

THE EFFECTS OF INDUSTRIALIZATION ON WOMEN: BRITISH AND MALAYSIAN EXPERIENCES.¹

Leslie O'Brien

[Bila kita mengkaji kesan pengindustrian terhadap wanita pada kurun ke sembilan belas di Britain dan di akhir kurun dan puluhan di Malaysia, nyata bahawa kebanyakan daripada pengalaman di kalangan wanita tetap sama walaupun peluang pekerjaan didapati berbeza. Di Malaysia, perkembangan industri pembuatan telah mempertingkatkan sumbangan golongan wanita sebagai tenaga buruh dalam sektor tersebut. Ini disebabkan oleh beberapa faktor, terutama sekali kerana wanita dianggap lebih "sesuai" untuk kebanyakan daripada tugas tugas pengeluaran yang ada sekarang lebih-lebih lagi dalam industri elektronik. Kedua-dua peluang-peluang pekerjaan untuk wanita di Malaysia tidak diakibatkan oleh faktor dalam seperti yang berlaku di Britain. Dalam kes Malaysia, agensi-agensi luar, terutama sekali kapitan asing dari Tokyo dan New York berperanan dari segi membentuk pasaran buruh. Walaupun aliran di Malaysia ialah untuk penyertaan wanita yang lebih ramai sebagai tenaga buruh dalam sektor pembuatan, tapi seperti apa yang pernah dialami oleh wanita di Britain pada kurun ke sembilan belas, pekerja-pekerja wanita di kilang tersekat oleh peranan keribut yang terhad dan selalunya mereka bekerja di bawah pengawasan kaum lelaki serta mereka mempunyai sedikit saja peluang untuk mencapai kemahiran.]

When we examine the impact of industrialization women in nineteenth century Britain and late twentieth century Malaysia, we see the employment opportunities run in opposite directions but many of the experiences of women remain the same. In Malaysia, the development of industrial manufacturing has seen an increase in the female share of the manufacturing labour force. This is due to a number of factors, chief amongst them the supposed greater suitability of women to many of the production tasks presently being undertaken, especially, the electronics industry. Secondly, employment opportunities for women in Malaysia are not just a consequence of internal factors as was the case in Britain. In the Malaysia case outside agencies, especially foreign capital from Tokyo and New York, helps shape the labour market. Although the trend in Malaysia is for greater participation of women in the manufacturing labour force, like their counterparts in Britain in the nineteenth century, women factory workers are confined to a limited range of work roles, are generally employed under the supervision of men and have few opportunities for training.]

INTRODUCTION

This paper will address the subject of 'Women in the Urban and Industrial Workforce' within a comparative framework. An attempt will be made to ascertain whether or not the patterns of female labour force participation in Southeast Asia today are reproducing patterns of the experience of women in the Western European transition from

¹This paper was first prepared for the conference *Women in the Urban and Industrial Workforce: Southeast and East Asia*, Manila, The Philippines, 15-19 November, 1982.

idealism to industrial capitalism. This question will be explored by reference to the historical experience of women in Britain in the period proximately 1750 – 1900 and the case of women in Peninsular Malaysia today.

THE QUESTIONS REGARDING KEY CONCEPTS:

Since classical times, the 'city' has been identified with 'civilization'. Both Marx and Weber were so impressed by the apparent contrasts between city and countryside at certain stages in the emergence of 'modern' society, they seemed to treat the city as a generic social structure (Abrams in Holton, 1982). Many contemporary studies treat urban habitation as a causative influence in its own right. Studies of women and the 'industrial revolution' in Western Europe, for instance, place a great deal of emphasis on the difference in options and opportunities available to urban compared with rural women (e.g. Anca, 1978; Tilly and Scott, 1978). Recent works on women and 'industrialization' in Southeast Asia suggest that rural to urban migration is causally significant (see e.g. Ariffin, 1980; Jamilah, 1982/83). Is there something special about town life? What, if anything, does the concept 'urban' or the idea of 'urbanization' tell us about the types of social changes the various authors are attempting to explain and the implications of such changes for women?

What people do, in particular their social relations of production, of greater importance than the space in which such social relations occur, although locale may not be unimportant. It is contended, however, that to frame one's argument around rural-urban differentiation, or the process of rural to urban migration, is to place the problematic of women industrial workers within a framework of limited explanatory value. Such an approach tends to entail, or suggest, analysis in terms of the artificial dichotomies 'rural' vs 'urban' and/or 'traditional' vs 'modern'. 'Urban' tends to be associated with all that is modern, progressive and free; 'rural' with all that is traditional stagnant and fettered (see for instance, Marx, 1976; Weber, 1978, and most writings within the Parsonian tradition (Hoogvelt, 1982 for elaboration). Even if a rural-urban continuum is allowed for, the polarities are suggestive of certain consistently contrasting characteristics which are difficult to substantiate, theoretically or empirically. Firstly, the perspective is more tautological than explanatory. Secondly, research has shown that there is little empirical basis for the contrasts 'rural' and 'urban', either in terms of social organization, economic functions or cultural values (see e.g. Hill, 1968; Castells, 1977).

A further difficulty concerns the concept 'industrial' and,

relatedly, the process of 'industrialization' (often urbanization and industrialization are conflated). The type of technology used in production is very important. The shift from human or animal power to machine production is related to some significant social changes. In some of his writing, Marx even suggests some degree of technological determination of modes of production (e.g. the comment 'The hand-mill gives you society with the feudal lord; the steam-mill, society with the industrial capitalist', *The Poverty of Philosophy*, in Braverman, 1974:18). Technology does not exist in a vacuum. It is embedded in social relationships. In producing, whether deploying industrial or hand technology, men and women enter into definite connections, relationships with one another (Marx, 1972: 176-177). Outside the social world, the introduction of industrial technology has generally been associated with the development of capitalist relations of production (Kay, 1975; Lloyd, 1982). Industrialization historically has involved some degree of separation of 'home' and 'place of work', and this is important, especially for women (Pinchbeck, 1969). The process of 'industrialization' however, not only involves the expanded deployment of industrial technology in production and the growth of factories but it also involves a radical transformation of society in all aspects, economic, social, political and cultural (Sutcliffe, 1971: ix). To locate women industrial workers theoretically, we need to note that when they go to work in a factory, they not only join the industrial workforce but also become direct members of the industrial proletariat. As factory workers, they are sellers of labour power. Their work creates surplus value for local or international capital. They are directly involved in capitalist relations of domination and subordination. These factors are more important than whether or not the factory in which they work is located in the town or the countryside, or whether they were born in a village.

In addition to the class implications of women working in factories the fact that they are women is also significant. In all known societies there has been some division of labour by age and by sex. The implications of these divisions are the subject of considerable debate and will not be elaborated here. Suffice it to say that women's gender status is related to the gender division of labour and that the implications for women of their gender status is that they are likely to have different labour market options and opportunities than those available to men simply because they are women: the gender division of labour gives rise to certain ideas about the social worth of women. Such ideological turn, contributes to the reproduction of the gender division of labour in society (see O'Brien, 1979 for discussion). Class and gender both need more appropriate frameworks for the study of women industrial workers than the spatially-determined rural/urban perspective.

INDUSTRIAL MANUFACTURING IN BRITAIN AND MALAYSIA:

Any comparison of the work roles available to women in Britain in the 18th and 19th centuries and Malaysia today needs to be located by reference to the socio-historical processes within which the allocation of work roles occurs. The development of industrial manufacturing in Britain occurred within the context of the transition from feudalism to capitalism in Western Europe. Although fuelled by inputs of wealth from plunder and merchant capitalism, industrial capitalism developed out of changes largely endogenous to that society (Dobb, 1963; Marx, 1972; Murray, 1977 for debates). At the time industrial manufacturing emerged, the British economy was undeveloped. It was never underdeveloped by a network of exogenous forces (see Turner, 1978 for discussion). The terms and conditions of industrialization were written largely by inside forces.

The Malaysian case stands in complete contrast. Widescale industrial manufacturing in Malaysia, indeed throughout Southeast Asia, is a recent phenomenon. The Malay Peninsula was, however, drawn into the orbit of the world capitalist system in the eighteenth century, via British colonialism. Capitalist penetration was uneven, drawing some parts of the country into capitalist relations of production, affecting others primarily by way of the penetration of market forces. Through a process of expropriation of natural resources, expropriation and utilization of low-pay labour forces and unequal relations of exchange, Malaysia was unevenly developed. Industrialization in Malaysia, even today, is a much subject to decisions made by external forces as to internal class factors (Brennan, 1982; O'Brien, 1982 for discussion).

BRITAIN:

Britain in the pre-industrial period was not homogeneous as regards economic organization or social structure. The major class distinction is between those who owned and those who did not own land, the different means of production. Following the enclosures and the dispossession of much of the peasantry (the Celtic parts of the British Isles were not affected), land ownership was heavily concentrated (Dobb, 1963; Marx, 1976; Barnes, 1983). As late as the eighteenth century, the majority of the population (65% in 1750, Tilly and Scott, 1978: 12) still lived and worked in the rural areas. Some were tenant farmers. Much of the dispossessed peasantry had, however, become a class of agricultural wage labourers on the large farms. Alternatively, or in addition,

some of the population had turned to cottage industry to earn a living. The manufacture of goods for exchange (craft and cottage industries) using relatively simple technology, also took place in the towns. In the towns and the countryside, economic activities were small-scale, labour-intensive and low productivity undertakings (Tilly and Scott, 1978). In both towns and country, the household was the main unit of production and of consumption. The labour needs of the household defined the work roles of men, women and children. Men, women and children were all expected to support themselves (Branca, 1978; Tilly and Scott, 1978).

As a gender group, women bore prime responsibility for the production and preparation of food and the care of very young children (Branca, 1978; Tilly and Scott, 1978). What women did, in addition to this 'domestic' role, depended upon their class and their marital status. The wives and daughters of poor farmers, for instance, would work in the fields alongside their husbands. Some married women, but especially single women, worked as domestic servants. This role generally involved participation in the wider economic activities of the household, in addition to washing, cooking and cleaning. The wives and daughters of wage labourers could only contribute to the family economy, as they were supposed to, by involvement in some form of domestic industry (e.g. spinning, knitting, lacemaking, weaving) or working as wage labourers themselves. Most wage labouring women was undertaken in agriculture or in domestic service, but it included work on construction sites and the like (Pinchbeck, 1978; Branca, 1978; Tilly and Scott, 1978).

In Britain in the pre-industrial capitalist period, women were engaged in a variety of occupational roles. Much of the work women did was strenuous. This was particularly the case for women working in agriculture but also pertained for women working in certain other occupations. Within the division of labour, some tasks were performed almost exclusively by men, other tasks almost exclusively by women. In many instances, men and women worked alongside each other, sharing tasks. The work women did was socially recognized, and they received an economic reward for their labour, although they were not always able to control its expenditure. Further, in most work situations, women occupied a subordinate role to men, working as assistants or servants to their fathers, husbands or other men. Although there might not have been any qualitative difference in the tasks they performed, women were known as 'farmer's wives' or 'wife-craftsmen' rather than accorded the full job title. Because they could perform useful service without technical training, women were often denied apprenticeships and were thus less-likely to attain the rank of 'skilled' worker. Moreover, because their labour was more likely to

classified as subsidiary and unskilled, women were seen as less legitimately entitled to apprenticeships and training than men (Pinchbeck, 1969; Branca, 1978; Tilly and Scott, 1978). The subordinate status of women at work and the work of women was reproduced by a set of practices which held them in a vice-like grip.

THE DEVELOPMENT OF THE FACTORY SYSTEM:

In the early years of industrial capitalism in Britain, the system of domestic manufacture expanded. This increased the range of opportunities available to women to earn a cash income whilst working in their homes. (At the same time, increasing commodification put pressure on men and women to have access to a cash income). Job opportunities for women in the late 18th century, however, often arose as a consequence of changes that deprived other groups of women of their livelihood.

The main cottage industry in Britain was the textile industry. Textiles were divided into different branches (wool, flax, linen and cotton) and women were unevenly represented within the different branches. Women did participate in every branch of the woollen industry however, and this was the oldest and most important trade (Pinchbeck, 1969). Since the 14th to 15th centuries, women had worked as wool sorters, wrappers, carders, spinners and dyers. As in other branches of the textile industry, women were also engaged as weavers, but this was primarily a male occupational role (Pinchbeck, 1969:158). The first major technological innovation in textile production occurred with the introduction of the 'flying shuttle' in the late 18th century. This came into general use amongst cotton weavers about 1760 and later spread to other branches of the industry. The development of the shuttle made weavers more efficient and thus created a demand for spinners, as more thread was needed to supply the faster-moving looms. This expanded occupational opportunities for women, because spinning was entirely the work of women and children (Pinchbeck, 1969: 115, 19). Within just a few years however, spinning too was mechanized, and the job opportunities women had so recently gained were lost.

Hargreave's 'spinning jenny' came into use in the 1770s. The jenny multiplied the number of spindles that could be worked by one spinner. This increased productive output but did not lead to a reorganization of the industry. The new machines were worked by the traditional labour force, viz women and children, operating from a home base. The next advance, Arkwright's water frame' (patented in 1775), moved the factory production of warp by a male labour force. For a few years, home spinning by women and children and factory production

by men complemented each other. At the end of that decade however, Crompton combined both production techniques into a 'mule', which reduced the need for spinning labour *per se* and saw production move entirely to a factory base (Pinchbeck, 1969: 116). What had been 'women's work' now came to be 'men's work', not because of the spatial separation of 'home' and 'place of work' but because women were denied access to the new technology used in factory production. As has been detailed above, women occupied a subordinate position to men in production. Even in areas where women were the main force of production (e.g. spinning, where women had the numbers, the skills and the training) their generalized subordination rendered them vulnerable to male definitions of their role within the processes of change. The greater social value placed on men as workers; the greater social value accorded to the work men did meant that the new, presumably 'important' technology was seen as best left to men, the 'important' members of the society. Men, not women, were taught to operate the new machines. Men, not women, were given the opportunity to train, and thus acquire the skills associated with the new production process (Pinchbeck, 1969: 115-117 for discussion). The male advantage of the pre-industrial period was transferred to the new of factory production.

At the same time the changes noted above reduced work opportunities for large numbers of women, they also created opportunities for the employment of other women. Increased output following the mechanization of spinning expanded to demand for weavers. Although more a male than a female occupational role, the increased demand for this type of labour (exacerbated by the growing popularity of coarse cloth) and the absence of many men due to the French revolutions, domestic wars, facilitated the entry of women into a largely male domain — in addition, the economic needs of women and children, given the loss of employment opportunities in spinning, led to their actively seeking alternative (Pinchbeck, 1969: 163)

Labour shortages occurred first in the cotton trade, leading to higher wages for weavers in this section of industry. This attracted weaving labour from linen and wool to cotton production, creating shortages in the areas they had vacated and further reducing barriers to the entry of women into the work world of men. During this period, women came to comprise up to half the weaving labour force in some areas, whereas previously their participation had been minimal (Pinchbeck, 1969; Branca, 1978; Tilly and Scott, 1978). Although now comprised a high proportion of the weaving labour force, women weavers had been apprenticed. Most were dependent on skilled male weavers to set up their looms. Their lack of formal qualifications and certain types of knowledge meant that women, as a general

group, continued to occupy a subordinate role to men at work. The conditions of their incorporation into weaving also allowed for their being paid at a lower rate than male weavers. Although male weavers in some sectors of industry argued against the lower wage for women (not for feminist reasons but to maintain their own wage level), the large number of lesser-skilled women and children, in combination with the growing oversupply of labour, saw weaving wages drop below the poverty line. Women had work but it did not provide them with an efficient economic return for their own reproduction (Pinchbeck 1969: 16-182 for discussion).

Domestic production of textiles declined in the late 18th century and opportunities for employment in agriculture were rapidly contracting. At the same time, the factory production of yarn and cloth was gaining momentum. New opportunities were developing but not fast enough to meet the needs of a population largely divorced from its means of production. The early factories were very smallscale operations, employing a few skilled male workers and large numbers of low-skilled women, children and apprentices. By the early 19th century, successive economic and technological change had increased the need for adult labour, and factory employment opportunities for all, including women, expanded. This trend became more pronounced following the passing of the Factory Act of 1833 which prohibited the employment of children (Pinchbeck, 1969: 184).

The female labour force in the early years of the factory production of textiles did not comprise those women whose livelihood had been eroded by the mechanization of spinning. Rather, agricultural labourers, domestic servants, unskilled workers from other trades and the major — men and women not averse to factory work and attracted by the higher wages — worked in the mills (Pinchbeck, 1969: 1983). With the development of the steam loom however, women who had been involved in the domestic production of textiles moved into the factories. This was as much due to the hiring practices of manufacturers, who preferred to employ those who had experience on the handloom, as to the crisis amongst domestic weavers:

'...the majority of the girls who attended the power looms in the 'thirties and 'forties were the daughters of distressed handloom weavers who entered the factory to better their prospects: and the married women, more often than not, were wives of weavers, forced by bitter necessity to leave their homes. In either case, it was very largely their earnings that preserved the handloom weavers families from utter starvation.'

(Pinchbeck, 1969: 185)

The female factory worker is one of the enduring images of

industrialization in Britain, and large numbers of women did work in the mills. Most were engaged in low-pay, low-skilled and repetitive jobs, performed under the most horrendous conditions (see e.g. Engels, 1969 for details). Economic and technological changes produced occupational opportunities for women, but jobs for women in the manufacturing sector generally did not grow as fast as job opportunities occurred in agriculture and domestic industry. Further, as industrial capitalism developed, production shifted from textile and garment manufacture to iron and steel production; to the manufacture and usage of so-called 'heavy' machinery in so-called 'heavy' industry. The decline in employment opportunities for women in 'light' industry (textiles) was not offset by new job opportunities in the emerging industrial sector. Many of the new industries employed male workers almost exclusively. This is not to argue that women were absent from the coal mines or that women played no part in iron and steel production or the manufacture of machinery. Women did work in these industries but their participation rates were very low. Further, women were more likely than men to be engaged as casual labourers, rather than apprenticed into the metal trades and taught the skills of production. Throughout the latter half of the 19th century, the proportion of females in the industrial labour force in Britain declined. By the end of the century the typical industrial worker was a man. The symbol of early industrialization, the mill girl, had been replaced by that of the black-coated male worker (Pinchbeck, 1969; Richards, 1974). Why did this so?

Even though the male wage rate was higher than the female wage rate in the 19th century, men were hired in preference to women to work in 'heavy' industry. Men were thought to be better suited to the needs of the production process than women. Men were considered to be physically stronger than women, thus better able to operate the machinery used in the production process. Men were thus given access to training which enabled them to perform work roles women could not. The imagery of the male industrial worker pertained despite the historical example of women's participation in production in the industrial period; despite the arduous physical labour women performed in agriculture, construction and certain sections of textile production (e.g. the manufacture of carpets), despite the work women did in the coal mines. It seems clear that 'light' and 'heavy' are not absolute categories but social constructions. Thus the shift from textiles to iron and steel production and related industries was a shift from labour intensive to capital intensive production. Men, being better placed to define the forms of work than women, exerted monopoly control over occupational resources. Men, as a gender group, excluded women from the competition for jobs by reference to a range of specious biological arguments.

and psychological arguments. This was further re-enforced by the development of the bourgeois ideal of the 'supported' wife and the emergence of the school system. The number of women in poverty in the latter part of the 19th century, the continued importance of domestic service for women, attest to the limited range of wage labouring opportunities for women. It was not until well into the 20th century when the continued expansion of capitalism had created a service sector with clean, 'white collar' jobs thought suitable for women (and not wanted by men) that the parameters of female employment opportunities in Britain expanded (Richards, 1974; O'Brien, 1979 for discussion).

MALAYSIA:

The countries at the periphery of the world capitalist economy are not just scaled-down models of what Western Europe resembled in the 17th and 18th centuries. They each have their own history; their own dynamic. Furthermore, their incorporation into the world capitalist system has affected their futures in a way which negates the possibility of any corresponding experience of development for the countries concerned. Given this, we can have little reason for believing that the experience of women will be universal through time and space or for thinking that the impact of industrial capitalism on Malaysian women, for instance, will represent some duplication of the experience of British women in the transition from feudalism to capitalism. Can we, however, find any commonalities?

The Malay Peninsula has long been subject to external contact, even control. It was part of regional empires (e.g. Srivijaya, Majapahit) and on the trade route between China, India and Arabia. In the late 18th century, European merchants' capital became involved in the region on a significant scale. In support of this penetration, the British established administrative posts in the Straits Settlements (Penang, Malacca and Singapore) and later in the Malay states. Until the end of the 19th century however, the region was subject generally to indirect rather than direct colonial rule (Gullick, 1958; Emerson, 1964).

The pre-capitalist mode of production was one based upon labour intensive agriculture. Fishing was also important, as was the production of a variety of handicrafts. Money was used and trade within the country was also widespread. Indigenous Malay women participated in all forms of production, although a division of labour by age and sex was ascertained. In addition to childminding and domestic labour, women participated in the production of 'padi' (wet rice), sometimes on their own account, generally as part of a domestic labour-force in which men

carried out field work more consistently than women. Women did go out to sea to fish but they did help produce and repair fishing as well as maintain the land-based economy in the absence of fishermen. Women worked in craft, both as independent producers as well as members of household economies. Malay women played a significant part in trade (Firth, 1946; Swift, 1965; Firth, 1966). Their participation in production was sufficient to modify the deleterious impact Islam might have had upon them, following the conversion of the country after the 14th century. Their economic activities were insufficient, however, to eliminate a male advantage in economic, political and social life (Manderson, 1979; O'Brien, 1979).

Although drawn into the world capitalist economy, capitalist relations of production in Malaya were contained to the mines and plantations where immigrant wage labourers produced tin and rubber (Jackson, 1961). In terms of the articulation of the pre-capitalist and capitalist modes of production, the pre-capitalist mode dominated well into the 20th century. The indigenous peasantry were, in fact, constrained from entering the production of cash crops or joining the wage labour system by a combination of colonial legislative enactments, economic practices and customary edicts (Jomo, 1977; Lim, 1977). Unlike the situation as pertained in other Third World countries (Deere, 1976; Saffiotti, 1977; Mies, 1980; Meillassoux, 1981), the wage labour/subsistence division was more a class and ethnic than a gender distinction. The subordinate class of one ethnic group (the indigenous Malays) were contained in the subsistence sector, while the subordinate classes of other ethnic groups (immigrant Chinese and Tamils from the Indian sub-continent) carried out the wage labour function at the lowest rates of pay.

As the capitalist mode of production came to dominate in the articulation between the pre-capitalist and capitalist modes (Rahman, 1971) 'second stage of articulation', so wage labouring commodity production grew in importance within the Malayan social formation. There are a number of reasons for believing that as the 20th century proceeded, the more generalized gender pattern pertained. Malay men first joined the wage labour force, leaving Malay women (necessarily of the same generation) behind in the villages to perform subsistence production. More Malay men than Malay women entered the wage labour force during the 20th century and performed work that were socially recognized and rewarded as labour. More Malay men than Malay women worked within the industrial manufacturing labour force until very recent years. There were, and are, large numbers of Malay women categorized as 'unpaid family workers' in census labour force surveys (O'Brien, 1979 for details). Whether these women who have been involved in subsistence production are the wives of

daughters of men who entered the wage labour force, and thereby contribute to the reproduction of the family and aid capital accumulation in obviating the payment of a family wage for men, is an issue which requires further exploration. There is however a wealth of evidence that the development of industrial capitalism in Malaysia has, until recently, tended to create job opportunities for men, not women (O'Brien, 1979).

Industrial manufacturing in Malaya is a phenomenon of the 20th century. Until the 1950s, manufacturing made an insignificant contribution to Gross Domestic Product. Even at the time Malaya obtained political independence from Britain (1957), the manufacturing sector comprised a number of small-scale family businesses and a few large companies engaged in the production of 'import substitution' manufactured goods. The industrial proletariat was not a force to be reckoned with. Malaya conformed to the international division of labour: a source of raw materials and a market for goods manufactured in the factories of the 'centre' (see amongst others, Amin, 1976 for discussion).

Employment in most sectors of import-substitution manufacturing industry was essentially a male, non-Malay preserve (although women were engaged as unpaid workers in family enterprises). Such women as did obtain employment in manufacturing were overwhelmingly concentrated in the food and beverage processing industries or in textile and garment manufacturing. These women were more likely to have been non-Malay (especially Chinese). At the end of the period of direct colonial rule and for the first 10-15 years afterwards, most women in Malaysia worked in the agricultural sector (as subsistence producers, processors of agricultural products or plantation labourers), as unpaid family workers throughout the class structure or as domestic servants (Malaya, 1960, Table 12-15; Malaysia, 1973, 1977; O'Brien, 1979, 1982).

Employment opportunities for women in the industrial manufacturing sector of the Malaysian economy prior to 1970 related to a number of influences, none of which should be seen as causative in its own right. Some factors we might identify as 'push' factors, e.g. the class position of the women concerned (involving the need to obtain a cash income); marital status (involving the consideration of alternative sources of support and what they might be); the question of geographic mobility (or otherwise); ethnic status (poverty transcends ethnic boundaries, non-Malays however were less likely than Malays to have access to land, thus more likely to have had a need to sell their labour power). Some factors might have 'pulled' women into the industrial workforce at that time. Firstly, the nature of the product/s

manufactured drew women into certain sectors of industry. Women as preparers of food and sewers of clothing in the pre-capitalist period seem to have been seen as the more 'logical' choice of workers for participation in the extension of these activities. Secondly, the nature of some of the tasks involved in the production process seems to have been a factor in the preferential recruitment of women into work roles requiring skills and/or personal qualities thought to be uniquely female. Finally, there is evidence that women were a substratum in the pre-capitalist economy of Malaya, likewise a secondary category in China and India, the societies from which most immigrant women in present-day Malaysia (or their forebears originated). Such inequality has legal, cultural and economic dimensions for Malaysian women — like their British counterparts — vulnerable to male definitions of their role within the processes of change. They are vulnerable too to greater exploitation within capitalist relations of production. Although difficult to demonstrate, because of the differential classification of work roles for men and women, Malaysian women workers generally earn less than men. This increases the likelihood of their recruitment into those work roles thought particularly suitable for women, especially if such jobs are not wanted by men (O'Brien, 1977, 1982, 1984).

In the late 20th century, capitalist relations of production have become even more widespread and industrial manufacturing has grown in importance in the Malaysian social formation. These changes have been fuelled by State development strategies, as well as changes within the world capitalist economy. For its part, the Malaysian government has encouraged foreign investment in the form of manufacturing enterprise, both as a means to (hopefully) solve local problems of un- and under-employment and as a source of foreign exchange earnings. At the same time, capital from the developed countries has been seeking cheaper and more compliant labour power than could be obtained on home ground (Frobel, Heinrichs and Kreyen, 1980; Malaysia, 1981a; O'Brien, 1982, 1983). From the early to mid-1970s, foreign capital (from Britain, as well as Japan, the United States, Western Europe, Australia and elsewhere in the ASEAN region) has entered Malaysia and, in joint venture with local and State capital, established a number of 'world market' factories (i.e. those transnationally-owned factories produce goods at the capitalist periphery for sale on the world market).

In Britain, the expansion of industrial capitalism saw a shift from the first-established 'light' textile and garment manufacturing industries to the production of iron and steel and so-called 'heavy' industries associated with these metals. For reasons elaborated above, this entailed a decline in the participation rates of women in manufacturing labour force. In Malaysia, by contrast, the expansion of

Industrial capitalism has seen the female labour force in the manufacturing sector move in the opposite direction, i.e. an increased rate of participation with development. Industrial capitalism should not be equated with industrial manufacturing. Capital accumulation through agricultural industry is of great importance in Malaysia, even

industries which employ large numbers of women. Women a scant 17% of the manufacturing labour force in 1957. This increased to 29% in 1970, a consequence of the government's upon diversifying the economy away from agriculture the medium of import-substitution manufacturing. By 1979 less than a decade later, women comprised 39% of the labour force (Malaysia, 1977. 1981b O'Brien, 1983). A many, but not all this number, are young, single Malay women

2). The explanation of this phenomenon relates to class, gender the nature of the capitalist world economy.

proportion of the female than male labour force remains tied to agriculture. The role of women's participation in subsistence to underwrite adequate male wages is clearly of continuing importance in the process of capital accumulation. There is now, however, an accelerated movement of women from agriculture to industry (Malaysia, 1978; 1981b). This suggests the mode of accumulation is in the process of change.

In addition to wage rates, another factor relevant to the increase in the number of women in the manufacturing labour force is that many of the production processes in the now-expanded manufacturing sector require attributes of the labour force assumed to be intrinsic to the female. Like the textile and garment manufacturers who set up business before them, many employers in chemical processing plants, pharmaceutical and micro-electronics industries seek out manual dextrous and compliant workers. Manual dexterity, patient compliance, submission to male authority are assumed female characteristics in Malaysia. They are skills and qualities emphasized in the process of socialization into the adult female role (O'Brien, 1977). Because they are attributes acquired in settings not directly related to capital accumulation, because they are qualities considered to be 'innately' female, many of the skills women bring to the market place are neither socially recognized nor rewarded. In employing women to work on production processes which demand nimble fingers and manual dexterity, capital acquires cheaper labour power than the male equivalent, able to perform the complex tasks of production but not necessarily having to be paid at skilled rates of pay (see also Grossman, 1978; Lim, 1978).

In addition to these cost and skill factors relevant to the employment of women, women are also believed to be a more controllable source of labour power than men. Women are believed to be inherently more submissive, more passive than men. Further, they are culturally inveigled to submit to male authority (O'Brien, 1979; 1981). To diffuse class-based dissatisfaction with the work situation and thus minimize their potential for control, employers emphasize the 'femininity' of their female workers. Women workers are offered deportment and grooming lessons, the chance to participate in company beauty contests. Aspects of gender, reconstituted, are used in the context of class relationships of domination and subordination.

Evidence that women are not the passive personalities they are perceived to be can be found in the reactions of female factory workers to their job environment. Such women produce much and under great pressure (Ariffin, 1980). They are dominated as women and dominated as workers. They lack, however, legitimate avenues for class-based

action to improve their wages and conditions of work. Trade unionism is severely restricted in Malaysia. Some working women have reacted to the super-imposition of class and/or gender control which they consider to be excessive in one of the few forms available to them; mass-hysteria, a culturally-acceptable form of female protest. They protest, but do not change the structures which oppress them. The general efficacy of gender control within class relationships survives, further increasing the attractiveness of female rather than male labour power in factories (see also Grossman, 1978; Lim, 1978 Ariffin, 1980; Jamilah, 1982/83).

In addition to the above-mentioned reasons why there might be a 'demand' for female labour in the manufacturing sector, our explanation needs also to take into account the question of labour availability, to explore some of the reasons why women might to prepared to accept, or actively seek, employment in factories and to try to ascertain why men have not monopolized these new work roles, which involve the production of the newest technology, especially given their generalized power to define the situation. An important consideration in this regard is the question of education.

Since 1957, and especially since 1970, Malaysians have had better access to education. During this period, the parameters of female educational opportunities have also expanded. More women in Malaysia now gain access to education. More women in Malaysia are retained within the educational system beyond the post-primary level than ever before (O'Brien, 1979). Such increased access to education could have resulted in a significant rise in unemployment for women. Education tends to raise the hopes of the educated that they will be able to obtain clean, white collar employment. There are, however, not enough white collar jobs in Malaysia so as to absorb all the newly educated population. Most white collar jobs are monopolized by men with middle levels of education (O'Brien, 1979). Given the likelihood that young, high-school educated women would reject unpaid family work or the domestic service roles accepted by women of the generation before them, the advent of 'world market' factories in Malaysia can be seen as fortuitous. Research by Ariffin (1980) has shown that it is a significant proportion of this population that has moved into factory employment. Factory work is poorly paid, the pressure of the production line is immense, and many of the girls express dissatisfaction with their jobs (Grossman, 1978; Lim, 1978; Ariffin, 1980). Many of the factories however are air-conditioned (for the sake of the product, not the producers), a factor not without merit in a tropical climate. Many of the girls are seduced by the beauty contests and such 'extras' offered by employers. Many of the girls prefer the autonomy of individual rather than household employment,

even if it is at a very low rate of pay. Employment in factories may be all these female factory workers would want but given the present lack of alternatives it is what many accept, despite the drawbacks.

The question of education also partly explains why men are gaining employment in the new 'world market' factories at the same rate as women. As noted, many of those employed in the factories are women aged between 15-24 years. Men in this age group are more likely than women to be retained within the educational system. Education for men, as future breadwinners, is considered more important than the education of women (O'Brien, 1979). Further, men in the 15 - 24 year age bracket have other labour market options and opportunities, some of which are not available to women. This is not to deny that there is no male youth unemployment. There is considerable unemployment amongst young men yet still they have not been able to gain access to, let alone monopolize scarce occupational resources in the manufacturing sector. Despite the advantage men as a gender group have over women as a gender group in Malaysia, they have been unable to define the position of women within the processes of change as successfully as their counterparts in the British transition from feudalism to industrial capitalism. It is suggested that the 'failure' of men in this regard relates to the determination of many aspects of social life in Malaysia by external, rather than internal forces. In particular, decisions made regarding employment preferences and practices are made as much in the boardrooms in London, New York, Tokyo or Sydney as in Kuala Lumpur or Penang factories. The interests of local patriarchy seem to have been subordinated to the interests of international capital.

Will the trend counter to the Western experience of women in industrial capitalism continue in Peninsular Malaysia? This is dependent upon a number of factors. We might predict that any change in the conditions which led to the establishment of 'world market' factories in Malaysia (and thus the expansion of job opportunities for women in the manufacturing sector) would lead to reversal of the present direction of female employment patterns. The 'runaway' factories might go somewhere else, or they might shut shop and go home, if it is no longer profitable for them to remain in Malaysia. Government policy is also a relevant factor. 'Industrialization' plays a major role in development plans. Under the Fourth Malaysia Plan, 1981-1985, a Heavy Industries Corporation has been established to lead the shift from 'light' textiles, garments and electronics to 'heavy' industries, e.g. shipbuilding, motor vehicle manufacture. This might signal a pattern of the preferential recruitment of male rather than female workers into the newest industries, as well as leading to a diminution of the proportion of women in the

manufacturing labour force. Malaysian women do participate in a range of work roles not normally performed by women in Britain. Nonetheless there is a tendency towards the typing of roles in 'heavy' industry as most suitably performed by men, and a typing of roles performed by men as 'heavy' (O'Brien, 1979. 1982. 1983 for details of the division of labour in manufacturing).

CONCLUSION:

What can we learn from our cross-country comparison of the impact of industrial technology on work roles available to women? Do the implications vary according to the type of technology deployed in production? To some extent this is the case. More importantly, however, are the conditions under which new technology emerges and especially the consideration of what the male labour force is doing at the point in time. If the male labour force is fully absorbed, or if outside forces define the situation, technological change might lead to new job opportunities for women. If, however, the male labour force is not fully absorbed and if internal forces define the situation, men as a gender group might define the new technology inappropriate for women and monopolize any work roles which emerge. This might mean that they then vacate other occupational roles, leaving the way clear for women to enter formerly-male work areas. If the roles vacated are rigidly defined as suitable only for men, however, such a forward movement of men is more likely to lead to a restructuring of job opportunities along class lines but within the dominant gender boundaries.

BIBLIOGRAPHY

- Abrams, P. (1978) 'Towns and Economic Growth: Some Theories and Problems', in P. Abrams, P. and Wrigles, D (eds) *Towns in Societies* Cambridge University Press, Cambridge.
- Amin, S. (1976) *Unequal Development*, Harvester Press, Sussex.
- Ariffin, J. (1980) 'Industrial development in Peninsular Malaysia and Rural-Urban Migration of Women Workers: Impact and Implications', *Jurnal Ekonomi Malaysia* 14(1): 41-59.
- Barnes, J.A. (1983) 'The New Peasantology', Sociology Workshop, Flinders University, May, 1983.
- Branca, P. (1978) *Women in Europe Since 1750*, Croom Helm, London.
- Braverman, H. (1974) *Labor and Monopoly Capital, The Degradation of Work in the Twentieth Century*, Monthly Review Press, New York.
- Brennan, M. (1982) 'Class, Politics and Race in Modern Malaysia', *Journal of Contemporary Criminal Justice* 12(2): 188-213.
- Castells, M. (1977), *The Urban Question: A Marxist Approach*, Arnold, London.
- Deere, C. (1976) 'Rural Womens Subsistence Production in the Capitalist Periphery', *Review of Radical Political Economics*, 8(1):9-17.
- Dobb, M. (1963) *Studies in the Development of Capitalism*, International Publisher, New York.
- Emerson, R. (1964) *Malaysia: A Study of Direct and Indirect Rule*, Oxford University Press, Kuala Lumpur.
- Engels, F. (1969), *The Conditions of the Working Class in England*, Granada Publishing, St. Albans, Herts.
- Firth, R. (1946) *Malay Fishermen*, Kegan Paul, London.
- Firth, R. (1966) *Housekeeping Among Malay Peasants*, L.S.E. Monographs on Anthropology 7, The Athlone Press, London.
- Frobel, F., Heinrichs, J. and Kreye, O. (1980), *The New International Division of Labor*, Cambridge University Press, London.
- Grossman, R. (1978), 'Women's Place in the Integrated Circuit', *Pacific Research*, 9(1): 2-16.
- Gullick, J.M. (1958) *Indigenous Political Systems of Western Malaya*. The Athlone Press, London.

- Elton, R.J. (1982) 'Cities and the transition to capitalism and socialism', paper presented to the 10th World Congress of the International Sociological Association, Mexico City, August, 1982.
- Gogvelt, A.M. (1982) *The Third World in Global Development*, Macmillan, London.
- Robertson, R.M. (1961), *Immigrant Labour and the Development of Malaya 1786—1920*, Government Printer, Kuala Lumpur.
- Smith, M.A. (1982/83), 'Industrialization, Female Labour Migration and the Changing pattern of Malay Women's Labour Force Participation', *Southeast Asian Studies*, 19 (4): 412-425.
- Smith, K.S. (1977), *Class Formation in Malaya: Capital, the State and Uneven Development*, Ph. D Harvard University.
- Smith, G. (1975). *Development and Underdevelopment. A Marxist Analysis*. The MacMillan Press.
- Smith, T.G. (1977) *Peasants and Their Agricultural Economy in Colonial Malaya, 1874-1941*, Oxford University Press, Kuala Lumpur.
- Smith, Y.C. (1978) 'Women Workers in Multinational Corporations: The Case of the Electronics Industry in Malaysia and Singapore', Michigan Occasional Papers, No. IX, University of Michigan, Ann Arbor, Mich.
- Smith, P. (1982), *A Third World Proletariat? Controversies in Sociology*, 11, George Allen and Unwin, London.
- Malaysia, Federation of, Department of Statistics, (1960) *1957 Population Census of the Federation of Malaya, Report No. 14*, Government Printer, Kuala Lumpur.
- Malaysia, Federation of, Department of Statistics, *Manpower Survey 1973*, Unpublished.
- Malaysia, Federation of, Department of Statistics, (1977), *General Report, Population Census of Malaysia, 1970* Vol. 1, Kuala Lumpur.
- Malaysia, Federation of. Economic Planning Unit, (1981a), *Fourth Malaysia Plan, 1981—1985*, Kuala Lumpur, Government Printer.
- Malaysia, Federation of, Department of Statistics, (1981b) *Quarterly Survey of Employment in Manufacturing Industri Peninsular Malaysia*, Kuala Lumpur.
- Anderson, L. (1979), 'A Woman's Place : Malay Women and Development in Peninsular Malaysia' in James C. Jackson and Martin Rudner (eds) *Issues in Malaysian Development*, ASAA Southeast Asia Publications Series, Heinemann Educational Books, Kuala Lumpur.
- Marx, K. (1972), 'Wage Labour and Capital', in R. Tucker (ed) *The Marx-Engels Reader*, W.W. W. Norton, New York.
- Marx, K. (1976), *Capital*, Vol. 1, Penguin, Harmondsworth.
- Masson, C. (1981), *Maidens, Meal and Money. Capitalism and the Domestic Community*, Cambridge University Press. Cambridge.

- Mies, M (1980), 'Capitalist Development and Subsistence Reproduction: Rural Women in India', *Bulletin of Concerned Asian Scholars*, 12(1): 2-15.
- Murray, M. (1977) 'Recent Views on the Transition from Feudalism to Capitalism', *Socialist Revolution* 34, Vol. 7 (4).
- O'Brien, L.N. (1979), *Class, Sex and Ethnic Stratification in West Malaysia—with particular reference to women in the professions*, Ph. D. diss. Monash University, Melbourne.
- O'Brien, L.N. (1982) 'Industrial Manufacturing and the Malaysian Labour Market', presented to Asian Studies Association of Australia Fourth Biennial Conference, Monash University, May, 1982.
- O'Brien, L.N. (1983) 'Malaysian Women and the New International Division of Labour', in L. Manderson and G. Pearson (eds) *Class, Ideology and Women in Asia*, forthcoming.
- O'Brien, L.N. *Class, Gender and Ethnicity in Peninsular Malaysia*, manuscript completed June 1984.
- Pahl, R. (1968) 'The Rural-Urban Continuum', in R. Pahl (ed) *Readings in Urban Sociology*, Pergamon Press, Oxford.
- Pinchbeck, I. (1969), *Women Workers and the Industrial Revolution, 1750 — 1850*, Cass, London.
- Rey, P.P. (1971), *Colonialism, Neo-Colonialism et Transition au Capitalisme*, Maspéro, Paris.
- Richards, E. (1974) 'Women in the British Economy Since About 1700: An Interpretation', *History*, LIX: 337-357.
- Saffiotti, H.I.B. (1977), 'Women, Mode of Production and Social Formations', *Latin American Perspectives*, 4(½).
- Sutcliffe, R.B. (1971), *Industry and Under-development*, Addison-Wesley, London.
- Swift, M.G., (1965), *Malay Peasant Society in Jelebu*, L.S.E. Monographs in Anthropology, The Athlone Press, London.
- Tilly, L.A. and Scott, J.W. (1978). *Women, Work and Family*, Holt, Rinehart and Winston, New York.
- Turner, B.S. (1978), *Marx and the End of Orientalism*, Controversies in Social Theory, George Allen and Unwin, London.
- Weber, M (1978) *Economy and Society*, University of California Press, Berkeley.