal, precision instrument, small machine
 - 210 Mixed metal, wood
 - 211 Chemical
 - 212 Rubber
 - 214 Construction
 - 215 Paper, Cardboard
- 300 Tertiary Sector: Commerce, professions and arts, services
 - 301 Banking, insurance
 - 302 Professions
 - 303 Government
 - 304 Utilities, transportation, communications
 - 305 Domestic service, personal service
 - 306 Hotel, restaurant
 - 307 Retail merchandising

For a fuller explanation of method of analysis and more extensive discussion of classification, see Louise A. Tilly, "The Working Class of Milan, 1881-1911," doctoral dissertation, University of Toronto, 1974.

12. Raffaele Calzini, Milano'fin de siecle.' 1890-1900, Milan: Hoepli, 1946, p. 159

13. The sources for the labor force information in this paper are three population census publications put out by the city of Milan: La Popolazione della città di Milano secondo il Censimento del 1881, Milan, 1882; La Popolazione di Milano secondo il Censimento del 1901, Milan, 1903; La Popolazione di Milano secondo il censimento eseguito il 10 giugno 1911, Milan, 1919. These publications give much greater detail on the communal level than do the Italian census volumes. However, they fall far short of the individual and house-

hold level information available from nominative lists or census schedules, as they deal with the urban aggregate. As far as I know, neither nominative lists nor census schedules were preserved for this period in Italy. In the Milan volumes, occupations were classified by basic economic sectors, then by finer categories within sectors, then by job titles. Within many, but not all, job categories, an indication of status was included, namely the added label "owner," "white collar employee," or "worker." The 1881 and 1901 censuses included much richer information than the 1911 census. For 1911, only sex and occupation were cross tabulated. For 1881 and 1901, occupation was cross tabulated with sex, place of birth, location of home within the city, and age. Since industrial categories differed for the three censuses, I went to the smallest unit -- the job title -- and constructed a uniform classification for the three censuses. The industrial categories used were the same as those listed above, footnote 11.

14. Occupation and age and occupation and nativity cross tabulations were available only for the censuses of 1881 and 1901. Because of the different age categories in the two censuses, one large block for ages 21 to 60 had to be used for the comparisons, as well as over 60, up to 14, and 15 through 20. Consequently, only labor force categories with exceptionally young or exceptionally old workers stand out from the predominant pattern in which most workers were aged 21 to 60.

15. The textile industry was relatively unimportant in Milan, and declined in importance still further after 1900. This is in contrast to the rest of the province of Lombardy, which was the locus of many silk and cotton mills.

16. See Abel Châtelain, "Migrations et domesticité féminine urbaine on France, XVIII^e siècle - XX^e siècle," Revue d'histoire économique et sociale, XLVII (1969), p. 508. This argument about the connection between family need, values and women's work is more fully developed in Joan Scott and Louise Tilly, "Women's Work and the Family in Nineteenth Century Europe," Comparative Studies in Society and History, 17 (January, 1975), pp. 35-64.

17. See Aldo De Maddelena, "Rilievi sull' esperienze demografica ed economica milanese dal 1861 al 1915," in L'Economia italiana dal 1861 al 1961, Milan: Giuffrè, 1961 and Tilly, op.cit., Chapter IV, "Economic Growth and Migration". Analysis of migrants' occupations from 1884 to 1914 shows a definite shift to more skilled occupations of migrants registering with the city Anagrafe (Population Register).

18. Tilly, op. cit., 117-125

19. Articles 7 July, 1912, 18 August, 1912, 16 February, 1913, 4 January, 1914.

20. Tilly, op. cit., pp. 248-253. Per capita consumption of meat also increased, another indicator of prosperity: pp. 253-255.

21. I am presently completing a project which compares occupational and household structures cross-sectionally and longitudinally in three French cities of greatly contrasting economic types: a textile city, a coal mining city, and a commercial administrative city (Roubaix, Aniens, 1861-1906.) This project is supported by a grant from the Rockefeller Foundation Population Policy Research Program. Although the research reported in this paper was done before the grant, my thinking about the problems raised has been largely shaped by research and reading done with the support of the grant.

22. Joan Scott's and my forthcoming book, Women, Families and Industrialization in England and France (Praeger, 1977) develops and documents this argument. See also Valerie Kincaid Oppenheimer, The Female Labor Force in the United States: Demographic and Economic Factors Governing its Growth and Changing Composition, Population Monograph Series No. 5, Berkeley: University of California Press, 1970, and "Demographic Influence on Female Employment and the Status of Women," American Journal of Sociology, 78 (January, 1973), pp. 946-961.