Feminine labor geography in Mexican assembly factories

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Introduction

The local productive areas' conformation due to capital and labor mobility is a phenomenon that permits to understand the behavior of the assembly industry in the four recent decades. At the beginning, this activity was catalogued as one more manifestation of the world's exploitation-
free zones, but nowadays it represents an ample geographical zone of intense assembly work, which takes in the northern border with the United States, included the Mexican Ocean Pacific zone down to Central America.

The expansion of the assembly factories in Mexican territory could be explained as part of a new transnational geography (Sassen, 1998), which convokes to processes in growing productive interdependency, with marginalization and exclusion of various social actors in such stages (Hannerz, 1998; Harvey, 1996; Castells, 1995). This is illustrated by the participation of women who were laborers for the first assembly factories in the free zones, and now are so again for the electronics, automotive, and confection's new global markets.

Women's presence in Mexican assembly factories has been a symbolic feature of these factories for four decades, as well as its link between the capital transnationalization and the workforce feminization processes. This assumption acquires a major importance in the light of the different stages of the assembly factories' territorial expansion and their relation with the feminine workforce hiring patterns.

In the present article I propose to examine the assembly industry's expansion in Mexico and its impact on the feminine labor. I consider that this process represents a relevant phase in the occupational history of the women in the country, especially for the border zones and the new assembly factories' locations. This makes it necessary to analyze the relation between the processes of productive transnationalization and the workforce feminization as an articulated and historical fact.

For this, in the first part of the article I show the geographical mobility of the assembly factories and its distribution in three activity axes after a four decades' presence in the country. In the first axis are the assembly factories which are located in the most important cities of the Mexican northern border since the 1960's decade. In the second axis are those factories which are located in the Mexican northern, northwestern and northeastern cities since the 1980's factories, and the last axis corresponds to the factories located in the center, Occident and south of the country with a fast grow from the nineties. With this exercise I try to demonstrate how the assembly factories expansion favored the labor's transnationalization and reorganization in various Mexican cities.

In the second part of the article I consider the possible articulation among the assembly factory's expansion, the local workforce reorganization and the search of a laboring supply with specific characteristics, as feminine labor is. Some indicative elements of this process are the occupations and salaries' segmentation
and polarization in this region according to gender, when it causes low-income female laborers, next to a reduced number of male employees with high salaries and qualifications. Besides, a social sector's conformation linked to sub-hiring chains, outsourcing and clandestine workshops, as instances which concentrate large numbers of laboring female youngsters and women.

In this respect, at least three feminine employment hiring cycles in the assembly factories could be identified. The first indicates the propagation of employment for women with low remuneration in the northern frontier during the 1970's and 1980's decades. The second corresponds to the hiring de-feminization process in the assembly factories, when there is more dynamism in men hiring in respect to women almost in the whole country in the 1980's and 1990's decades. The third cycle shows a high flexibility process in the young women and men's labor use in the assembly factories in Mexico's center and south.

**Assembly factory's territorial expansion in Mexico:**

**Background**

In Mexico few manufacturing sectors have the dynamics that the exporting assembly industry has had. Its appearance and consolidation are framed in the transition from an importations substitution model to an exporter model, which permitted the increase in the manufacturing exports in the country.

The assembly factories appeared in Mexico as part of an alternative industrialization project for the border cities with the United States in 1965, whose function was to provide hundred of laborers with employs due to the end of the Bracero Program, which was agreed with the United States, however, its legal existence was concreted through the Border Industrialization Program in 1966.1

The first assembly factories were established under the free zone system and border fringes2 with the United States in the cities of Tijuana, Ciudad Juarez, Matamoros, Mexicali and Nogales, urban centers where there were programs of border industrial development and there was an especial customs and fiscal regime, which formed the historical border of the assembly factories in Mexico.

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1 The validity of the Border Industrialization Program concluded in 1970, and the next year the Border Fringe and Free Zones Program started with the aim to favor commercial activities in the northern border. For that commercial centers were created, local industry and tourism was publicized, but above all, assembly industry was supported.

2 The Free zone covered the whole of the Peninsula of Baja California and the north-occidental part of the State of Sonora. And as border fringe it was defined as the space delimited in the international line with an imaginary line of 20 kilometers to the south. Only in Ciudad Juarez case the distance was extended to 70 kilometers in 1987 (Barajas y González, 1989).
This industry's growth was conditioned by the United States' economical cycles, especially between 1975 and 1976, when the recession in this country provoked the reduction of working days, the temporary suspension of laborers and the definitive closing of several assembly factories in the northern border. From 1983, this activity was able to come round thanks to the modifications to the Foreign Investment Law and a policy centered in the promotion of the exporting sector.\(^3\)

In their first activity years, these factories were characterized by the intensive use of workforce in assembly operations, paying attention to the comparative advantages scheme, in relation to abundance and workforce low cost, hiring especially young women. Their productive links with local enterprises were scarce and had antiquated technological levels, as well as low qualified laborers' formation (Carrillo, 1985; Fernández, 1983; Gambril, 1981).

By the end of the 1980's decade, Mexican government widened the options of programs that allowed importing activities\(^4\) by means of the diversification of legal ways for transnational investment. Besides, it was observed the introduction of state-of-the-art technology and automated processes in some plants associated to worldwide leader firms, even though the assembly processes, intensive in workforce in an important number of factories and production processes prevailed. This first transformations in the assembly factories enabled women's hiring in flexible conditions and high deregulation context.

During this period, the location of factories outside the perimeter of Mexico's northern border took place due to the modification of the exportation programs on government's side. This allowed those industries to locate in almost any part of the country where there were salary competitive advantages or of industrial infrastructure. In this way, some factories were settled in medium-sized urban

\(^3\) National Program of Fomentation to Foreign Industry and Commerce 1984-1988 from the former Ministry of Commerce whose objective was the conformation of a new industrialization and specialization pattern of the external commerce, higher technological autonomy, relocation of the industry and rationalization of the country's industrial organization. For that commercial protection was rationalized, non-oil exportations were fomented, productive investment and modernization were stimulated, industrial decentralization and active and selective foreign investment promotion were encouraged. In practice, the program did not work in full because of the protectionism that practiced the enterprisers in the country and only six programs were set off. The automotive Industry Rationalization Program, the Pharmaceutical Industry Integral Development Program, the Small and Medium Industry Integral Development Program, the Computing and Other Electronic Industries Development Program, the Petrochemical Industry Integral Development Program and the Exporting Assembly Industry Fomentation Program 1989-1988 (De la O, 1997).

\(^4\) For example, the Exports Integral Fomentation Program (Profiex) and the Temporal Imports Program for the Production of Export Articles (Pitiex) and the Support Program for Highly Exporting Industries (Altex).
cities in the north, northeast and northwest of Mexico, whereas other had as destination relatively small rural communities.

The expansion of the assembly factories towards new destinations defined a second axis of these activities in the country, particularly in cities characterized by the decline of their main economical function, as cotton growing, aviculture or the mining of carbon resources, which permitted to have large numbers of unemployed people. As time passed by, assembly factories' expansion propitiated productive specializing patterns in different cities, mainly in confection and electronics, which contributed with most of the jobs in the national assembly industry.

The importance of the assembly industry in the national employment was incremented in the 1990's decade, facing the perspective to sell its production in the domestic market and to continue under a schema of cheap workforce and fiscal stimuli offered by local governments. So, in 1996, the assembly industry represented 32 percent of the total manufacturing employment in the country, and generated almost 800 thousand jobs, distributed in 2 563 establishments, especially in electronics, confection and automotive parts sectors (Carrillo and Kopinak, 199; INEGI, 2000). In this context the movement of assembly factories continued towards the center-occident and south of the country, it is calculated that in April 2005 an important cumber of assembly factories were concentrated in no-border cities, i.e., 26 percent of the factories with more than 214 thousand laborers (INEGI, 2006).

**Assembly industry's geography in Mexico: The three frontiers**

It could be said that the assembly industry in Mexico has undergone a long process of especial reorganization through capital mobility and labor reorganization in different parts of the country (map 1). To consummate this process it was supported in the features and competitive compounds of the local economies and in the search of cheap labor, whose more significant consequences are the three axes configuration or frontiers to assembly investment in Mexico and the propagation of specific employment conditions, especially for women.
Historic Border

The first axis was defined by the historic assembly industry border, which was conformed by the main cities in the northern border, such as Matamoros, Tijuana, and Ciudad Juarez, where the first plants of these types were settled at the beginning of 1960's decade. These cities became authentic assembly centers oriented to the production of harnesses, automotive parts and electronic appliances. In its growing process influenced in the closeness to the productive centers from South California and Texas, as well as an active participation of the local businessmen, in a context of intense unrest of civil and laboring organizations in respect to the workers' rights (De la O y Quintero, 2002).

Nogales, Piedras Negras, which border with the United States, are also part of this historical frontier and operate under a comparative workforce advantages schema, but they did not achieved the same assembly boom that was observed in other cities (Map 2). In Nogales and Piedras Negras there were active unions and traditional enterprisers, and that presence also contributed in the scarce expansion possibilities of the assembly factories in such cities (Quintero, 2002).

In this first axis the unfair assembly factories' presence effects are noticed; for some cities it meant the consolidation of this sector and their articulation with productive centers from South California and Texas. Whereas for other, it meant the impossibility to reach a competitive condition due to their proximity to cities with scarce economical importance in the United States, such as Tegle Pass and Nogales. The latter was added to the descent of their traditional activities in the carboniferous reserves, in mining and in siderurgy. Hence, it is calculated that by April 2006 most of the assembly labor's concentration was in the historical border, mainly in Chihuahua (25.7 percent), Baja California (20.4 percent) and Tamaulipas (15.5 percent), which means that more than the half of the assembly employment is concentrated on that area (INEGI, 2006).

The border in expansion

I define the second assembly axis as a border in expansion, for it is the result of the displacement of the assembly activities towards the north, center-north and occident of Mexico since the 1980's decade (Map 2). As a matter of fact, since 1986 the location of these factories in the northern border started to change from 80 percent to 60 percent in such period, and by April 2006 it is calculated there was 735 assembly factories in no-border-line cities (INEGI, 2006).
The assembly factories in this area were benefited from the relative
closeness of Mexico's northern border with the so-called Gulf Corridor\(^5\), which
involves base-cities for the petrochemical industry and electrical in Houston, San
Antonio and Austin, and the Center Corridor, which includes Kansas, Saint Louis
Missouri, Forth Worth and Dallas, where there are important metal, transport
equipment, electric and electrical products, and clothing industries (Barajas,

Some cities in the border, as Mexicali, Hermosillo, Ciudad Acuña and
Reynosa, started their assembly activities in this period, after having experienced
a descent in their traditional activities. To this context it was added the local
government, industrial promotion groups' participation and the sort of enterprise
that settled in those cities; which in the long run propitiated the productive
specialization of such cities in television, automotive parts assembly, and at a
lesser extent confection. Enterprises such as Sony, Daewoo, Mitsubishi and LG,
in Mexicali; Delco, Phillips, Sony, Matsushita, Nokia, Lucent, Fujitsu, Condura
and Delnosa, in Reynosa are notable (Map 3). The whole of these features
allows understanding why these cities are considered as expansion nucleuses in
assembly activities.

\textit{The Emergent border}

I call the third assembly activities' axis emergent border. This involves cities in
the middle and rural towns not in the border line. The pioneer cities in this cycle
were Guadalajara and Mérida with their surrounding areas by the end of the
1980's, followed by Aguascalientes, Torreón, Gómez Palacio and Lerdo, and
several municipalities from Puebla, Guanajuato, San Luis Potosí, Zacatecas,
Mexico and Mexico City, during the 1990's decade (Maps 1 and 2).

In most of the cases, the main economical activities of these cities were either
in decline or in restructuring, as the traditional shoe and leather industry, the
confection and, in general, the great national industry. So the expansion of these
factories was an employs' reactivation strategy by the local governments.

\(^5\) A series of twin cities also belong to this corridor along the border with the United States, as Ciudad
Acuña-Del Río, Eagle Pass-Piedras Negras, Laredo-Nuevo Laredo, McAllen-Reynosa and Brownsville-
Matamoros. According to Barajas (1989: 84-85) the location of one of the divisions of the Altos
Hornos de Mexico siderurgy in Monclova and the carbon mine in Sabinas, Nueva Rosita, Rio Escondido
and Ciudad Nava, Coahuila, conferred a spatial relevance to this region before its decline.
MAP 2
TERRITORIAL EXPANSION OF THE EXPORTING MANUFACTURING INDUSTRY MODEL

- HISTORIC BORDER (Matamoros, Cd. Juárez, Tijuana, Nogales, Piedras Negras)
- BORDER IN EXPANSION (Hermosillo, Mexicali, Reynosa)
- EMERGENT BORDER (Guadalajara, Mérida, Aguascalientes)
MAP 3

Tijuana
- SANYO
- SONY
- HITACHI
- MITSUBISHI
- SHARP
- SONY ELECTRONICS
- PHILIPS
- CASIO
- KODAK
- CANON
- KIOCERA
- INTERNATIONAL RECTIFIER

Mexico City
- SONY
- DAEWOO (SLRC)
- MITSUBISHI
- LG Electronics

Sonic
- DAEWO (SLRC)
- MITSUBISHI
- LG Electronics

Toyota
- DAEWO (SLRC)
- MITSUBISHI
- LG Electronics

Honda
- DAEWO (SLRC)
- MITSUBISHI
- LG Electronics

Chihuahua
- TOSHIBA
- PHILIPS
- THOMPSON
- KENWOOD
- ELAMEX
- PLEXUS
- JABIL

Chihuahua
- TOSHIBA
- PHILIPS
- THOMPSON
- KENWOOD
- ELAMEX
- PLEXUS
- JABIL

Reynosa
- DELCO (Automotriz/Audio)
- PHILIPS
- SONY
- MITSUSHITA (Automotriz/audio)
- NOKIA
- LUCENT TECHNOLOGIES
- FUJITSU (Automotriz)
- CONDURA (Automotriz)
- DELNOSA (Automotriz)

Matamoros
- DELPHI
- DELTRONICOS
- TYCO
- CONDURA

Monterrey
- PIONEER
- KODAK
- NIPPON DENSO (Automotriz)
- AXA YAZAKI (automotriz)

Aguascalientes
- TEXAS INTS.
- XEROX
- SIEMENS

Queretaro
- CLARION
- SIEMENS

Edo. de Mexico
- PANASONIC DE MEX.
- OLMPIA
- OLIVETTI
- AMP
- ERICSSON
- ALCATEL/INDETEL

Puebla
- GAP
- T. HALIFGER
- LEVIS
- D. KARAN
- GUESS
- DOKERS

Chihuahua
- TOSHIBA
- PHILIPS
- THOMPSON
- KENWOOD
- ELAMEX
- PLEXUS
- JABIL

Torreon
- THOMPSON

Mexico City
- SONY
- DAEWOO (SLRC)
- MITSUBISHI
- LG Electronics

Guadalajara
- IBM
- HP
- NEC
- LUCENT TECHNOLOGIES
- MOTOROLA
- KODAK
- CUMEX
- SIEMENS
- FLEXTRONICS
- JABIL CIRCUIT DE MEX.
- SCI/SANVINA

Cuernavaca
- NEC

Aguascalientes
- TEXAS INTS.
- XEROX
- SIEMENS

Queretaro
- CLARION
- SIEMENS

Edo. de Mexico
- PANASONIC DE MEX.
- OLMPIA
- OLIVETTI
- AMP
- ERICSSON
- ALCATEL/INDETEL

Puebla
- GAP
- T. HALIFGER
- LEVIS
- D. KARAN
- GUESS
- DOKERS

Audio y Video
Equipo de Cómputo
Telecomunicaciones
Textil
The localization of the assembly factories in these cities enabled the articulation of Central Mexico's industrial corridors, as well as that of Saltillo-Ramos Arizpe-Moclova and Monterrey, with the Central-Northern and Occidental region, known as the commercial and industrial axes. These, besides, permit the interchange with three of the most important regional subsystems in the country, i.e., Monterrey, Guadalajara and Mexico City. In this context stand out electronics, computing and telecommunication industries, such as Texas Instruments, Seros, and Siemens in Aguascalientes; IBM, NEC, Kodak; Cumex, Siemens, Solectron, Jaibil and SCI in Guadalajara; and the same from Pioneer, Kodak, Nipon Denso and Axa Yazaki in Monterrey (Map 3).

The first assembly factories which were established in Guadalajara, did it temporarily, in 1974, and multiplied their presence since 1982 Mexican economical crisis. Their true expansion happened during 1990's decade, when more than fifty factories were settled, with approximately six thousand hired laborers in clothing and electronics for computing and telecommunication production. By May 2006, there were 93 factories with almost fifty thousand laborers; however, it must be considered the closing down of factories and the year-2000 dismissals, due to the United States' economical deceleration.

In Merida, the first assembly factory was established in 1982 and this activity's boom was lived by the end of the 1990's decade, in an economical crisis and unemployment context caused by the fall of henequen fiber production and the privatization of Cordemex factory in 1993, one of the main employment generator in the city (Morales et al., 2002). Nowadays there are approximately 77 assembly factories oriented to confection, jewelry and medical equipment assembly, where more than 26 thousand laborers take part in all the state, with a large quantity of Maya female laborers (Castilla, 2004). It is worth to mention the importance of this city because of its commercial and productive link to Florida's Corridor, in the United States.

Whereas in Aguascalientes several assembly factories linked to automotive parts and confection sectors were settled, in large part due to NAFTA (North America Free Trade Agreement) in 1994. In such agreement it was foreseen the ingress of textile products to domestic market, which impacted negatively the state's textile sector. Part of the economical and employment recovery was based on the expansion of the assembly factories in the state (Camacho, 2002). In this way, in 1999 there were 87 assembly factories with 23 959 laborers, nevertheless in 2002 36.3 percent of this activity's jobs was lost, because of the North American economical crisis and the relocation of corporative groups into
cheaper work markets, as the Central American ones. By May 2006 it was calculated that there were only 3 factories with more than 15 thousand employees in the whole state (INEGI, 2006).

In Puebla hundreds of Mexican, American and Korean assembly factories were established, mainly in Sierra Mixteca, Sierra Norte and in the Tehuacán Valley. In these areas the traditional employment sources were in field, commerce and nixtamal milling, so assembly industry was perceived as a development opportunity and a feasible strategy to reactivate local employment. In this way, by 1996 there were 33 factories with more than 12 thousand hired people in the whole state, four years later more than 122 factories with more than 41 thousand employees were added (INEGI, 2001). This assembly boom was intensely lived in Tehuacán, Teziutlan, Ajalpan and Puebla, as well as in the small population of Altepexi in Miahuatlan.

For instance, in Teziutlan hundreds of clothing factories were established along with familiar workshops, as for Tehuacán Valley factories for exporting were established, oriented towards denim trousers confection for the United States, Canada and Europe, specially for brands as Navarra, The Gap, Tommy Hilfiger, Polo, Ralph Lauren, Levi’s, Donna Karan, Guess, Arizona, Dokers, among other. It means, besides the large assembly factories there are clandestine factories that operate under a sub-assembly schema with a highly flexible labor, as much as working from home allows (Juárez, 2002).

The accelerated incorporation of assembly factories in these zone propitiated the growth of more than a hundred house developments in only ten years, whose population is mainly emigrant indigenous people in the search of a job (Barrios, 2002). According to some studies, 80 percent of the laborers from these places are indigenous: nahuas, mazatecos, popolaca, mixtecos, among the most relevant groups (Ramírez, 2001).

The impact of the 2002 North American economical crisis caused the loss of 20.6 percent of the jobs in assembly factories in the state (2002). Nowadays it could be affirmed that in Puebla's assembly factories there are two tendencies. On the one side, a fast decrease in assembly factories presence caused by the relocation of numerous factories towards Central America, Brazil and Asia. And on the other side, the transfer of various activities to home and clandestine workshops, where tax payment is evaded and so are the benefits granted by the Ley Federal del Trabajo (Federal Laboring Law).
In Coahuila and Durango, specifically in the so-called La Laguna\(^6\) region, a fast assembly-factorization of the local economies was observed in the 1990's decade. The first assembly factories were settled in Lerdo, Gomez Palacio and Torreón, to be established later in rural areas and ejidos of La Laguna as a consequence of the fast depleting of the labor markets in the regions according to Cámara Nacional de la Industria del Vestido (National Chamber of the Clothing Industry), in 1997 there were more than seventy thousand laborers distributed into 200 clothing confection companies, but this figure could be larger due to the sub-registration of the activity. By the 200 there were 72 factories in Torreón, 68 in Gomez Palacio, 14 in Lerdo and nine in other Durango municipalities, which adds up more than 44 thousand employees (INEGI, 2001).

This area lost a great deal of assembly jobs with the 2002 United States' recession, 45.4 percent of the existing in Durango and 11 percent in Coahuila by May 2006 there were 221 factories with more than 99 thousand employees in Coahuila's assembly industry, as for Durango there were 43 establishments with more than 20 thousand employees (INEGI, 2006).

Finally, Guanajuato, San Luis Potosí and Zacatecas in the Center-North and Mexico City altogether with the State of Mexico in the center of the country, constitute the last fragment of the emergent assembly industry region. During 2000, in Guanajuato there were 13 402 laborers in this activity, distributed in 78 factories; 11 403 in San Luis Potosi, distributed in 19 factories and 5 903 in Zacatecas, distributed in 19 factories, all of them established in small and rural cities\(^7\). In spite of the recent establishment of assembly factories in these states, the crisis at the beginning of the millennium generated the loss of 15 percent of the jobs, especially in Zacatecas and San Luis Potosi.

In Mexico City and the State of Mexico there were 2 286 laborers in 29 establishments and 13 734 laborers in 58 factories, respectively, in 2000. Mexico City assembly factories are very heterogeneous in respect to production sectors and localization patterns, in contrast to the ones the State of Mexico, which are located in parks and industrial zones with predominance of activities such as confection and clothing, metal-mechanic and furniture production.

\(^6\) The region of La Laguna is formed by the cities of Torreón, Gómez Palacios and Lerdo, in the mentioned states, this process was acute in 1992, from the amends to the Agrarian Reform (Van Dooren, 2000).

\(^7\) In Guanajuato are in Celaya, Irapuato, León, San Miguel de Allende, Yuridia and the towns of Purísima de Bustos and San Luis de la Paz; in San Luis Potosi, in Matehuala, Santa María del Río and the capital; in Zacatecas, La Calera, the capital and the towns of Concepción del Oro, Fresnillo, Guadalupe, Jerez, Luis Moya, Morelos and Ojo Caliente.
The grouping of the borders aforementioned faces common problems as the low salaries, scarce integration between local and national industry with the assembly industry investment, the vulnerability of the employment in front of the economical North American cycles and the growing flexibility in the use of workforce, especially from the women.

**Assembly factories' expansion and feminine employment**

When the assembly-industry project began in Mexico's north border, employment was offered especially to young women, but nowadays men represent an important laboring contingent in this activity according to INEGI's data, in February 2006 there have been 1 176 155 people hired, from who 424 660 were men and 499 061 were women. Which indicates the progressive de-feminization of the employment from the assembly factories settled in the country, if it is considered that the relation changed from 28 hired men out of a hundred women in 1975 to 86 men out of a hundred women in 2004 (Table 1).

In this respect three cycles of the feminine employment in assembly factories can be identified. The first indicates the propagation of the feminine employment with low payment in the northern border during the 1970's and 1980's decades. The second corresponds to the de-feminization of the assembly industry employment, when it is observed a higher number of hired men in almost all the country than in the 1980's and 1990's decades. The third cycle shows a high flexibility process in the use of young men or women's workforce in the assembly factories in the center and south of Mexico (Scheme 1).

There can be some talk about a fourth cycle product of the deceleration of the assembly factories in 200, which meant the loss of laboring positions for thousands of women. Between the years 2000 and 2003, women lost 122 thousand laboring positions which equals 21.2 percent of the laboring employment, whereas men lost 82 thousand positions, which is equivalent to 17.6 percent of the laboring employment in the assembly industry.

Employment in Mexican assembly industry has changed along four decades, but everything seems to indicate that the most unfavorable changes have been experienced by women. Specifically, when assembly factories started activities in the country's northern border, women constituted the workforce required by the employers, which contributed to the formation of a feminine labor market. As
time passed a higher productive specialization in the factories in economical crisis contexts was observed, that opened assembly factories' labor market to men, affecting women's occupation, when they reoriented to the laboring segments with lesser remuneration. Recently, the expansion of assembly activities in the interior of the country manifested the reactivation of the feminine workforce in the assembly industry, although in lower opportunity niches, as in confection.

These facts present as a balance a long process of occupational segmentation, based on gender, in the assembly factories, in the first place, in respect to work opportunity types for women compared to men, and in the second place, the type of laboring guarantees had in a new-hiring-schemas context, that propitiate occupational vulnerability when preferring temporary, unsteady and lesser-benefited jobs.

Should be the assembly jobs the only available for depressed economies, it would mean that this type of laboring conditions could be extended to the rest of the laboring market in the country. It could be said that, more often every time, men are in an open competence panorama in front of the women to get the jobs in this factories, however with uneven results and opportunities, due to the conditions imposed by the assembly factories, in respect to hiring policies and the worsening generalized state of the laboring conditions in each region.

First cycle

As it was previously stated, the first assembly factories were established in the northern border in free zones and borderline fringes in 1965, in Tijuana and Mexicali, in the State of Baja California; in Ciudad Juarez, State of Chihuahua; in Matamoros, State of Tamaulipas, and in Nogales in the State of Sonora. The presence of the assembly factories caused an important change in the occupational structure of these places when incorporating almost exclusively feminine workforce.

These changes can be observed through masculinity indexes, which permit to identify the feminization degree of the workforce of an assembly factory by city, if the total men number is divided between hired women in that activity per year and city. In this way, in 1975, in Ciudad Juarez, Matamoros, Tijuana and Mexicali, out of a hundred laboring women there were less than thirty hired men for the same activity.
<table>
<thead>
<tr>
<th>Year</th>
<th>National Total*</th>
<th>Workers</th>
<th>Masculinity rate</th>
<th>Annual percentage variation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>National total</td>
<td>Obreros</td>
<td></td>
<td>Men</td>
</tr>
<tr>
<td>1975</td>
<td>67 214</td>
<td>12 575</td>
<td>45 275</td>
<td>27.8 : 100</td>
</tr>
<tr>
<td>1980</td>
<td>119 546</td>
<td>23 140</td>
<td>78 880</td>
<td>29.3 : 100</td>
</tr>
<tr>
<td>1985</td>
<td>211 968</td>
<td>53 832</td>
<td>120 042</td>
<td>44.8 : 100</td>
</tr>
<tr>
<td>1990</td>
<td>446 436</td>
<td>140 919</td>
<td>219 439</td>
<td>64.2 : 100</td>
</tr>
<tr>
<td>1995</td>
<td>648 263</td>
<td>217 557</td>
<td>314 172</td>
<td>69.2 : 100</td>
</tr>
<tr>
<td>2000</td>
<td>1 291 232</td>
<td>468 695</td>
<td>575 706</td>
<td>81.4 : 100</td>
</tr>
<tr>
<td>2001</td>
<td>1 198 942</td>
<td>432 340</td>
<td>524 929</td>
<td>82.4 : 100</td>
</tr>
<tr>
<td>2002</td>
<td>1 071 209</td>
<td>389 435</td>
<td>463 149</td>
<td>84.1 : 100</td>
</tr>
<tr>
<td>2003</td>
<td>1 062 105</td>
<td>386 293</td>
<td>453 767</td>
<td>85.1 : 100</td>
</tr>
<tr>
<td>2004</td>
<td>1 115 230</td>
<td>409 274</td>
<td>476 992</td>
<td>85.8 : 100</td>
</tr>
<tr>
<td>2005**</td>
<td>1 167 239</td>
<td>423 814</td>
<td>496 842</td>
<td>85.3 : 100</td>
</tr>
</tbody>
</table>

* Includes employees and technicians.
** Preliminary figures from July.
### Scheme 1
MANUFACTURING INDUSTRY
FEMININE PARTICIPATION AND TERRITORIAL EXPANSION CYCLES

<table>
<thead>
<tr>
<th>Manufacturing industry expansion regions</th>
<th>Feminine participation cycles</th>
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</thead>
<tbody>
<tr>
<td>Border of manufacturing tradition (north border)</td>
<td>Spreading of the feminine employments</td>
<td>De-feminization</td>
</tr>
<tr>
<td>Expansion border (north east and north best borders)</td>
<td></td>
<td>De-feminization</td>
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<tr>
<td>Emerging manufacturing (north, best, center and Yucatán border)</td>
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New feminization of the labor
This tendency was the same in the assembly industry at a national level, showing that almost 70 percent of the employment was occupied by laboring women in production, with an index of masculinity of a hundred women per every thirty laboring men in the total of national assembly industry (Table 1). The exception to this pattern was Nogales, where out of a hundred women there were 63 hired men in the job positions (Table 2).

In the 1980's decade, the stagnation of the industrial production oriented towards the internal market and the gradual economy's liberalization propitiated the population's real income fall and the insufficient creation of paid-jobs, which affected especially the north and center of the country. In this first cycle, the incorporation and increment of women in manufacturing occupations, especially in assembly industry, favored the feminization of the workforce in the country (Pedrero et al., 1997). Previously, in the importations' substitution stage, some of the manufacturing occupations were done by masculine workforce, but in the exporting stage new industrialization areas emerged in the northern border, that is why feminine workforce prevailed in the assembly industry. Specifically in 1980, the women's hiring represented almost 78 percent of the total of laborers' employment generated in this industry, with a masculinity index of thirty men out of a hundred female laborers.

This same tendency was observed in Tijuana, Ciudad Juarez and Mexicali, with 30 men out of a hundred women in 1980. In contrast, in Nogales there was an early participation of men's workforce, with 70 men out of every hundred women hired in the assembly industry. However, Matamoros showed a ratio of twenty laborers per every hundred hired women (Table 2).

The importance of women's hiring in the assembly industry in the northern border is undeniable during the first decades, but it was not an identical behavior in all the productive sectors. According to masculinity index in frontier municipalities, in 1980 a higher feminine participation happened in the electronics and textile industry, with a ratio of 20 men per every hundred women, whereas for automotive parts, out of a hundred women there were 50 hired men (INEGI, 1978, 1988, 1991, 2000).

Men and women's laboring insertion in the assembly industry showed the conformation of workforce specialized sectors according to gender, in certain occupation categories and activity's fields. This in the medium term reflected the women's disadvantage position in the local labor market, in a social context where feminine attributes and their work status mediated in the laboring definition and assignation of women in the assembly industries. So it was not
strange to hire young women, between 14 and 25 years old, because of their "agile hands and fine movements".

In the end, work conditions in assembly factories became another element in production, when they adapted to intense working rhythms, low payments and employment instability conditions. In this way, working insertion patterns had a certain correspondence with hiring policies in assembly factories for they preferred women. But also, because it was a sector which asked for the least requisites to a low-instructed population with employment needs.

In these conditions, feminine labor was considered second-class and of low economical value, as pointed in numerous studies on assembly factories during the period. The research's findings showed a feminine labor as unqualified, weak, marginal, temporary and part of the industrial reserve army. This greatly reflected the enterprisers' discourse on women in assembly industry as "many, pretty and cheap". This workforce cycle in assembly industry showed the two expressions of the same phenomenon: the economical expression of the feminine incorporation in the workforce and the symbolic and cultural expression of this experience's valuing, in a specific market (Borderías, 2003: 58).

**Second Cycle**

It is characterized by the workforce de-feminization in the traditional and expanding borders. By the end of the 1980's decade, masculine participation gradually increased in the assembly industry besides a lesser women hiring dynamism. This process was related to the first effects of the 1982 Mexican economical crisis, as the real salaries decay and the closing-downs of some private and State's enterprises, which caused the dismissal of numerous laborers, the depression of various local labor markets and the growth of the tertiary sector, among the most relevant effects.

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8 Some of the first investigations were based on the scheme of the comparative advantages when trying to explain the intensive and extensive use of the feminine work force characterized as "cheap, abundant and with no labour experience", as apparently the women from the Mexico's northern border incarnate it. (Rosado, 1976; Escamilla y Vigorito, 1977; Gambrill, 1981; Carrillo y Hernández, 1982; Iglesias, 1985; Arenal; 1986; Lailson, 1988; Fernández Kelly, 1980 y 1983; Barajas y Rodríguez, 1992).

9 See the case studies performed in the northern border by Murayama and Muñoz, 1979; Fernández-Kelly, 1980 and 1983; Gambrill, 1981; Carrillo and Hernández, 1982; Carrillo, 1985; Hernández, 1988; Barrera, 1990; Denman, 1991; Barajas and Rodríguez, 1992.
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<td>28.6</td>
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<td>80.2</td>
<td>89.1</td>
<td>101.1</td>
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<td>96.1</td>
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<td>53.3</td>
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</table>

*Data for the whole state.
In some of the cities in the northern border, where assembly activities had not been encouraged in the 1960's decade -as in Piedras Negras and Reynosa- this industry was given a lot of support. In the first city, the restructuring of carbon extraction and electricity production public-sector enterprises, propitiated the loss of numerous jobs -mainly masculine ones-, that converted the assembly industry in an alternative employment's source (Quintero, 2002). In Reynosa, separately, with the restructuring of public-sector enterprises dedicated to gas extraction, the settling of assembly factories of electronics, furniture and metallic goods was favored (Quintero, 2002).

In this period the assembly industry's\textsuperscript{10} expansion towards borderline and northern cities, where there was no antecedents of this industry was also observed, as in Ciudad Acuña and Hermosillo. In the first city there was such an impact that in the year 2000 there was 56 automotive and metal-mechanic factories with more than 30 000 employees. Whereas in Hermosillo several factories related to Cemex and Ford groups as well as some confection-oriented ones were located\textsuperscript{11}.

In this stage workforce de-feminization in assembly industry took form, when feminine participation stagnated and it only had 57 percent of this activity's total employment in 1985. This tendency was clearly reflected through masculinity indexes in the direct workers, with 45 men out of a hundred hired women. This pattern was strengthened in the 1990's decade, with 69 men workers out of a hundred hired women in the total of the national assembly industry (Table 1). Such behavior was observed in Tijuana, Ciudad Juarez and Mexicali\textsuperscript{12}, with almost 50 hired men out of a hundred hired women in this industry in 1985.

In the cities the recently activated assembly factories, the tendency was different. In Ciudad Acuña there was a change from the feminine hiring pattern to a less intense one in only a decade; in the 60's there was 20 hired men out of a hundred women, and in 1985 the proportion was 60 men out of a hundred women. In Piedras Negras and Reynosa, the feminine hiring pattern was stable until 1985, with a ratio of almost 30 men out of a hundred assembly industry hired women (Table 2).

\textsuperscript{10}This process coincides with the change to the article 321 of the Customs Code of Mexico in October 1972, through it was allowed the placement of assembly plants throughout the country. So that in 1989 five percent of the total establishments were outside the border and by 1998 they represented almost 20 percent.

\textsuperscript{11}The activities of confection and dressing increased with the signing of the North America Free Trade Agreement in 1994.

\textsuperscript{12}In Nogales and Matamoros it was continue with the last decade's pattern, this is, the first city with 84 male workers per each hundred female hired workers; whereas in Matamoros showed a proportion of 35 men per each hundred in the assembly plants (Table 2).
It seems like, when assembly factories expanded towards the north of the country, a more complex ingress profile was constituted. On the one side, the employers started to hire more men, for there was a larger workforce to use due to the de-industrialization which preceded the establishment of assembly factories in different locations and to the national employment's decrease. These facts, in the long run, impacted the according-to-gender local work markets' composition.

Another element that contributed to workforce de-feminization was the technological diversification in the assembly factories, which influenced the required profiles with a higher formation and technical studies, which seemed, men commonly had. It was also observed that automotive parts industry, where traditionally men were hired, extended its activities in the country. Thus, in 1985 there were 90 men out of a hundred women hired in the automotive parts, aside from the electronic and textile industries, with 32 and 30 men out of a hundred hired women, respectively, in border municipalities.

In the 1990's decade, women's participation in assembly factories at a national level was less than 50 percent, with a relation of 64 men out of a hundred women (Table 1). In Tijuana, Juarez and Nogales, such relation was almost doubled in respect to their previous indexes, reaching 80 and even a hundred men out of a hundred hired women, which reduced the gender-composed gap in workforce. In contrast, Mexicali and Matamoros preserved a feminine patter, with 60 and 44 men out of every hundred hired women, although not achieving reverting the process of gradual de-feminization in the workforce.

On the other side, in the assembly industry expansion axis, the process was similar in Ciudad Acuña and Piedras Negras, with 85 and 87 men out of every hundred hired women; differently from Reynosa and Hermosillo, where women's presence continued to be important, especially in the latter, with 26 men out of every hundred hired women in 1990 (Table 2).

During this period a specializing pattern in electronics and automotive parts was configured in the northern border, years later this patter was strengthened by means of 558 electronic factories and 175 automotive factories with almost 500 employed people in such region in the year 2000 (INEGI, 1995 and 2000). This pattern was consolidated especially in some cities where industrial

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13 This process can be understood to the light of the changes that the automotive industry faced in the United States in this period, changes caused by the competence of compact cars produced in other countries. The latter led such industry to decrease its costs with the relocation of its large plants to Mexico. This was the case of Ford Motors, whose brand established five assembly plants in the 1980's in the country. The investment in technological capital was reflected in the size of its plants, which explains that the tendency of increment of the male employment in the automotive parts is associated to its expansion process in the country (Fleck, 2001).
infrastructure was generated and with a wide diversity of productive forms and of articulation with global chains in the south of California and with the Houston-San Antonio-Austin-Dallas corridor, in Texas. Besides influencing the masculinity index behavior for the automotive parts' border sector, where there used to be as many hired women as men. This did not happen in the electronic and textile assembly factories with a relation of 50 men out of every hundred hired women in 1990. This tendency was reflected in the municipalities which were not in the border line, not as intensely as in the border though, with 54 men out of every hundred laboring women in the automotive assembly factories, 35 men out of every hundred hired women in the electronics and 18 men out of every hundred women in the textile (Table 3).

Changes in sectorial composition propitiated gender segregation in respect to women's first employment cycle in assembly industry, which happened in the 1970's decade. But this behavior did not mean a reduction of differences between the job man-done or woman-done, but the generalized deterioration of the male laboring situation and women's insertion to more traditional sectors, as well as the electronics and non-borderline confection.

Differences between men and women's job was also present in the technician positions distribution, with less that 300 technicians out of every hundred women in the same circumstance. This behavior was observed in borderline cities with assembly tradition as well as in the expansion one, constituting the extreme cases Reynosa, with 364 technician men out of every hundred technician women, and Hermosillo, with 186 technician men out of every hundred technician women in the year 2000 (INEGI, 2000).

The total of the aforementioned data permits to identify how the segregation in each field, occupation and even in assigned task by gender has worked in the assembly industry. The segregation by field is reflected on the intensive women's participation in the confection and clothing industry, and with less intensity in the electronics industry, which shows that employment and remuneration's opportunities in fields that offer better salaries, as in machinery and tools for transport, compared to the low salaries of the confection and clothing sectors (Fleck, 2000)

Occupation and task assignation segregation can be observed in women's massive participation in production operative positions, in contrast to their reduced participation in technical or directive positions. This difference is also present in the enterprises interior, where they are offered a reduced variety of positions, such as operators, qualified operators, lines or groups leaders.
It can be affirmed that gender segregation in assembly industry is reflected upon income differences, work conditions and laboring mobility between men and women. In a gradual hiring de-feminization context in that industry whose expression is the slow growth of the feminine employment in the border region, in front of the increase of it in the no borderline regions by means of settling confection and clothing assembly factories. In this way, workforce de-feminization in assembly industry, refers us to a workforce supply phenomenon, which at the beginning had in the border a dramatic growth in women's participation in assembly factories. But during a second cycle, the new assembly factories' jobs were required by both men and women in an economical crisis context and in assembly activities expansion.

**TABLE 3**

EXPORTATION MANUFACTURING INDUSTRY. RELATIONS OF MASCULINITY. WORKER OCCUPIED BY THE ECONOMIC SECTOR AND MUNICIPALITIES, 1980-2000

<table>
<thead>
<tr>
<th></th>
<th>Border Men</th>
<th>Border Women</th>
<th>Masculinity rate</th>
<th>Non-border Men</th>
<th>Non-border Women</th>
<th>Masculinity rate</th>
</tr>
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<td><strong>Electronics</strong></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>1980</td>
<td>9 369</td>
<td>43 024</td>
<td>21.8</td>
<td>872</td>
<td>4 886</td>
<td>17.8</td>
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<tr>
<td>1985</td>
<td>17 020</td>
<td>52 332</td>
<td>32.5</td>
<td>1 578</td>
<td>8 456</td>
<td>18.7</td>
</tr>
<tr>
<td>1990</td>
<td>39 729</td>
<td>74 703</td>
<td>53.2</td>
<td>4 911</td>
<td>13 919</td>
<td>35.3</td>
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<tr>
<td>1995</td>
<td>59 774</td>
<td>99 232</td>
<td>60.2</td>
<td>7 730</td>
<td>21 946</td>
<td>35.2</td>
</tr>
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<td>2000</td>
<td>113 774</td>
<td>153 737</td>
<td>74.0</td>
<td>25 158</td>
<td>54 473</td>
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<tr>
<td>1980</td>
<td>2 183</td>
<td>10 588</td>
<td>20.6</td>
<td>361</td>
<td>2 604</td>
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<tr>
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<td>2 985</td>
<td>9 854</td>
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<tr>
<td>1990</td>
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<td>73 522</td>
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<td><strong>Car spare parts</strong></td>
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<tr>
<td>2000</td>
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<td>63 142</td>
<td>125.1</td>
<td>19 614</td>
<td>25 588</td>
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</table>

In this context, the gender work division subject in its demographical aspects became relevant through the study of the determinants of working participation and insertion to remunerated work outside the house of the women, as well as new employment sources for men. It could be affirmed that, starting from 1980's decade, feminine work acquired more complexity and revealed the importance of the economical and social processes in the Mexican context.

Likewise, the approaches on relations between class, gender and patriarchate to explain women's labor oppression in the assembly industry coexisted with the recent contributions on work's de-feminization. The paradox in these studies was to continue considering women's work as secondary and performed by a weak and passive individual, even though her visibility, agency capacity and importance along several decades. The topics on women's participation in assembly labor market, the laboring strategies of the individuals during crisis and work rotation were the approached subjects by sociologist, anthropologists and demographers during this period (Catanzarite y Strober, 1989; Barajas y Rodríguez, 1992; Carrillo, 1994). In the academic discourse of the 1980's decade it was emphasized women's working conditions in assembly factories rather than their relation with other individuals in the political and social ambit.

**Third cycle**

The women's workforce flexibilization cycle in the emergent northern border corresponds to new assembly industry patterns linked to their territorial expansion towards medium-sized cities and some rural populations in the center-north, occident, center and the Peninsula of Yucatan, as previously mentioned. During this cycle, men were put at an open competence level with women to get a job in the assembly industry, however with uneven opportunities due to the flexible hiring policies and to the deterioration of the work condition in the 1990's decade. To the previous can be added the economical decrease of some of the traditional assembly activities such as tanning, shoe production, metal-mechanic industry and the cotton growing, which especially affected some cities in the center and south of Mexico, that later would become the new destination for Mexican and foreigner assembly factories (De la O y Quintero, 2002).

During this cycle, man and women searched for employment opportunities in a flexible and in-expansion sector, as assembly industry, where out of a hundred women 81 men were hired at a national level in the beginning of the term (Table 1). This period was of great uncertainty in the assembly sector because of the
The gradual elimination of customs' tariffs protections derived from NAFTA's coming into effect, and the later impact in employment due to the 2000 economical North American recession. Specifically in Baja California 23.1 percent of the assembly industry work positions was lost; in Chihuahua 16.9 percent, and in Tamaulipas 10.6 (INEGI, 2002).

In this context, the workforce de-feminization process took different directions in the assembly zones. In Cities such as Matamoros and Hermosillo a feminine hiring pattern prevailed, in a lower intensity respecting previous decades however, with 62 and 37 hired men out of a hundred assembly hired women, respectively in the year 2000 (Table 2).

In some cities in the center-north, occident, center and the Peninsula of Yucatan, a complex situation was observed. In Torreón, Lerdo, Gomez Palacio, and the State of Puebla a more masculine hiring pattern prevailed, with almost 90 men workers out of a hundred women hired in the confection and clothing sector. In a very short period of time it was assumed that in these cities this occupation pattern, some enterprisers even manifested the importance of "the docility and agility of young men's hands", characteristics formerly attributed to feminine work.

As for in Guadalajara, Aguascalientes and Merida there was a feminine hiring pattern, where 60 men were hired out of a hundred women in the year 2000 (Table 2). This tendency was more intense in San Luis Potosi, Guanajuato and Zacatecas, with indexes lower than 50 men out of a hundred women.

According to the described behavior, a relation seems to exist between the incursion of assembly factories in the country, especially towards south, and the working opportunities' feminization. For instance, the more feminized sectors are located in the electronics and confection sectors in no-border-line municipalities, with 46 and 59 men out of every hundred women hired in assembly factories in the 2000. Meanwhile, in the automotive parts' sector it was identified 76 hired men per each hundred women in the same period (Table 3). These data contrast with those of the border cities, where a men-women proportional hiring pattern was observed, under a one-and-one men-women ratio, in the assembly industry.

Likewise, feminine opportunities to be in technical positions seem to be equivalent for men and women in the emergent assembly regions, at least it is for the States of Aguascalientes, Mexico, and Mexico City, Puebla, Zacatecas and Merida, where a relation of 10 to 14 male technicians per each 10 women was observed in the 2000.
This behavior is associated with the minor position number that in general is offered to this region's technicians and with perceived remunerations. Specifically, technicians in the border and in the expansion zone earned in 1999 96 761 and 74 283 MXP p.a. on the contrary technicians in the emergent region earned 52 071 MXP p.a. (INEGI, 2000). If it is considered that this last is the region where women showed higher opportunities to be in technical positions, this element permits to dimension the laboring opportunity's quality for women.

All in all, it is possible to identify different patterns of territorial distribution of the assembly factories, as well as employment profiles by gender. On the one side, a larger women's participation in cities of industrial assembly recent expansion is given. And on the other side, a higher masculine participation in occupation sectors as confection and clothing and electronics, the same which in the last decades were feminine occupation niches. Every day men are put at a more open competence level with women to get assembly-industry jobs, however in uneven conditions and opportunities, due to structural conditions that the assembly industry sets as for local hiring policies, generalized deterioration of the country's work conditions, and also to cultural and social reasons that intervene in feminine and masculine work recognition.

It can be affirmed that in the 1990's and in the new millennium, feminine employment has been under the influence of processes such as laboring flexibility and globalization, which mediated in the way to understand men and women's work and experience in assembly labor market. In this context, from study cases in assembly factories it was possible to identify modifications in labor organization systems, which was not alien to the worker's gender. It is, flexibilization resources and new hiring ways, as the partial time, for example, depended on the possibility to hire women.

From this assumption study cases were carried in different border cities, and in those regions where assembly factories had settled, finding evidences of new schedules, more flexible labor days and remuneration forms associated to productivity. In spite of being operating in a clear gender segmentation in positions and ascendant mobility opportunities (Salzinger, 1992; Carrillo, 1994; De la O, 1995 y 1997; Zúñiga, 1999; Castilla; 2004).

14 According to the most recent inform of the Reflection and Labour Action Centre (Cereal in Spanish), published in 2006, it was possible to identify in electronic manufacturing centres installed in Guadalajara, Chihuahua and Tijuana, various violations to the labour rights, among which stand the evasion of labour responsibilities, accidents and work illnesses, the use of toxic and dangerous substances, sexual harassment and non-dignifying treatment, as well as the scarce freedom of syndic association. Among the enterprises that collaborated for the elaboration of this inform are IBM, HP, HP, Solectron, Flextronics, Sony, SCI Sanmina, Jabil and Celestica (Public, June 27th, 2006).
Women's work in productive modernization and laboring flexibility contexts unveiled the complexity behind the feminine "qualifications" definition, if they are reasoned from values and culture points of view. There are enormous differences with the perspectives on sexual segregation of the work, feminization and hierarchy-assignment of the positions according to categories, for under those criteria, women's work is defined as unqualified. Hence, the importance of recognizing the values and culture in the women's work definition in assembly factories.

For instance, it has been observed that in assembly industry laboring insertion there are still different values among men and women when deciding their ingress to labor market. The elements women value are referred to work conditions, laboring stability, cooperation, environment and social services' access. This helps to understand the good reputation of the "new organization forms" in these factories and the management speeches appropriation on "the factory as referent of the family" (De la O, 1997).

Another phenomenon which has been uncovered is the difficulty that men express to be in job positions identified as feminine, linked to skill, endurance and feminine work culture demands, in the assembly laboring media, masculine presence has lead its specificity and gender differentiation to change, which means those jobs are in a redefinition path for men integration.

Besides, from assembly factories expansion towards the center and south of the country, some researchers recognized the ethnicity importance on their studies, either by the effects of laboring indigenous population migration or by the localization of new assembly factories in indigenous populations' regions, as in Puebla and Yucatan's cases. As well as poverty subject and gender exclusion in some cities in the north and in the south of the country.

Conclusions

In the present article I mentioned my interest in analyzing how territorial mobility process of the assembly factories influences the regions' configurations and women's employment patterns. For this, at first I approached to the assembly factory's geographical mobility, which allowed me to identify the conformation of three regions or borders of these factories in the country, as well as different employment cycles and patterns involved. This somehow expresses the articulation between transnational capital mobility and the local workforce supply adequacy, whose effects have been unfavorable for women along for decades.
On the one side territorial assembly factory mobility has influenced the conformation of at least three borders or axes for this activity. I defined the first as historical and include pioneer cities of this activity since 1960's decade. To the second as an expanding axis of the activity beyond the border, that since 1980's decade includes cities in the north, northwest and northeast of Mexico. And the emergent axis whose characteristic is the fast growth of the assembly factories in the center-north, occident, center and the Peninsula of Yucatan, since the 1990's decade.

In the first axis stands out a productive specialization pattern oriented towards electronics and automotive parts production, as well as a germinal process of feminine workforce use in the 1960's decade, process that ended in an employment pattern similar for men and women. In the second axis I identified the relation between assembly factories mobility and the de-industrialization and traditional economical activities crisis situation that was lived in most of the new destinations, where a larger masculine participation was observed. In the third axis stands out the specialization in confection and clothing activities with women's mass employment.

Likewise, assembly industry mobility in the country favored the conformation of regions in blood and in decay, according to the typo of productive specialization and the connection with the international markets. In this way, in the border with the United States and in the northern part of the country factories specialized in electronic products processing and automotive parts were established. In this process is distinguished the coexistence of the economical decay in different cities and localities of the country, where the arrival of the assembly industry was converted in an employment creation strategy in front of the impossibility to develop a local strategy for employment.

Assembly factories growth and mobility in the last forty years show unfavorable cyclic changes for women. When assembly factories started operations in the Mexican northern border, women were the required workforce, contributing to the construction of a feminine workforce internal market. As time passed, from a higher productive specialization and in an economical crisis context, women's occupation in these factories did not grow with the same dynamics as that of men, except in traditional and badly-paid activities in the center and in the south of the country. It is, in lesser opportunity niches, as Mexican traditional confection.

This long occupational segmentation by gender process took almost forty years and gives as balance the gradual diminution of laboring opportunities for
women in assembly industry, who currently compete for employment opportunities side by side with men in a new hiring scheme, occupational vulnerability context due to the increase in the number of jobs with less benefits, pensions and promotions.

During the 1970's decade, women's assembly work was considered marginal and disqualified, hence the predominance of the image of "many, pretty and cheap". In the 1980's decade, mass presence of women in the economical activity unveiled the centrality of the women's paid job in the economical system, even though the men's incorporation to assembly industry tendency opened the "masculinization and feminization" of this sector theme.

In the 1990's decade, in the light of the statements on globalization and flexibility, the way to understand job, men and women's experience in the work market changed, however, women's work image as secondary and disqualified remained, reality that alludes to work market segmentation and to a dual market. According to those theories, women's work secondary character was due to their role in social reproduction, where created differences were used by the market. In this way, it must be analyzed the enterprises' preference to hire women, beyond salary savings, when demonstrating the importance of women's effective qualification, although those are informal or not school-learnt. This shows the need to overcome the subordination vision of feminine work, recognizing its competences and real qualifications, as well as the influence of the cultural factors in feminine work definition (Kergoat, 1978).

Labor's proletariazation and feminization are a consequence of the change in the laboring characteristics of the last decades, and not the cause of this laboring condition for women. For instance, men's access to assembly factories enabled their promotion and not so their proletariazation, why is it considered in women's case the opposite? More often ever time it is necessary to go from a marginal women's work perception to the recognition of their mentality in the global economical processes.

What these almost forty years of feminine presence in the assembly factories show is that if women are incorporated to a laboring sector without the cancellation of the gender difference, their participation is reduced to the handling of stereotypes on their work (Borderías, 2003); from this the change of images used by the assembly industry employers when referring to women in the first years as "abundant, young and cheap" and, nowadays as "scarce, old and expensive".
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