

HOME AT WORK: HOUSEHOLDS AND THE STRUCTURING OF
WOMEN'S EMPLOYMENT IN LATE NINETEENTH CENTURY
DUNDEE

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DECLARATION

I declare that the composition of this thesis and the research upon which it is based is entirely my own work.

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ABSTRACT

The past decade has witnessed a debate in the literature over the best way to explain patterns of gender inequality. The central objective of contributions has been to understand the processes which underlie differences in the experiences of men and women. Particular concern is directed at processes which lead to women's unpaid labour in the home and to their position vis-a-vis men, in paid employment where they are found in segregated and low paid occupations. Theoretical developments range from dual systems approaches, which try to explain gender by combining a theory of patriarchy with a Marxist theory of capitalism, to approaches which argue for a single integrated explanation of production and reproduction. This thesis assesses these developments and finds current understandings lacking in two respects. Firstly, although there is a recognition of the inadequacy of Marxist categories in accounting for gender they are, none the less, given a central place in explanations. Similarly, variations in the experience of men and women are often discussed but are rarely incorporated into theoretical explanations as significant categories. A large part of the problem stems from the abstract level at which the development of explanations has been carried out. The argument presented here is that advances in theoretical explanation require that the processes underlying patterns of gendered experience are properly identified, and that this can only be achieved by thorough empirical examination of the wider context in which women labour. Those contributing to the debate have focused on a few symbolic occurrences in the nineteenth century such as protective legislation, male trade union exclusivism and the family wage. In a study of Dundee, a Scottish textile city, the broader context of everyday life is explored for women working in the industry during the late nineteenth century. To begin with information on wages is matched to occupations enabling the hierarchy of women's textile jobs to be established. Dundee provides a unique opportunity to look at a variety of households, and here the composition of households from a sample of the 1891 Census is outlined and the distinctive features of those headed by women are discussed. The structure of households which emerges from this exercise is related to the structure of occupations, making it possible to identify processes of inequality which are composed of household/employment experiences. In the Dundee sample processes of this sort are found to be of great importance in gaining access to employment. The structure of opportunity which exists and the patterns of inequality associated with it have consequences for what people are required to do in order to make ends meet.

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CHAPTER ONE

GENDER AND THE INTEGRATION OF PRODUCTION AND REPRODUCTION IN THEORIES OF INEQUALITY

The literature on the history of women's employment in the context of the mid to late nineteenth century is characterised by a division between theoretical and empirical endeavours which has had a negative effect upon our understanding of the topic. Those undertaking empirical work, tend to view their task as being that of outlining and describing women's employment experiences in concrete, detailed and specific historical studies. Those concerned with developing a theoretical understanding of women's employment experiences, on the other hand, generally conduct their discussions in the abstract and at a distance from specific concrete circumstances. Though there is some overlap between the two- most empirical works have implicit, if not explicit theoretical statements, and vice versa- there are few attempts to fully integrate these projects.

Many of the empirical historians with an interest in issues of women's work have rejected existing theoretical approaches regarding them as being of little help in the process of reconstructing women's employment experience. While providing us with valuable historical insights, however, these writers have themselves made little attempt to develop new theoretical accounts and often, as a result err on the side of description. Concerning the theoretical literature, one criticism

which can be made is that the latter does not capture the variety of experience which men and women had in the past. On those occasions where variations in women's and men's experiences are observed they are rarely theorised, and gender categories are used as though describing coherent forms of experience. The persistence of differences within the categories "woman" and "man", however, has both theoretical and empirical ramifications.

At the level of theory, differentiation in the experience of men and women in relation to patterns of employment raises questions about the power of gender as a concept for describing such experience. (Acker, 1989; Siltanen, forthcoming; Beechy, 1982). Evidently, a simple man / woman division will not be able to capture the variety of experience which each sex encountered. The implication, therefore, is that existing theoretical categories will have to be respecified in order to meet the demand that differing experiences are adequately described.

At the empirical level, the increasing evidence of variations suggests the need for a systematic exploration of the differences in women's, and men's, experiences of employment. Although there has been a growing awareness of the variations within the category "woman" as a result of empirical investigations into women's employment history, important questions remain

to be answered, such as, what affected this differentiation, and how is it to be explained? At the empirical level, therefore, we are required to look at the structures which lie behind differences in the employment experiences of women.

Existing work shows that differences in women's employment experiences can to some extent be attributed to individual characteristics such as, age, marital status, and so on. There is a general consensus amongst historians of women's work that during the late nineteenth and early twentieth centuries, for example, the majority of women who were in full-time paid employment were young and single. Nevertheless, a small percentage of married women were to be found working in most locations, and in others a substantial proportion of married women were employed. But why did some married women work while others did not? Individual attributes of the sort described cannot answer this question; to do so requires a wider knowledge of the circumstances in which married women laboured. So, in addition to forcing us to re-examine women's experiences of employment the collapse of gender categories in explanations simultaneously necessitates a detailed exploration of differences in women's experiences outside of employment.

Several empirical studies demonstrate that women's experiences of employment, such as, whether they

worked or not, and the types of work which they did, were related to issues of their domestic circumstances (Gittens, 1986: Roberts 1986: Bose, 1984). This literature has also been successful in identifying the diversity of the experience which women had both at home and in employment. The theoretical implications of these findings have still to be recognised, and conclusions have yet to be properly drawn. The question of the nature of the relationship between home and employment has also been rigorously contested in the theoretical literature. But, this debate remains unresolved largely because the empirical adequacy of the theoretical principles employed have not been properly assessed, and because many of the observations made in empirical studies have not been incorporated into theoretical understandings.

Nevertheless, it is now generally agreed that some knowledge of people's wider social circumstances is required in order to explain differences in their experience of employment (Lazonick, 1979: Humphries, 1987). Most writers recognise the importance of looking at the structure of life outside employment and view this as being essential to an understanding of the differences between women and men in employment. The organisation of social reproduction is given a central place in many arguments. More recently the household has been identified as important, as the setting in which strategies of the maintenance and reproduction of the

working population are devised.

The household is thought to be significant in explaining the experiences which individuals have of employment, both currently and historically. The argument emerging is that characteristics of this unit and of the people who compose it are central to such understandings. Assuming that processes connecting households to employment exist, then developing understandings of variations in women's, and men's, experiences in relation to their households could help us to develop understandings of variations in their experiences of employment. This is suggested by Humphries (1981). As said, in spite of the general recognition of the importance of structures outside of employment explanations have not been well developed. Though households have been recognised as important, like gender, differentiations between households have not been properly made.

There are indeed issues of inequalities within households to be considered. Nevertheless, as a unit the household would seem to be a significant determinant of the employment experience of individual members. Further exploration of the processes operating in this respect, therefore, looks both necessary and profitable. This may also offer a route to the theoretical integration of production and reproduction. A good deal of work will need to be done in specifying the relationships between

households and employment; the sort of information required, it appears, can come only from a theoretically informed, detailed empirical study.

Although theoretical debates are conducted with reference to empirical circumstances, these are narrowly focused on a few circumscribed, supposedly "theoretically significant" events. Many theorists concerned with the relationship of production to reproduction are motivated primarily by an interest in understanding present day processes. While they frequently argue that this task requires an understanding of the historical antecedents of these processes, paradoxically, this often has a detrimental effect upon our understanding of the past, largely because the context in which events occurred are not sufficiently explored. The historical period which has been most consistently referred to in the theoretical literature is the late nineteenth century. It is said that during this period both men's and women's relationship to wage labour was defined, and the foundations for their present-day relationships to this structure were laid. The supposedly key events which have been highlighted in the literature are those connected to issues of protective legislation, occupational segregation, and the family wage. Because the context of present-day issues and problems is taken as a reference point, these events and their repercussions are not generally examined in the context

of the everyday course of life which men and women experienced at the time. There is virtually no attempt made to understand people's domestic arrangements and responsibilities. This is another reason why those concerned with concrete history have regarded this literature as deficient.

From these general, theoretical understandings of specific occurrences attempts have been made to read off what everyday life was like for men and women, working down from abstract theoretical assumptions to assumptions about attitudes and experiences. There have been few attempts made to work the other way, that is by outlining the arrangement of everyday life experiences in order to reconstruct more general considerations. It seems fair to suggest that if, in the first place, the intricacies of everyday life are understood perhaps they could be elaborated into a more general theoretical statement.

Integrating theoretical and empirical undertakings would seem to provide one of the best ways of developing better accounts of the history of women's everyday experience of paid work. It may also help to resolve the controversies over the nature of the relationship between women's employment and their life outside employment. As said, authors are not blind to the necessity of considering the relations between production and reproduction, but they do disagree over

the best way in which this can be achieved, and most encounter difficulties in sustaining their arguments. More detailed empirical studies of women's past productive and reproductive experience would enable the examination of the processes by which they are connected.

The numerous attempts over the past decade to integrate issues of production and reproduction in historical understandings of women's employment, have focused on the observation that men and women have different relationships to employment and to reproduction and that the latter explain the former. The sexual division of labour in which these differing relationships are said to be manifest involves the following pattern of male and female experience. Firstly, while men have been drawn, more or less wholesale, into 'capitalist' production where they work for wages, many women, particularly those who are married, have been confined to the home. Secondly, those women who do undertake paid employment are to be found segregated into particular occupations with characteristic low wages. Theories which have tried to explain gendered patterns like these have come largely from the Marxist-feminist tradition although they have taken a variety of forms.

The intensified demand for a theory which fully integrates issues of production and reproduction (Acker,

1988: Dex, 1988), has arisen primarily as a result of the collapse of Marxism as an adequate explanation of men and women's lives; particularly from the inability of such an approach to explain gender differences. Despite the crisis in Marxist explanation, authors have been reluctant to give it up. One reason for this reticence, and one of the main obstacles inhibiting the development of new theories, is the refusal to accept that issues of gender have long term implications for the definition of, both late nineteenth and twentieth century, society as capitalist. This reluctance to dispense with a Marxist framework has been sustained in spite of the persistence of gendered experience. Although most of the authors currently being considered regard gender issues as presenting problems for Marxist explanations they are rarely viewed as calling into question the definitions of processes as capitalist. In general, the failure of Marxist categories to explain patterns of gender inequality is not considered to cause major difficulties for explanations of this sort per se but merely to be unsuitable in relation to a particular instance.

The inability to dispense with theoretical viewpoints in spite of their declining explanatory power is shared with other areas of sociology. The attempt to rescue diminishing theories using a variety of mechanisms follows a process which has already been identified (Holmwood & Stewart, 1983). Most often this involves the

use of ad hoc principles to extend explanations on those occasions where the theory in its original form does not suffice. The reluctance of many to dispense with a Marxist explanation of inequality engendered the emergence of dual systems theories. These use Marxist categories to explain the structure of employment and supplement them with special categories in order to explain gender differences, where they occur. But dual systems theories have been increasingly regarded as unsatisfactory and there have been efforts to develop explanations which integrate issues of production and reproduction as part of a single system. The continued use of Marxist categories in these efforts, however, commonly results in the collapse back into dual systems theories. This indicates that Marxist categories will have to be put aside and new ones employed if gender is to become a central component of a general theory of inequality.

Gender thus requires some form of explanation. Attempts to supplement Marxism for this purpose have proved to be of limited success, as the outline of dual systems theory which follows demonstrates. Supporters of this approach regard capitalist processes as sex blind in that they treat men and women in exactly the same way. Marxist categories on their own are thought to be unable to explain the sorts of gender inequalities which emerged over the second half of the nineteenth century and supplementary categories must be brought in to fill

this void. The tendency to import concepts to bolster declining theories is, therefore, quite evidently a feature of dual systems approaches to the study of gender and employment.

In the remainder of this chapter I shall look more closely at theoretical approaches to the problem of the gendered experience of employment. I shall begin with a consideration of 'dual systems theory' and shall follow this with a discussion of 'single systems theory'. The latter is viewed as an advance on the former. However, the failure of authors within the 'single system' tradition to problematise certain aspects of the explanation results in deficiencies which lead them, consciously or unconsciously, to return to dual systems understandings. Problems, in both instances, arise from the continued use of a Marxist framework and result in the failure to sustain explanations which integrate production and reproduction. The deficiencies inherent within these explanations gives credence to the suggestion made earlier that new undertakings which combine both theoretical and empirical concerns are required.

DUAL SYSTEMS THEORY

The earliest attempts to understand the relationship between production and reproduction in theories of women's employment display the most problematic uses of history. Dual systems theories are essentially concerned

with the present day relationship of men and women to employment. Certain events during the nineteenth century are plucked out by authors and are viewed as being pivotal in the development of these current relationships. The dual systems approach was crystallised in an article written by Heidi Hartmann and published in *Capital and Class* in 1979 (Hartmann, 1979). This article sparked off a controversy which has continued to rage for more than ten years. Hartmann argued that, to date, women's position in employment had been understood, using a Marxist framework, in terms of capitalist relations which had the effect of ignoring gender inequality. These approaches were unsatisfactory for Hartmann, and other dual systems theorists, because they could not explain problems raised by the operation of the sexual division of labour; such as why it was women rather than men who were to be found at home, who had prime responsibility for child care and domestic work, and why women who did work were in segregated and low paid jobs vis-a-vis men.

Dual systems theorists insisted that capitalist relations were not enough to explain gender inequality, that they are in fact sex blind. To account for differences between men and women, they argued, we have also to understand the way in which the development of the capitalist mode of production was modified during the nineteenth century by an unanticipated force. This force was identified as patriarchy, and defined as a

hierarchy of gender which places men at the top, and women at the bottom. Patriarchy, it is argued, helps to explain gender inequality in capitalist societies. But the interaction of patriarchy and capitalism must be understood, for neither on its own is sufficient to account for such inequality. It is this interaction which is responsible for the gender division of labour in the following way:

"Capitalist development creates the places for a hierarchy of workers, but traditional Marxist categories cannot tell us who will fill which places. Gender and racial hierarchies determine who fills the empty places." (Hartmann, 1979: 13)

In early dual systems theories capitalist processes were thought to structure employment, while gender processes were said to determine the position of men and women in this structure. The two systems were considered to be mutually accommodating, co-existing more or less in harmony, with each adapting to changes in the other.

According to dualists, understandings of patriarchy should be both historical and materialist. The failure to be so was the downfall of radical feminist definitions of patriarchy which were ahistorical and universalist. Patriarchy, according to Hartmann, has a material base resting on men's control of women's labour power, and is maintained through the exclusion and segregation of women at work and their confinement within the home. The current "partnership" between patriarchy and capitalism and the establishment of the

material base of patriarchy, she claims, dates back to the events of the mid-nineteenth century during which men struggled for control over women's labour power.

This struggle came about apparently because men's position in society was being progressively eroded by advancing capitalism. The proletarianisation of men, women and children which had been occurring since the onset of industrialisation, and which is generally recognised as having had detrimental effects on working class family life, also kept wages to a minimum for everyone. According to Hartmann, men at this time began to realise that, as a result of these developments, their interests were being undermined in two vital respects. In employment, women who worked were cheap competition helping to lower wages further and - as a consequence of females earning wages which made it possible for them to have an independent existence - along with a rapidly deteriorating home life came a weakening of male authority in this arena.

Men as a group are argued, by Hartmann, and others (for example, Eisenstein, 1979), to have acted in the following ways in order to protect their position of dominance over women and children. Rather than fighting for equal pay and status for women and young people, men chose to exclude them from skilled trades and from trade union membership. They argued for a "family wage" to support wives and families, and to keep

them at home to provide domestic services. Men also sought to resist women's entry into the labour force. Those women who had to work were thus concentrated in low status jobs. Overall, sexual segregation and assumptions about women's place resulted in low pay for women workers. These actions on the part of men, it is said, led to the emergence of the sexual division of labour, and cemented the relationship of women and men to employment which persists to the present day.

The capitalists, says Hartmann, having realised simultaneously that working class families had to reproduce themselves, and that this was most efficiently achieved by having wives at home to provide domestic services, conceded the money for family wages, and thus secured their interests alongside those of working men. The capitalist state reinforced the exclusion of women from particular occupations by implementing protective legislation. Thus the partnership of patriarchy and capitalism was confirmed.

Explanations which depend upon a concept of patriarchy have difficulty in explaining even part of the problem of the gendered experience of employment. The controversy over the usefulness of this concept predates the first dual systems work and has been well documented (Alexander & Taylor, 1979: Beechy, 1979: Rowbotham, 1979). It is argued to be ahistorical, despite claims by dual systems theorists to be sensitive

to historical issues. As a concept, patriarchy flattens out the experiences of men and women in differing historical epochs. In treating men and women as undifferentiated social categories, it also obliterates, and therefore does not allow for, the variety of experiences which men and women encounter both currently and historically.

Theoretically, the concept of patriarchy assumes that all men, and all women have the same relationship to home and to employment. Empirical work on these issues indicates that there were, and are vast differences to be found within their experiences of these locations, differences which must be accounted for in explanations. The conception of patriarchy found in dual systems theories has hardly moved on from that of the radical feminists' which are dismissed as "ahistorical" and "universalist". Similar criticisms can be levelled at Hartmann and her contemporaries.

The second main difficulty associated with conceptualising gender inequality in terms of patriarchal relations concerns the assumption that all relationships between men and women are power relationships. This implies that men are always in a position to realise their interests, that the interests of men and women never coincide, and that there is no possible room for negotiation between the sexes. Hartmann's understanding of the differing interests of

men and women, and of the ability of men to have their interests realised is schematic, and despite a claim to materialism is abstracted from the context of everyday life. This understanding is rigidly uncompromising, ignoring the evidence that men and women often act together in accordance with joint interests, as Middleton, and Rowbotham both emphasise (Middleton, 1988: Rowbotham 1982). Far more would need to be known about the context within which women's and men's interests arise and about the experiences of men and women at this time both inside and outside of employment for the interpretation of the mid-nineteenth century events made by dual systems theorists to be convincing.

The argument that the sexual division of labour emerged at this point in the history of employment is undermined by printed evidence of all sorts which suggests that occupational segregation by sex was a feature of employment processes long before the conflicts surrounding women's labour during the mid-nineteenth century. Middleton, for example, shows that occupational segregation characterised the employment of most rural men and women as long ago as the thirteenth century (Middleton, 1988). Equally, there is little evidence that protective legislation undermined women's employment opportunities, though they may have consolidated patterns of job segregation already in existence (Hutchins & Harrison, 1911).

The fact that neither patriarchy nor capitalism are strong enough on their own to account for gender inequality suggests that those seeking an integrated approach need to look elsewhere for concepts and categories to describe these patterns. If capitalism itself is sex blind then the existence of gendered experience, both in employment and outside of it, calls the operation of capitalist processes and therefore the usefulness of Marxist categories directly into question. If gender is as important as Hartmann implies then it needs to be given a central place in any theoretical understanding. Tacking on a theory of patriarchy, as occurs in dual systems theories, to compensate for the inadequacies of Marxism does not solve these problems, it merely adds new ones. With dual systems approaches we are left with two inadequate theories rather than one.

This leads on to a further difficulty with this type of dual systems approach, namely that gender does not enter into the analysis of the structures within production. Rather this is left to unsatisfactory Marxist categories. We need to know how gender structured the hierarchy of occupations creating men's and women's jobs. Such a connection raises questions about the analytical distinctiveness of two systems, one governing production and the other governing reproduction, and suggests that the analytical

separation of these two areas in understandings of women's employment may not be appropriate.

Sylvia Walby (1986) in a revised Dual systems approach recognises both the need to look at the way in which gender structures employment and the problem of maintaining the separateness of capitalism and patriarchy in explanations. In her view, the relationship between these two modes is not harmonious: rather, she characterises it as one of perpetual struggle and conflict in which either side employs various tactics in furthering its own interests. She regards the battle between these two forces during the mid-nineteenth century as being over "the allocation of women's labour time." (Walby, 1986: 68) Walby views patriarchal relations at work, through which men ensure the "crowding" of women in low paid, low status jobs, as underlying gendered occupational hierarchies. It is the unequal position which women encounter at work that leads to their unpaid labour in the home, according to Walby, and not the other way around as most dualists argue. The separateness of the two systems can be maintained, she says, by understanding their distinctive modes of exploitation (Walby, 1986: 64). Men accrue the surplus from women's labour in the home, capitalists accrue that produced from men's labour at work.

Aside from the problems with dual systems theories already outlined, there are difficulties which are

specific to Walby's approach. Her main assertion is that patriarchy determines the structure of employment and that it is in this arena that relations between men and women originate, and furthermore that their unequal relationship here is mirrored in the home where women carry out domestic labour. But by her own admission women's domestic labour is required for men to retain their position in employment. If as this implies, conditions outside employment are prerequisite to men's position in employment, then where is the rationale behind the maintenance of separate relations or the basis for the causal connections which she espouses? Walby, it would seem, has inadvertently made a case for the integration of capitalist and patriarchal relations, though her intention is to profess their distinction (1).

SINGLE SYSTEM THEORY

Approaches which look towards building an understanding of gender inequality in terms of processes which occur as part of a single system have been gathering force in recent years as the inconsistencies in dual systems understandings become more difficult to rationalise. These contributions have learned from the mistakes made by dual systems approaches recognising, to some extent, the need to break down the empirical/theoretical divide in examinations of the history of women's employment. These endeavours also attempt to dissolve the theoretical division in dual systems

theories which kept production and reproduction apart. Though they are considerably more sensitive to issues of the way in which history is used, substantial importance is placed on developing transhistorical understandings of women's employment. This means that, as in dual systems theories, studies still tend to concentrate on particular events and do not reconstruct sufficiently the context in which these events occurred.

Authors arguing for single systems also tend to come from Marxist feminist backgrounds and consider that an overall system of capitalism is composed of elements of production and reproduction. Differences in the positions held by men and women in the sphere of production are thought to be structured by differences in their relationship to the sphere of reproduction. Though this is also a feature of dual systems theories, these works are far more successful at developing an understanding of the wider context in which employment is carried out.

Two types of approach which seek to integrate production and reproduction in historical explanations of women's employment can be identified. Firstly, there are those which are "empirically" oriented, and which make statements based upon fairly detailed studies of concrete circumstances (Brenner & Ramas, 1984: Humphries, 1981). The second type of contribution which stresses the need for understandings which

integrate production and reproduction are more theoretically abstract (Acker, 1988: Dex, 1988: Humphries and Rubery, 1984). Both approaches have difficulty in maintaining the integrated relations which they specify. The outcome in many cases is a return to dual systems theory.

The generalised argument for the operation of a single system rather than dual systems involves viewing issues of gender as altering the operation of a capitalist mode of production from the mid-nineteenth century onwards. Analysts believe that a crisis of reproduction, rather than patriarchy, interrupted the path which capitalist development was taking; a crisis which arose from the effect which this course of development was having on the lives of working people. As a consequence of the nature of the resolution of this crisis, theorists considered it inappropriate to use straight forward Marxist terminology to discuss the nature of gender and productive relations which arose after this point.

Authors proposing understandings of women's and men's relationship to employment in terms of the operation of a single system interpret the events which took place in labour relations during the mid-nineteenth century quite differently from dual systems theorists. Those whose assertions are based on a reconstruction of the context in which paid employment was carried out at this time

interpret these events in the following way. They point out that work, under early capitalist production, was characterised by long hours, it was physically exhausting and it was in many cases dangerous. In addition, the proletarianisation of all family members meant that individuals received low wages. These developments in waged labour were having an appalling effect on working class family life, with high mortality rates, especially amongst children, and high levels of poverty leading to squalid living conditions. The crisis of reproduction which theorists argue arose as the result of these employment and living conditions underlies the events which took place during the mid to late nineteenth century, and helps to account for differences in experience according to gender.

Authors stress the difficulties which families must have encountered in combining waged work with domestic responsibilities and child care. They argue that the working class had no choice other than to withdraw one adult member from employment and to fight for a higher wage for the remaining member. It was women who left paid employment because, as a result of their particular relationship to social reproduction, it was more plausible that they should be responsible for child care and for domestic work. Brenner and Ramas, for example, are controversial in attributing the sexual division of labour to the biological differences between the sexes. The sexual division of labour in such understandings is

thought to have arisen as a resolution to this crisis in reproduction (Brenner and Ramas, 1984: 50).

Jane Humphries, though similar in many respects to Brenner and Ramas, does not base her argument on the biological differences between men and women. She is forceful in her claim that it is important to look at the wider context in which changes in labour relations took place. In reconstructing the context in which the 1842 Mines Regulation Act occurred, she develops an understanding of the gender dimension of this specific piece of legislation. Humphries discovered that in those settings where women worked underground in coal mining a system of family labour prevailed. Here the majority of family members were employed in the mines in the common pursuit of household support, or maintenance, and not for individual gain. It was out of a general concern for the good of the household, and with the pertinent issues of reproduction that male colliers supported the removal of women from the mines. Like Brenner and Ramas, Humphries doubts whether there was any alternative open to a group of people bent on improving their standards of living, and argues that the removal of women from the workforce was in the interests of the working class family, including women, and not merely in the interests of men. Humphries' argument which establishes the importance of household considerations in understanding nineteenth century changes in employment relations has been as controversial as the biological argument put

forward by Brenner and Ramas (Mark-Lawson & Witz, 1988).

In this context, according to single system theorists, the campaigns of male trade unionists to exclude women from particular jobs was a precautionary exercise to maintain their position in employment and to support the associated effort to secure a family wage. Equal pay, argue Brenner and Ramas, would not have had any impact on women's predicament. For a start women were segregated in employment and there was still the problem of domestic work and child care to be solved. Though this approach made women dependent on men and cemented their poorer employment opportunities, the argument suggests it had a positive effect on working class living conditions.

Jane Humphries deals more directly than do Brenner and Ramas with the statements made by dual systems analysts, looking at whether all relationships, particularly those between men and women, are relationships of power. She challenges the tendency of writers in this tradition to take for granted men's support for protective legislation, and the existence of an alliance between capitalists and working class men, and asks whether men's interests were always self-seeking and opposed to those of women. She suggests that protective legislation, at least that which saw the end of women's employment underground in coal mining, was an instance of the convergence of the concerns of men and

women, and not merely a case of men pursuing their own interests.

This group of authors in reassessing the developments in labour which occurred from the mid-nineteenth century onwards make a quite different interpretation than do supporters of the "consensus" view (Barrett, 1980; Hartmann, 1979). They argue that neither protective legislation nor the exclusion of women from skilled trades and their trade unions, can explain the sexual division of labour. Protective legislation was most prominent in textiles where, they say, it had no effect on occupational segregation by sex, which was already well established, and no effect on female participation which continued to grow in this industry over the second half of the nineteenth century. Plenty of printed sources back up these assertions. Skilled occupations, on the other hand, employed a relatively small proportion of the total male working population and the history of their unions is considerably diverse. Claims, like those made by protagonists of the consensus view, that all men acted in a particular way which had a similarly derogatory effect upon all women are not defensible. Homogeneity in cause and effect relating to this issue, say Brenner and Ramas, did not exist.

Single system contributions are for this writer, a considerable advance upon dual systems approaches in the

move towards an integrated understanding of gender inequality. Their success rests upon two major components of their analysis. Firstly, on their recognition that issues of reproduction entered into and affected the production process and, secondly, on their assessment of the mid-nineteenth century developments in labour within the context of the requirements and difficulties of everyday life. Despite the fact that these two elements represent the strength of the 'single system approach', ironically they also encompass the major weaknesses of the work. While on both counts these authors go further than dual systems theory, they still do not go far enough to enable them to sustain a fully integrated understanding of the issues at stake.

The problem with the relationship of gender to capitalism outlined by theorists such as Brenner and Ramas, is that the integration of production and reproduction is considered to be a purely temporary arrangement which delays rather than transforms capitalist development. Humphries makes the same argument in a later paper with Rubery (Humphries & Rubery, 1984). The crisis in reproduction which they identify is viewed as a nineteenth century phenomenon which is overcome in the twentieth century as women, especially those who are married, return to work. This, they argue, sees the crisis in reproduction overcome and the reinstatement of capitalist principles. The short

term nature of the crisis which such authors depict renders the explanatory role of gender a temporary requirement, since, by implication, Marxist categories should re-apply to the description of social and economic existence during the late twentieth century. The processes of change which these authors identify in the earlier period are thus undermined, because they are evidently considered to be contingent rather than fundamental.

The failure to question the appropriateness of Marxist categories is shared with dual systems theorists. But here I want to focus on problems with the unique understanding which this group of authors have of the sexual division of labour, and its origins in the mid-nineteenth century. After all, the argument which they present of the development of this structure with its temporal location could mean that the interpretation holds for the late nineteenth century despite its inability to account for the processes which have brought about change since then.

Brenner and Ramas, as well as Jane Humphries, attempt to establish a relationship between the domestic setting and the world of employment, and both view the nineteenth century differences between men and women in the area of social reproduction as accounting for differences in their employment experiences. While Brenner and Ramas talk in general terms about issues of

reproduction, Humphries identifies the household unit as the locale in which these issues became pertinent, and were contained during the nineteenth century. Both interpret the development of the sexual division of labour and the consolidation of patterns of occupational segregation by sex as being for the good of working class reproduction, and not solely in the interests of men.

Unlike those who argued for a dual systems approach, those who argue for a single system at least begin to consider differences amongst women, particularly in relation to their households. This is done, in the case of Brenner and Ramas, in order to account for variations in the attitudes of women towards male trade union exclusivism. Variations within the categories "man" and "woman" are not theorised, by either Brenner and Ramas or Humphries, and to a large extent these authors also consider gender distinctions to be the most salient determinants of the experience of men and women, as do dualists. There is no attempt made to look at differences which women may have had in their experiences of employment, or to relate differences found here to differences in their experience of domestic life. This ground work needs to be done, and patterns across the two established if we are to develop a fully integrated approach to issues of production and reproduction.

The emphasis on biology in Brenner and Ramas follows on from, and consolidates this point. It implies that all women, and all men, have the same relationship to reproduction, and for that matter to production. In fact there are age and life cycle factors built into both of these structures which resulted in the category "woman" incorporating persons in dramatically different circumstances at any one time, and any woman could experience a variety of circumstances over the course of her life. These differences not only need to be researched, they also need to be theorised.

The sorts of difficulties which lie in store for those who continue to use Marxist categories for the purpose of developing an understanding of gender inequality which integrates production and reproduction are made clear in the more abstracted contributions to single system theory (Acker, 1988: Humphries and Rubery, 1984). Joan Acker's work demonstrates some of these problems. Acker uses the late nineteenth century for the particular purpose of identifying the origins of the sexual division of labour. Like many others searching for an approach which integrates production and reproduction she argues that the sexual division of labour emerged at this time in order to accommodate the problems of reproduction within a capitalist society, which were reaching a crisis point. This sexual division of labour is maintained from that point onwards,

according to Acker, by the new relations of distribution which are centred around the wage system, primarily the family wage which becomes the means of supporting non-working members of the family.

From here on Acker leaves the nineteenth century to concentrate on developing a general theory of class and gender. In arguing for a single system, Acker suggests that classes are structured through relations of distribution as well as those of production. It is through an understanding of the relationship between these two that gender can be incorporated into the analysis of capitalist society. Men and women, says Acker, could be conceived as having different class positions, to which they are allocated on the basis of gender specific criteria. In Acker's approach categories of class are gendered. Men are allocated their place as a result of their employment position, non-working women find theirs both through their husband's job, and through their own position as unwaged housewives. But how are we to comprehend the position of the unemployed man and, of course, the employed woman? This is a question which Acker does not address sufficiently. Perhaps it would do to assume that the unemployed man maintains his class position from his occupation prior to unemployment, but employed women are far more difficult to place. Acker's implication is that the class positions of the latter, like those of employed men, can simply be read off from their occupations;

though they are generally different from those done by men. As can be seen, the model is extremely complex and would thus be difficult to employ because of the number of gendered class positions. The extent of possibilities increases further when we consider the relationship of women to paid employment. In addition, patterns of gendered employment experiences indicate that occupations can not be used as objective indicators of class position. Acker is left with the problem which plagued Walby: that of identifying the boundaries between processes of class and gender.

Acker's analysis would become even more problematic were we to attempt to use it to capture the variations in women's experience. This difficulty arises primarily from her failure to give up class or to reconceptualise gender. Class categories are clearly inappropriate. However, Acker makes a final attempt to rescue them in the conclusion to her paper by respecifying their purpose:

"The primary aim of class analysis is not to define bounded categories into which people fit, but to comprehend class formation, the processes that produce contradiction, conflict, coalition, and different life experiences". (Acker, 1988: 496)

The analysis which Acker presents hardly comes up with the requirements she outlines. Surely any theory of inequality must be able to provide categories which can be used to describe experience? No one is arguing that these should be timeless, unchanging entities, but they

are necessary. Acker's problems, like so many of her contemporaries, arise precisely as a result of her inability to give up particular "bounded categories". Because she holds on to a Marxist explanation she essentially ends up with a dual systems approach. She is unable to sustain an explanation of gendered experience as occurring within a single structure.

Humphries and Rubery (1984) also illustrate the problem of maintaining the separation of production and reproduction. In this example, rather than adding concepts to Marxist explanations, in order to explain the emergence of gendered employment experience during the late nineteenth century, the single system of capitalism is subdivided. Capitalism is thought to be composed of two systems: that of production, and that of reproduction. The latter are viewed as two separate systems within a system, the connection between them is defined by the concept of "relative autonomy". Again no attempt is made to assess the impact which gender has on definitions of society, or to reconceptualise the way in which Marxist explanations are conceived. This approach fails to develop a single, integrated understanding and collapses back into dual systems theory largely because of the historical positioning of the problem. This means that the processes by which the two systems are integrated are not adequately drawn out, and their integration is thought to be temporary.

SUMMARY

Different attempts to develop an understanding of women's employment which integrates issues of production with those of social reproduction have been examined. Although, on the whole, these attempts are not specifically concerned with the organisation of production and reproduction in the historical setting, most turn to developments in labour relations at the end of the nineteenth century in order to examine the origins of the processes by which these two structures are interrelated. A fully integrated approach, however, remains some way off largely due to the need to reconceptualise theoretical principles and to integrate theoretical and empirical undertakings. The way in which historical events of the nineteenth century have been separated from the wider context in which they occurred has resulted in imprecise understandings of domestic/employment relations during this period.

Some of the main areas which need to be worked on if we are to be successful in developing a single, integrated theory of production and reproduction which can explain gendered inequality have been discussed. The necessity of giving up waning Marxist explanations is largely a theoretical problem which begs the question of how we are to replace its accompanying categories. But there are also empirical questions which need to be asked, the most important being those about the nature

of differentiated female, and male, experience both of home and of work.

Giving up Marxist categories means that we have to divert attention away from the issues of production which predominate in these explanations. The persistence of gendered experience indicates that issues of reproduction are of fundamental importance to any theory of inequality and as such need to be brought to the forefront of explanations. An integrated theory will have to give equal weight to production and to reproduction. It will thus be a requirement of such an approach to develop understandings which address the processes running through these two areas of social life.

The identification of households as units which are important in structuring individual's experiences of employment, is a major step forward in integrating the analysis of production and reproduction. Again, much work remains to be done in establishing the nature of household/ employment processes. Households, like "men" and "women" are not units with undifferentiated characteristics. In order to identify the nature and extent of household influences, the variety of household experiences will have to be examined.

In America, Christine Bose (Bose, 1984) has undertaken work which looks at the relationship between

households and the employment experiences of female household members at the turn of the century. Using a huge sample of households taken from the 1900 Census she discovered that the motivation behind women's participation in employment could be understood using information on the nature of their households. Bose argues that: "... a woman's employment depended, in part on who else resided in her household" (Bose, 1984: 475). She depicts how household composition, the number and characteristics of individuals residing in women's households, influenced whether or not those in a variety of circumstances worked. But Bose does not go as far as she could. For example, she does not look at the way in which features of households could help in understanding more precisely the positioning of individuals within the structure of employment.

The task of developing an integrated theory of production and reproduction which incorporates an understanding of the varied experiences which women have, and which can tie differences in one area to differences in the other, is an immense project. Though the finished product remains some way off, significant advances have been made in reconceptualising the way in which "employment" processes are conceived, and in developing understandings of how elements of reproduction enter into and are part of these processes.

Though the task in hand is difficult, the way forward

is partly suggested by the practical necessities which have to be realised in order to meet the demands made upon any integrated explanation. The most pertinent empirical requirements are those of deconstructing female experience, both in the employment and the domestic spheres, in order that we have a more fully outlined knowledge of patterns of variation within each. This ground work has to be done before we can develop an understanding of how experience of these two areas of social life is related to each other.

Part of the problem of building an integrated analysis is due to the absence of information concerning the range of concrete experiences. It would seem that we need a substantially increased knowledge of patterns relating to home and work, at the empirical level, before we can establish with any confidence the theoretical nature of integration. The dualist and single system arguments which have been looked at both regard a 'materialist' understanding of the differences between men and women as essential to the development of the new theoretical principles necessary to describe gender inequality. In neither case, however, are the realities of everyday life which result in a marked variety of experience amongst women, and men, both in the domestic and the working arenas, taken fully into consideration. In both cases the task was identified as being that of uncovering the underlying determinant of gendered experiences of home and work for all men and

all women, a task that could only be achieved at a very general and abstracted level. The inevitable outcome of such an exercise was the much reduced perception of the social lives of men and women.

THE RESEARCH

The aim of this research is to explore the relationship between employment and domestic circumstances in an historical context, and to identify the way in which relations composed of both manifest themselves in single processes. Equally important is the task of deconstructing gender, and I hope to contribute to this by outlining the varied experiences which women had, both in employment and in the domestic setting. In explaining varied experiences, the household is recognised as a determining force. This research highlights the significance of the household context as an explanatory category.

The body of the research is composed of a detailed empirical study of Dundee towards the end of the nineteenth century. Dundee was a Scottish textile city which manufactured jute. In fact it was virtually Britain's sole producer of this fibre. The city gained its notoriety because of the jute industry, particularly as a result of the social conditions which it created. Raw jute was imported from India. It was a very coarse, low grade fibre which was used for sacking, for backing

carpets and so on. Largely due to its poor quality, the prices paid for jute products on the market were low compared to those paid for other textiles. The repercussions of this were that jute employees were extremely badly paid and the city thus experienced high levels of poverty. The Dundee workforce was almost entirely dependent upon jute for employment. The industry dominated the city and there was very little by way of alternative sources of paid work available. Within the jute industry the workforce from the mid 1860s and well into the twentieth century was two thirds female. This fact coupled with the general absence of alternative forms of industry meant that it was often very difficult for men to find employment in the city.

Late nineteenth century Dundee offered a unique opportunity for research. It was a textile centre, and these were the focus of attention, particularly with respect to female and child employment, throughout the nineteenth century. The fact that the jute industry was both the town's main employer, and that it was almost exclusively an employer of female labour meant that both life inside employment and outside of it displayed characteristics that were very rarely found in other locations. Inside employment, women worked across the range of textile departments. This contrasts to other textile industries in other areas where women were employed in far fewer occupations. Outside of employment the extent of female labour resulted in an imbalanced

sex ratio which affected the way in which people lived. In particular, the nature of households in the city was affected; Dundee had many more female-headed households than any of the other Scottish, or English cities. These unprecedented employment and living conditions offered a unique setting for exploring the variations in women's experience.

The research is presented in five chapters. In chapter two the general social scene is described. This involves an outline of the context of women's lives at the end of the nineteenth, and into the early twentieth century. Three locations are examined in turn. England and Wales are taken as a template because the circumstances pertaining there have already been well documented. Scotland is then compared to England and Wales; much of the information here is presented for the first time. Finally, the circumstances which characterised Dundee are explored. Three contextual components are discussed in relation to these three geographical locations. Those aspects of demography which had a particular significance for the lives of women are explored such as the sex ratio and aspects of marriage and motherhood. This is followed by an examination of women's experiences of employment during the period which looks both at levels of female participation in general, and at the characteristics of women who were participating. Finally, this chapter considers issues of welfare at the turn of the century.

The literature on this subject demonstrates the way in which the composition of households in conjunction with the structuring of employment helped to determine family fortunes. It also highlights the probability that female headed households would experience poverty.

Chapter three presents the sample of households from the 1891 Census enumerators' books which constitutes the main body of data of the thesis. The basic characteristics of the individuals who compose the sample are examined along with some preliminary features of their households. Important groupings within the sample emerge at this stage reflecting the significance of female headed households and the Irish population. Chapter four is divided into two parts. In the first, the nature of female employment within the Dundee textile industry is the focus of attention, though male employment is also briefly discussed. To begin with general features of employment, such as the hours and conditions of labour, are outlined. Thereafter, the occupations in which women were employed are identified as is the hierarchical organisation of these occupations. In part two of the chapter, an attempt is made to outline the characteristics of women who worked in the different sections of the textile industry. Initially, this effort concentrates on the literature and folklore of the city. This is helpful to some extent, particularly in relation to identifying a division between the women who worked in the spinning

mills, and those who worked in the weaving factories. Distinctions between the women in these two locations, however, are not systematically drawn out in the historic literature of Dundee. In order to complete the picture, the final pages of this chapter take a preliminary look at the characteristics of the 1891 sample female workforce in departments of jute production.

Having outlined the textile hierarchy and some of the background characteristics of the women working in different positions within it, the task remaining is that of understanding the processes integrating people's employment experiences and their wider circumstances. Here the role of the household and its relation to the structuring of employment experience becomes the focus of attention. Chapters five and six are concerned with relations of employment and the household, and the way in which these links helped to determine people's experiences both inside and outside of employment.

Chapter five demonstrates the way in which household processes related to employment opportunities and helped to maintain wider patterns of inequality within the textile working community. Here, the jobs done by the different members of male and female-headed households are outlined and compared. In male headed households, the jobs done by husbands and wives are compared. The clustering of husband's and wives jobs which emerges

from this exercise suggests either that household members were instrumental in finding employment for each other or that people married those of equivalent social standing. A similar pattern is found in the case of female headed households and this example is indicative of the way in which household processes operated on a generational basis.

The household processes identified in chapter five may have maintained patterns of inequality by acting as barriers to mobility within the Dundee textile hierarchy. If household members typically went into occupations which were done by others within the household it may have been difficult for those at the lower end to move to better paid jobs. It was particularly difficult for those employed in the lower paid jobs of the mill to move across to the factory. The concluding chapter looks at the implications of household/employment processes which cut across levels of household requirement. The first part of chapter six looks in considerable detail at the composition of households within the sample. Special reference is made to levels of dependency and to income composition. Different types of male and female headed households are examined in turn. Generally speaking, differences between households relates to life course position, though these are easier to specify in male than female-headed households. The second part of the chapter pursues the relationship between the financial

requirements of different households and the ability of members, particularly of household heads, to meet these. It looks at how the household/employment processes cut across levels of household need. It also outlines the strategies employed by households to compensate for the inadequate wages of their members.

In the final chapter of the thesis some concluding remarks are made. The desirability of an integrated theoretical approach to the study of gender relations is reiterated, though its realisation remains some way off. It is noted that successive attempts have failed largely because they have merely elaborated existing theories of economic life using ad hoc principles rather than addressing the need to reformulate these altogether. The research examines variations in the experience of men and women and looks for processes which cut across home and work by building up a picture of the range of experiences encountered by women in late nineteenth century Dundee.

It is argued that the operation of household/employment processes of the sort identified in the research raise problems for both Marxist and Marxist/Feminist explanations of employment and domestic life. Theories of production and reproduction should be integrated in a unitary theoretical approach. The employment experience of men and women in late nineteenth century Dundee was clearly related to

experiences in reproductive sphere through household employment processes which were attached to wider patterns of inequality.

NOTES

(1). Since writing this chapter, discussions of the concept of patriarchy have developed beyond the point indicated here. Attempts have been made to deal with the criticisms levelled at 'patriarchy', particularly those of essentialism, ahistoricism, and universalism. Significant contributions by Walby, Waters and Acker appear in Sociology (May 1989). Walby presents a model of patriarchy composed of six partially interdependent structures. She argues that 'systems of patriarchy' have existed in all historical epochs but that these take different forms according to the economic system prevalent at any one time.

Waters feels that 'patriarchy' should be reserved as a description of pre-capitalist societies, where male dominance is preserved by existing kinship structures. He prefers to use the concept of 'virarchy' in the analysis of capitalist societies. This describes a system whereby adult men remain dominant over women and children by virtue of their superior position in the household and their control of economic and political structures outside of the home.

Despite these developments, the concept of patriarchy still flattens out women's experience. It is difficult to see how they can help us to understand the variety of relationships which women have in economic or domestic settings, either today or in the past.

Both authors identify changes in the substance of patriarchy with the development of a capitalist mode of production and thus retain the analytical separation of economic and domestic life in a dual systems approach. In so doing, the analytical usefulness of the theory of capitalism goes unchallenged. Yet it was precisely because this lacked a gender component that the concept of patriarchy needed to be employed in the first instance. Because of the lack of integration of explanatory structures the concept of patriarchy itself can still be accused of being ahistorical, and the concepts of economic development that are linked to patriarchy remain in the form that was earlier criticised.

In contrast to Walby and Waters, Acker stresses the desirability of an integrated theoretical approach to the study of gender relations. However, she is reluctant to dispense with the concept of patriarchy because she fears that the fusion of political and theoretical endeavours which are typical of feminist thought might be weakened in the process. I remain unconvinced of the usefulness of patriarchy as an analytical tool in explanations of the domestic/employment experiences of men and women either currently or historically.

CHAPTER TWO

ASPECTS OF THE STRUCTURING OF WOMEN'S LIVES IN BRITAIN DURING THE LATE NINETEENTH, EARLY TWENTIETH CENTURIES

INTRODUCTION

While a great deal of work has been done to reconstruct the context in which women's working and domestic lives took place in late nineteenth, early twentieth century England, very little has been done to elucidate the Scottish case. A plethora of investigations which took place at the time recount the issues of the day relating to the welfare of families and to the employment circumstances of women in England. Sophisticated investigative techniques which emerged at the turn of the century were used by social investigators to examine poverty and the conditions of women's employment in England. Occasionally, Scotland would receive special attention usually as part of a wider investigation of some sort, for example, in those conducted by parliamentary committees who felt duty bound to cover the regions. But Scotland produced no Seebohm Rowntree and no Clara Collet, people who spent their lives debating and investigating issues of welfare and women's work. On those occasions where Scotland entered the discussion one particular town was the object of focus. Dundee was the exemplary textile centre, a place where the characteristics peculiar to textile towns, were magnified and extreme. Dundee 'boasted' high female employment in the jute industry, high levels of married women's employment and high

infant mortality rates. In addition, Dundee had features which singled it out. The textile industry there provided very limited employment for men, and very low wages for all its employees.

In recent years numerous attempts have been made to reconstruct women's experience of the late nineteenth, early twentieth centuries; these have concentrated again on the English setting. The Celtic countries are said to "require their own volumes" (John, 1986: 1). With this condition in mind, the main purpose of the present chapter is to pull together some information on the context of women's lives in Scotland during this historical period. This will contribute both towards the reconstruction of contemporary Scottish women's lives, and allow for the contextualisation of the Dundee experience.

In distinguishing Scotland from England and in order to identify Dundee's place within the former, three general components of context are considered. To begin with the focus is on the demographic characteristics which distinguished female experience at the time. The nature of the sex ratio and the patterning of marriage and childbearing are of particular interest in this respect. Following on from the examination of the demographic context comes an account of women's labour market activity. This section focuses on paid work in the formal economy. To begin with women's overall rates

of participation in paid employment are considered. This is followed by a discussion of the distribution of women within paid employment across different industries and occupations, and a look at which women were employed. Finally, issues of poverty are considered. This brings to light some of the ways in which household circumstances connect with the labour market activity of household members. From this literature the beginnings of an understanding of the differences in the experience of women can be gleaned. For example, female heads of households emerge as a group with particular experiences.

As the nature of English women's lives has been considerably reconstructed - for example, by Jane Lewis in her book "Women in England 1870-1950" (Lewis, 1984) - the general conditions of England are sketched out only briefly, though they are illustrated in more detail where the information is both thought to be required and where it is readily available. The overview of England then acts as a framework for comparing and establishing the Scottish context.

PART ONE: WOMEN'S LIVES IN ENGLAND AND WALES, 1871 TO
1911 (1)

(i) PATTERNS OF MARRIAGE AND MOTHERHOOD

Examinations of women's domestic and working lives start with outlines of demographic circumstances because these provide overall patterns in the female population, and are thus suggestive of some of the structures which



constitute women's experience. Structures of particular importance during the late nineteenth, early twentieth centuries were those of marriage and motherhood which dominated the lives of many women at the time. It is possible that demographic characteristics of this sort bore some relationship to patterns of female employment and some tentative links are presented along the way. The precise nature of such a relationship, however, is difficult to specify at the general level. To state, for example, that demographic issues are the prime determinants of women's participation in paid employment would be to jump the gun. The latter is also influenced by social factors such as the structuring of households, and by economic circumstances like the availability of employment, for men as well as women. But it would be equally simplistic to argue that variations in the demographic features of different locations are the outcome of the particular employment opportunities offered to men and women.

Demography is fraught by the difficulties encountered in attempting to identify directions of causality of this sort. One group of theorists have gone as far as to claim that demographic structures are brought about as a result of the strategies followed by households aiming to achieve present and future support and, furthermore, that these strategies are conscious and consistent (2). The intention here is not to debate these issues, but merely to sketch out something of the context in which

women's domestic and working lives occurred. Nevertheless, the interconnectedness of demographic circumstances, and social and economic circumstances can not be over stated. Demography provides information about the general features of a society in which the activities of reproduction and production took place. Demography, then, could be said to both determine and be determined by issues of reproduction and production in any one location.

One of the most persistent features of the population of England and Wales over the late nineteenth, early twentieth centuries was the disproportionate number of men and women. Over this period, and well beyond it, the population at the aggregate level was characterised by a large surplus of women. The most elementary information obtainable from the reports of the decennial population census gives the sex and age composition of the population, from which a sex ratio can be calculated. Here, this ratio is presented as the number of women to every hundred men in the population. Table 2:1 presents the sex ratio for England and Wales from 1871 to 1911 and provides an indication of the number of excess women in the population over that period.

TABLE 2:1 SEX RATIOS FOR ENGLAND AND WALES, 1871 TO 1911

YEAR	SEX RATIO (F/M X 100)		EXCESS WOMEN (F-M'000s)	
	All Ages	Age 15-44	All Ages	Age 15-44
1871	105.3	107.9	594	382
1881	105.4	106.6	694	369
1891	106.1	107.5	882	479
1901	106.8	108.2	1070	613
1911	106.8	108.0	1178	644

Source: (Lewis, 1984:3)

From 1871 to 1911 the number of excess women of all ages increased from a ratio of 105.3, for every hundred men, in the earliest year to 106.8 in 1911. The increase in the total population, occurring simultaneously meant that the overall surplus of women in England and Wales had reached one million by 1901 and continued upwards to the census of 1911. The composition of the sexes in the fifteen to forty-four age group was even more dominated by women (Table 2:1). This group includes those women considered to be within the reproductive age range and a major portion of women workers. In 1871 the sex ratio amongst this group was 107.9 women to every hundred men increasing to 108.0 over the period to 1911. The presence of a surplus of women in the population is often put down to their greater longevity but the uneven migration of young men and women was just as important in some locations (Flinn et.al., 1977).

In the late nineteenth century uneven migration was a feature of towns in which industries offered more employment to one sex than the other. Textiles typically employed a large number of women, and in those towns where textiles predominated imbalances in the sex composition of the population were notable. In the textile towns of the North of England, for example, the surplus of women at this time was even greater than it was in the population at large. In each of the four textile towns presented in Table 2:2, the number of women to every hundred men was substantially higher than the average figure for England and Wales.

TABLE 2:2 SEX RATIOS IN SOME ENGLISH TEXTILE CENTRES, 1891.

TEXTILE TOWN	SEX RATIO	
	ALL AGES	AGE 15-44
BLACKBURN	112.7	116.4
BURNLEY	108.7	109.5
PRESTON	114.6	118.9
ROCHDALE	113.2	115.3

Source: Census of England and Wales, 1891, Returns of Population.

In these cotton manufacturing towns a much larger proportion of women were employed than elsewhere, and all but Burnley had little employment 'suitable' for men, many of whom had to migrate in search of work

(Collet, 1894). These examples in addition to depicting geographical extremes in the composition of the sexes demonstrate the way in which the sort of employment available in a location could affect the structure of its population.

The examination of the sex composition of the population is motivated by a desire to look at the impact which an imbalance could have on women's experiences of marriage and motherhood. The increase in the surplus of women in the population of England and Wales towards the end of the nineteenth century, for example, meant that the chances of women, as a group, ever marrying were considerably reduced. Despite the decrease in opportunities from 1871 to 1911 the majority of women in England and Wales at this time did marry. As Jane Lewis puts it: "Marriage ...was part of the typical experience of women throughout the period" (Lewis, 1984: 4). In England and Wales in 1871, for example, almost eighty-eight per cent of women were married by the time they were forty-nine, the age generally considered by demographers to mark the end of the fertile period in women (Table 2:3).

TABLE 2:3 MARRIAGE PATTERNS AND FERTILITY RATES AMONGST WOMEN IN ENGLAND AND WALES, 1871 TO 1911 (3)

YEAR	%WOMEN EVER MARRIED		FERTILITY RATES	
	AGED	15+	45-49	BIRTHS
				ILLEGITIMATE BIRTHS
1871	63.9	87.6	295.5	15.1
1881	63.3	87.7	274.6	12.6
1891	61.3	87.1	280.3	9.6
1901	60.5	85.7	221.6	8.2
1911	61.0	83.5	173.5	8.1

Source: (Lewis, 1984: 5)

From 1881 onwards the number of women married by the time they were forty-nine declined gradually to 83.5 in 1911, reflecting the overall reduction in opportunities brought about by the large surplus of women in the population.

The number of women who married, in turn, influenced both the legitimate and illegitimate birth rates (Flinn et.al., 1977: 316). Fertility was another significant determinant of female experience during our period. In the late nineteenth century fertility, in England and Wales, was high for both legitimate and illegitimate births, though general patterns of decline characterised both categories over the period (Table 2:3).

The number of married women determined the proportions falling into each category at any one time. In 1871 there were 259.5 legitimate births amongst every 1000 married women in England and Wales, by 1911 the number had reduced substantially to only 173.5 births

for every 1000 married women. The number of illegitimate births likewise fell sharply over the late nineteenth century, decreasing by almost half in the period to 1911 when there were 8.1 births amongst every 1000 single and widowed women. At the earliest date, 1871, there were 15.1 births amongst the equivalent group. Accompanying the decline in the number of babies born, and thought to contribute to it, was the rise in age at marriage. But the fact that fertility declined outside of marriage simultaneously, indicated that delayed marriage was not the only factor involved.

Several aspects of 'women's' experience make themselves apparent from this brief perusal of the English and Welsh demographic patterns. Most importantly, in spite of the increasing surplus of women in the population of England and Wales which reduced their opportunities for marrying, marriage and motherhood dominated the vast majority of women's lives. Although this remains true for many women today, the information on fertility for the turn of the century shows that the number of babies born was extremely high. The numerous pregnancies which women experienced at this time were spread across the reproductive life cycle and not concentrated at particular points, a situation becoming the norm over the course of the twentieth century. Though the disproportionate nature of the sex composition of the population meant that many women did not have these experiences.

(ii) WOMEN'S PARTICIPATION AND DISTRIBUTION IN
PAID EMPLOYMENT

In addition to marriage and motherhood, most women at this time would also have had at least some experience of paid employment. Though this experience usually came at particular points in a woman's life course, at any one time women composed around a third of the workforce. In this section female employment patterns for the period are considered and a preliminary attempt is made to identify the sort of women who might be working for wages.

The reconstruction of patterns of female employment in England and Wales over the late nineteenth, early twentieth centuries is largely dependent upon the decennial Census Returns of Occupation. This source, however, is considered to be lacking both with respect to the classification of occupations and in the level of women returned as employed. The inadequacies of the Census have been thoroughly debated and those involved in this debate suggest that caution should be exercised when using this material (Collet, 1898b; Higgs, 1987; Wrigley, 1972). One of the main problems with using the Census returns on occupation relates to the assessment of the relative importance of occupations over time. Occupational titles changed frequently over the census years, especially before 1891. These changes, however, would not in themselves affect the overall level of

women's participation rates. In addition, they probably had less impact on figures for women's compared to men's jobs because the former were employed in fewer occupations.

The figures for women's overall participation rates have been those most consistently challenged. Clara Collet, in 1898, felt that:

"...the census in many cases affords a very rough measure of the extent of the employment of women,.." (Collet, 1898b: 226)

In recent years this inadequacy has been attributed to the definitions of employment which were used by those creating the census categories (Higgs, 1987). In general "occupied" was taken to mean those in full-time paid employment and thus many women did not make the census returns because they were frequently involved in informal types of employment which were often either casual, part-time or both. The problem of under enumeration, however, related not just to definitions of employment but also to the fact that many seasonal workers, who were often women, may not have been employed at the time that the Census was taken. Higgs points out that other women who escaped registration were those whose work was part of their domestic set up such as the wives and female relatives of farmers and retailers. Despite this list of inadequacies most commentators agree that the census is the best source available for outlining patterns of women's employment, historically, particularly if it is used with an

awareness of the limitations in mind. Though the level of female participation given in any one report may not be absolutely precise the general trends and changes embodied in the census returns are thought to be adequately captured.

The participation of women in paid employment can be measured in two ways (Table 2:4). Firstly, women's share of the workforce can be calculated, this provides a good indication of the balance of the sexes in employment. Following a significant decline in the decade from 1871 to 1881 the female share of the workforce fluctuated at slightly below a third in England and Wales. Secondly, women's participation in employment can be looked at as a proportion of the total number of women in the population. This measure helps in assessing the significance of paid employment for women's lives in general. Table 2:4 also shows the extent of women's participation measured in this way.

TABLE 2:4 WOMEN IN PAID EMPLOYMENT
ENGLAND AND WALES 1871 TO 1911 (4)

YEAR	women as % of total workforce	% of women in paid employment (All Ages)	Number Employed
1871	35	30	(3 544 468)
1881	30	26	(3 403 918)
1891	31	27	(4 016 230)
1901	29	25	(4 171 751)
1911	30	26	(4 830 734)

Source: Census of England and Wales, 1871 to 1911,
Returns of Occupation

The figures make it clear that, again after an initial reduction from 1871 to 1881, the proportion of women employed in England and Wales wavered at slightly more than a quarter of the total number over the years to 1911. On the whole, while the actual number of women employed in England and Wales increased over the period, the proportion of women actually employed changed little after 1881.

In textile regions the proportion of women employed was high right up to 1911. In 1891, for example, when the national figure for women's participation was twenty-seven per cent, most Lancashire textile towns had more than thirty per cent of women working. In Burnley, forty per cent of women worked, though the figures were even higher in Blackburn, where forty-five per cent, and in Rochdale, where forty-seven per cent, of women were employed.

The largest single employer of women over the years from 1871 to 1911 was domestic service which retained

its importance despite a proportional decline in the numbers of women thus employed. Next in importance as an employer of female labour, and of particular interest to this thesis was the textile industry which continued to expand over the period. The numbers employed in cotton increasing dramatically, a trend echoed in the woollen and worsted industries. These years witnessed a radical decline in the number of agricultural workers, the number of women employed on farms and in related industry decreasing by more than half. The gradual decline in the number of women employed in traditional occupations was matched by an increase in the number employed in the new service industries, catering, and in office and clerical work.

Generally speaking, the period can be said to have witnessed a diversification of the occupations available for women in England and Wales, if not an overall increase in opportunities measured by the proportion of women employed. Sexual segregation continued to characterise male and female distribution in employment with women excluded altogether from heavy industries such as mining, shipbuilding and engineering. In those industries which employed both women and men only very rarely were they found in the same jobs as contemporary discussions of wage differentials between the sexes verifies (Webb, 1891).

Clara Collet considered the most serious offence of

the late nineteenth century Census to be its failure to distinguish women's participation according to marital status. This was particularly pertinent in connection with the controversy over married women's work and infant mortality rates. In her work she attempted to estimate the number of married women working in various English towns in order to test this connection (Collet, 1898a). It was not until 1901 that married women's occupations were presented in the Census of England and Wales, and even then they remained inextricable from those of widowed women. The resulting figure showed that twelve per cent of married women and widows were engaged in paid employment in 1901. Ten years later when the census finally returned married women and widows separately the differences between them was emphasised. Only nine per cent of married women compared to a remarkable twenty-three per cent of widows worked in England and Wales.

Over the period in question, full-time paid employment was something typically experienced by single women, the number of married women employed full-time was relatively small. Marriage, however, in many cases did not signal the end of a woman's working life. From the official sources it is clear that a significant number of married women were employed and, if the above criticisms are correct, there were a great many more who did not make these statistics. Changes in circumstances which accompanied the life-course affected whether a

woman worked or not as can be seen from the percentage of widowed women who worked. Should her husband die a woman was quite likely to find herself back in full-time employment.

(iii) WELFARE: THE CONDITIONS OF MARRIAGE AND MOTHERHOOD

Though marital status was to some extent suggestive of whether or not a woman worked, during the late nineteenth, early twentieth centuries, a far more reliable indicator was to be found in her household circumstances. Though information of this sort is not available in any comprehensive form, the significance of the household in determining members' experience both of domestic and working life is highlighted by the concern over welfare which intensified at the turn of the century. The literature which emerged on this subject provides information about the circumstances which lead some women to work. It also shows how changes in circumstance could occur over the life course and is thus useful for identifying in more detail the characteristics of some of the women who worked.

Poverty became recognised as a widespread social problem in the developing urban industrial centres of the late nineteenth, early twentieth centuries. Investigations carried out by an emerging breed of social scientists, at the time, both measured the extent of poverty, which was found to be worryingly high, and

put the need to find solutions to its control firmly on the agenda. Studies concentrated on England, the major works were Booth's in London and (1889) Rowntree's in York (1902). Despite the problems of measuring poverty most commentators are in agreement with Rowntree's figure which estimated that almost thirty per cent of the population of York at the turn of the century was living in either primary or secondary poverty. This figure has been confirmed by subsequent studies of urban industrial centres elsewhere (Bowley & Burnett-Hurst, 1915; Treble, 1979; Roger, 1985).

Poverty affected many lives and as a phenomenon it was closely related to the interplay of processes of reproduction and production. The two major causes of poverty which were identified demonstrate this connection. Firstly, poverty was found to arise from features of the organisation of employment, and from the inadequacy and irregularity of wages. Secondly, the nature of domestic circumstances and changes in these over the life-course were shown to be major determinants of whether or not households experienced poverty. Domestic circumstances likely to provoke poverty were adverse family forms such as large family size, and the death or absence of the chief wage earner. Often a combination of these two factors were influential in deciding the "poverty stakes" though either on its own was, in many cases, enough to induce a state of poverty in a household.

Inadequate wages accounted for a large proportion of the poverty experienced by families at the turn of the century. Rowntree found fifty per cent of those in primary poverty as a result of the low level of the wage received by the main wage earner (5). Most of these low wage earners were unskilled, seventy-three per cent of men in such circumstances were general labourers. It was in examining this section of the poverty population that Rowntree drew up his model of the 'five altering periods of want and comparative plenty' (Rowntree, 1902). This was a model which showed how a change in fortune could accompany the changes in life cycle stage which every family encountered. A labourer's lot would be worse during periods where the number of dependents in his family were larger than the number of wage earners.

Poverty resulting from the inadequacy of wages was often compounded by the size of a household. Rowntree found a quarter of those living in primary poverty due to the largeness of the household (Rowntree, 1902). A couple with young children or with aged dependents living with them would easily put a strain on one wage, especially if it was a low one. As Tilly and Scott say of this newly industrialised period:

"The balance of wage earners and consumers in the household determined family fortunes". (Tilly & Scott, 1978: 105).

Poverty and the need to meet subsistence requirements in families which were top heavy with consumers would often mean sending any one of those able or eligible out to work.

The life-course effect of poverty meant that a family or individual might not spend their whole life in poverty but that significant periods could easily be accounted for in this way. Working class women, for example, depending on the nature of their household circumstances might be found living in poverty, as young children, as young mothers and as old widowed women. At any of these stages women may have been forced to find paid work. Young single female children, like their male counterparts, whose families' were poor, often found themselves working at an early age in order to help meet subsistence costs, while young single adult women who could work-full time often brought their families' out of poverty and into a period of comparative prosperity. If married women were found living in poverty the cause could be found in either of those two groups mentioned above. They may, for example, have been married to men whose earnings were insufficient to allow them to support their families, as was often the case among unskilled labourers, or they may have given birth to many children and thus have a large family. Women under such circumstances probably had no choice but to work.

Widows suffered from the death of their spouses'

rather than from the inadequacy of their wages and they were a significant portion of those living in poverty. Of the four classes which Rowntree devised to categorise the working population of York the most impoverished was class "A". An examination of this group shows that female household heads encountered considerable difficulties in maintaining their households. Widowed female heads accounted for forty-five per cent of class "A". They were the largest single group in the most disadvantaged category. Another group likened to widows were deserted wives. Though it is difficult to calculate the number of women of this status it was thought to be large. The households headed by these women accounted for another one per cent of Rowntree's class "A". Other women heading households, particularly separated wives, and old single women, added another three per cent to the figure which meant that female heads comprised a total of fifty per cent of the poorest group in Rowntree's study. This demonstrates that women without men, particularly those women who were heading households, did not fare well in late nineteenth century York.

In this initial section some features of the general experience of English and Welsh women at the end of the nineteenth and beginning of the twentieth centuries were outlined. The exercise showed firstly, that marriage and motherhood were central to women's lives at the time despite an increasing surplus of women which somewhat

reduced the opportunities open to them. Work was also important for women as their rates of participation in paid employment demonstrate. Though many women were engaged in employment throughout their lives, it was generally an experience limited to specific groups. Those who were married, for example, had lower rates of participation than did those who were single or widowed.

The review of the poverty literature brought out the widespread existence of inadequate resources at the turn of the century. This literature also illustrated some of the ways in which household composition and employment situation could determine the fortunes of families. For example, it showed how an imbalance of wage earners and dependents could induce a state of affairs whereby subsistence requirements could not be met. Variations in the experience of households which were prone to poverty accompanied the life-course, as household composition altered or the number of wage earners changed. Finally, this literature brought to light the fact that households headed by women were disproportionately represented in the most disadvantaged categories of poverty.

PART TWO: DEMOGRAPHY, EMPLOYMENT AND WELFARE IN
SCOTLAND, 1871 TO 1911

At the beginning of this chapter reference was made to the scarcity of material covering the experiences of Scottish women during the late nineteenth, early twentieth centuries. Taking the presentation of the experience of English, and Welsh women, as a template

this section both collates and analyses information concerning the experiences of Scottish women at this time. The three areas which were used to contextualise English and Welsh women's lives are re-examined in the Scottish case and, where possible, a comparison is made of the Scottish circumstances with those of England and Wales.

(i) SCOTTISH DEMOGRAPHIC CONDITIONS

As far as demographic conditions over the period were concerned the populations of Scotland, and England and Wales grew to resemble one another. In reaching this point, however, general trends in both locations often went in opposite directions. Compared to England and Wales, Scotland displayed extremes in most respects, particularly at the beginning of the period with, for example, fewer marriage opportunities amongst the female population and higher fertility rates.

The importance of the sex ratio for women in Scotland, as in England and Wales, arose from the relationship it bore to opportunities for the transition to adulthood, defined here in terms of marriage and motherhood. These formed the 'typical' experiences of women in Scotland at the time as they did for women in the rest of Britain. Over the period 1871 to 1911 sex ratio trends in Scotland went in the opposite direction from those in England and Wales with the result that by the end of the century these countries had similar

proportions of men and women in their populations. Scotland, at the outset of the period, had a much greater surplus of women than did England and Wales, in 1871 there were 109.6 women to every hundred men in the Scottish population, but this declined gradually over the second half of the nineteenth century (Table 2:5). By 1911 the two countries had similar ratios, Scotland showing 106.2 women of all ages to every hundred men and England and Wales 106.8. The higher proportion of women to men in the Scottish population was, as in the English and Welsh case, more marked in the fifteen to forty-four age group; in 1871 this group had 113.8 women to every hundred men. Amongst this age group there was also a substantial decline in the proportion of women to men from 1871 onwards.

TABLE 2:5 THE PROPORTION OF WOMEN TO MEN IN SCOTLAND, 1871 TO 1911

YEAR	SEX RATIO (F/M X 100)		EXCESS WOMEN (F-M '000s)	
	ALL AGES	15-44	ALL AGES	15-44
1871	109.6	113.8	153	107
1881	107.5	108.6	136	87
1891	107.2	107.7	140	80
1901	105.7	105.7	124	65
1911	106.2	106.3	143	78

Source: Census of Scotland, 1871 to 1911, Returns of Population.

The census of 1891 showed that in Scotland there were almost equal proportions of excess women in the population at large (107.2), and in the fifteen to forty-four age group (107.7). This was maintained right

up to the census of 1911. The number of surplus women in Scotland declined over the period while in England and Wales the number increased. These developments meant that by 1911 both countries had similar proportions of excess women in their populations.

The imbalance in the proportion of men and women in the populations of the two locations, in the earlier years, can be accounted for largely by differential migration patterns (Flinn et.al., 1977). Emigration out of Scotland, to England and abroad, was enormously important and in the early period Scotland experienced considerable immigration into the country, particularly of Irish people following the potato famine. Variations in the requirements of employers in different locations meant that these young migrating men and women went to different towns. Many of the Irish migrating to Dundee for example have been identified as young, single women who came looking for work in the textile industry. Young Irish men on the other hand were attracted to the heavy manufacturing industries of Glasgow (Collins, 1979). Within Scotland, as a whole, migration was also commonly biased to one sex or the other which created imbalances both in the home and the in the host locations. In addition, the widespread out migration of young Scottish men to England and elsewhere further imbalanced the sex composition of the population (Flinn et.al., 1977). Over the period, however, migration both into and out of Scotland declined and the sex ratio became more

balanced. Irish migration, for example, declined over the period having more or less ceased by the late 19th century.

A sex ratio skewed towards the female population affected the number of available marriage partners in a community and, therefore, the number of women marrying. This severely affected the life chances of many Scottish women over the late nineteenth century. Talking about rural Scotland, Flinn remarks that:

"...severely imbalanced sex ratios, above all in the fertile and marrying age groups, prevented a significant proportion of women from marrying" (Flinn et. al., 1977: 334).

In Scotland trends in patterns of marriage, like those of sex composition, went in the opposite direction to those in England and Wales over the period under consideration. Again these trends resulted in an increasing similarity between the populations of these two geographical locations. The overall number of women ever marrying in Scotland was a good deal lower from 1871 to 1911 than it was in England and Wales. In Scotland in 1871 only 79.8 per cent of women were married by the time they were 49, compared to 87.6 per cent of English and Welsh women. On the whole, trends in Scotland were composed of an increase in the number of marriages with slightly more women in total marrying over the period. Donald Morse points out that over the second half of the 19th century there were improved chances for women's marriage although, as we can see in

table 2:6 they did worsen, though temporarily, just after the turn of the century (Morse, 1988). Despite the increasing similarities of the two countries, fewer Scottish women married, and those who did tended to be older than their English and Welsh sisters. In 1911, 83.5 per cent of English and Welsh women had married by the age of forty-nine while only 78.7 per cent of Scottish women had done so (Table 2:6). The number of Scottish women in the twenty-five to twenty-nine age group who were married declined gradually indicating an increase in age at marriage, amongst women in Scotland over the period to 1911, a trend similar to that found in England and Wales (Lewis, 1984).

TABLE 2:6 MARRIAGE PATTERNS AND FERTILITY RATES
IN SCOTLAND 1871 TO 1911

YEAR	% Of Women Ever Married		Fertility Rates	
	AGE 15+	AGE 15-49	Legitimate Births	Illegitimate Births
1871	56.8	79.8	317.4	24.6
1881	56.9	80.6	313.3	21.3
1891	55.8	81.2	300.6	17.5
1901	55.5	80.3	272.5	13.2
1911	55.9	78.7	231.8	13.2

Source: Census of England and Wales, 1871 to 1911, Returns of Population. Registrar General's Annual Reports, 1971 to 1911.

Patterns of motherhood, like those of marriage, were also distinct in Scotland. Fertility in the late nineteenth century was high for both legitimate and

illegitimate births, and a great deal higher than it was in England and Wales. Unlike sex ratio and marriage pattern trends, changes in Scottish fertility went in the same direction as those in England and Wales, with similar overall patterns of decline in these rates observable over the period in both countries. In Scotland, however, the decline was much slower to materialise (Table 2:6). In 1871 there were 317.4 legitimate births amongst every thousand married Scottish women, in the same year there were 259.5 such births in England and Wales. Though legitimate fertility experienced a remarkable decline in Scotland to 1911 when there were 231.8 babies born to every 1000 married women, the rate of decline was significantly slower than it was in England and Wales with the result that fertility rates remained comparatively high at the end of the period. An additional fifty-eight more babies were born to every 1000 married women in Scotland than were born to the same group of women in England and Wales. The number of illegitimate births likewise fell sharply over the late nineteenth century, decreasing by almost half over the period to 1911 when there were 13.2 births to every 1000 single and widowed women in Scotland. At the earlier date (1871) the Scottish rate had been 24.6 amongst this group of women. The upshot of all this was that women in Scotland were less likely to marry than they were in England and Wales but were more likely to have babies, both within marriage and without.

Overall, it could be said that the female population of Scotland experienced, in the extreme, conditions which were found amongst women in England and Wales during the late nineteenth, early twentieth centuries. Scotland had a larger surplus of women in its population, and this coincided with lower rates of marriage compared to women in England and Wales. Despite the lower incidence of marriage amongst Scottish women motherhood also dominated their lives during the period. In fact, Scottish women gave birth to more babies both within marriage and outside of marriage at this time. The demographic features of these countries were becoming more similar over the period though, in moving towards this point, trends often went in opposite directions. Scotland was generally slower to change in most respects than were England and Wales.

(ii) THE PARTICIPATION AND DISTRIBUTION OF WOMEN IN PAID EMPLOYMENT: SCOTLAND 1871-1911

Women's experience of employment in Scotland from 1871 to 1911, like their experiences of marriage and motherhood also had features which distinguished it from that of English and Welsh women. Throughout the period, as can be seen in table 2:7, women composed around a third of the total workforce in Scotland with a slight decline of four per cent in total from thirty-three per cent in 1871 to twenty-nine per cent in 1911. These

figures were similar to those found in England and Wales at the time. Despite the equivalent sex composition of the workforce in both countries, however, rates of participation show that Scotland had proportionately fewer women in paid work than did England and Wales (Table 2:6). Over the period 1871 to 1911 fewer Scottish compared to English and Welsh women were engaged in paid employment. In both countries female participation was fairly stable with around a quarter of women employed, though in Scotland rates over the entire period were slightly lower than in England and Wales, and declined gradually from twenty-eight per cent in 1871 to twenty-four per cent in 1911. The equivalent figures for England and Wales were thirty per cent and twenty-six per cent respectively.

TABLE 2:7 FEMALE PARTICIPATION IN EMPLOYMENT,
SCOTLAND, 1871 TO 1911

YEAR	Women as a % of Workforce	% of Women in Paid Work (All Ages)	Number of Women in employment
1871	33	28	(490 605)
1881	31	26	(498 271)
1891	31	27	(556 564)
1901	30	26	(591 624)
1911	29	24	(593 210)

Source: Census of Scotland, 1871 to 1911, Returns of Occupation.

The distribution of women in paid employment in Scotland, as in England, underwent considerable

alteration over the period 1871 to 1911, reflecting the overall shift in the economy towards increased consumer and service industries. At the national level two general trends can be identified. Firstly, those occupations which had employed women in the early nineteenth century, particularly domestic service, agriculture and textiles declined in importance over the later half of the century. Secondly, there was an increasing diversification of employment opportunities for women, openings occurring in the areas of clothing, clerical work and even in professions such as teaching and nursing.

The four major occupational groupings which employed Scottish women over the period can be viewed in Table 2:8. Evidence for the decline of the traditional female occupations in domestic service, agriculture and textiles makes itself apparent while the percentage of women employed in these four groups moves from sixty-five per cent in 1871 to forty-eight per cent in 1911 confirming the importance of the new and expanding occupations for women.

TABLE 2:8 PERCENTAGE OF THE TOTAL FEMALE WORKFORCE EMPLOYED IN DOMESTIC SERVICE, AGRICULTURE, TEXTILES AND CLOTHING: SCOTLAND 1871- 1911

Year	Domest. Service	Agriculture	Textiles	Clothing	Total % Female W.force
1871	27	9	19	10	65
1881	27	9	17	11	64
1891	30	4	15	11	60
1901	24	3	13	12	52
1911	22	3	12	11	48

Source: Census of Scotland, 1871 to 1911, Returns of Occupation.

The extent of diversification is elaborated by looking at occupations employing one per cent or more of the total female workforce. Diversification was such over this period that by 1911 more than twenty occupations employed one per cent or more of the female occupied population, in 1871 only eleven occupations did so. The period, therefore, witnessed a doubling of the occupations composing this group and the addition of many others which employed smaller numbers of women. Despite the overall shift away from the traditional employers of female labour, however, these four groupings of occupations still accounted for almost half of the Scottish female workforce in 1911 with "indoor domestic servant" continuing to be the single largest occupation, as in England. On the whole textiles maintained an important, but reduced position, though on the East Coast rather than the West where they were previously located.

In Scotland it was not until 1911 that female participation in paid employment was broken down by marital status. The figures returned for this year show that considerably fewer married women were employed in Scotland, compared to England and Wales. In total only four per cent of married women were returned as occupied in Scotland the figure for England and Wales, nine per cent, was almost double this. Twenty-four per cent of widowed women, on the other hand were employed in Scotland. This was more similar to the figure found in England and Wales where twenty-three per cent of widowed women were employed in 1911. The importance of distinguishing the employment of married and widowed women is reinforced by looking at the occupations which employed more than one per cent of women in each of these two groups. Not only were there significant differences in the distribution of single and married women but widowed women were more frequently returned as working on their own account and in their own homes.

(iii) WELFARE IN SCOTLAND

Issues of welfare were just as pertinent in Scotland over our period as they were in England and Wales. In Scotland there were no surveys of poverty on the scale of those carried out in various parts of England around the turn of the century. Scotland did feature to some extent in the 1904 Interdepartmental Committee on

Physical Deterioration (P.P. XXXII, 1904). Spurred by the prominence of concern over issues of welfare at the time, this committee investigated the living conditions of working people in Britain and even spent some time considering Dundee. Recent attempts to reconstruct the Scottish experience of poverty using this source along with those which looked at prices, estimate that urban centres in Scotland probably experienced at least similar levels of poverty to those found in England (Treble, 1979). Scotland is considered to have been a "low wage" economy throughout the latter half of the nineteenth century, while the cost of living, in many places, was not found to be correspondingly low (Rogers, 1985).

As in England the groups of women most affected by poverty were the wives and children of unskilled labourers and, unsurprisingly, widowed women. Women who were deserted by their husbands were also an important category in Scotland, particularly in locations like Dundee where work for men was scarce. As Treble points out widowed women were treated more favourably than deserted wives, often receiving at least some support from charitable organisations and outdoor relief. On the whole, however, this relief was only to top up wages and widowed women along with their deserted sisters were, therefore, forced to find work. Given their shortage of skills, usually resulting from long periods away from

employment and the problems of caring for children, the jobs which these women found were of the worst paid kind with the worst conditions. Charring, washing and work in the sweated trades were the most common types of work found, their attraction being that they were easier to come by and often home based or nearby.

Though the information which exists on poverty in Scotland is scant it is evident that the phenomenon was at least as significant to the North of the border as it was to the South. The chief causes of poverty must also have been similar, with households affected at particular points in the life cycle, and low wages contributing to an inability to meet subsistence costs during times of high dependency.

The experience of Scottish women, then was somewhat distinct from that of English and Welsh women during the late nineteenth, early twentieth centuries. Generally speaking, differences in the Scottish experience were manifest in terms of extremes of patterns occurring in England and Wales. Overall, there appears to have been a move towards greater similarity between the two countries particularly in relation to demographic circumstances. At the end of our period, however, Scottish women were still less likely to marry, but had more babies than were their English sisters both within

and outside of marriage. The other features which distinguished the experience of Scottish women was their participation in paid employment. On the whole, fewer women worked over the period 1871 to 1911 in Scotland compared to England and Wales. Interestingly, only half of the number of married women working in England and Wales were found in Scotland. The proportion of widowed women working in Scotland, however, was more similar to that found in the other two countries.

PART THREE: DUNDEE 1871 TO 1911

The brief outline of the circumstances prevailing in English textile centres showed how particular locations could have features which were substantially different from the nation as a whole. Extremes in demographic and employment patterns arose from the increased availability of work for women. The existence of these differences within England inspires a quest for more detailed information on the nature of any differences which prevail in Scotland. In his final section Dundee, a city which stood out from the rest is examined in some detail. It shall soon become apparent that with respect to uncovering variations in women's experience of home and employment Dundee offers great scope.

Dundee was extreme in nearly every conceivable way. It displayed unusual circumstances in each of the contextual areas examined previously for England and Wales, and Scotland. Although the trends and patterns

found in some of the English textile towns were not unfamiliar to Dundee none of them came close to describing the experiences of men and women living and working in the city. The jute industry and patterns of employment which were incorporated within it have been consistently turned to in the search for an explanation of the quirky demographic and social conditions composing the context in which Dundee lives were carried out. In this final section the focus is narrowed down from the national to the local in an exposition of the demographic and employment circumstances which prevailed amongst the women living and working in this extraordinary city.

(i) DUNDEE DEMOGRAPHY

The most notable characteristic of Dundee's population over the period 1871 to 1911 was the extraordinarily large surplus of women. For a city of its size, Dundee's population was overwhelmingly female so much so that it was both known and described constantly as a "Woman's Town". The imbalance of the sexes was on a scale unseen in any other Scottish city, though some smaller towns in Forfarshire, which also manufactured textiles, had very large numbers of excess women (6). In 1891 Dundee had 125.2 women to every 100 men, of all ages, and 136.6 to every hundred men in the fifteen to forty-four age group (In the same year the figures for Scotland were 107.2 and 107.7 respectively). Only Edinburgh approached anything like

this degree of severity but it came far behind Dundee. In keeping with trends in the rest of Scotland, the sex composition of the population became gradually more balanced over the period to 1911, though Dundee maintained its substantial eccentricity well into the twentieth century.

Table 2:9 shows the number of women to every hundred men in the population of Dundee from 1871 to 1911. Over this period the number of women to every hundred men amongst the population of all ages went from a high of 129.5 to a 'low' of 125.3. In the fifteen to forty-four age group the proportions were even more imbalanced. In 1871 there were 150.1 women to every hundred men in this section of the population. Translated, this meant that for every three women there were two men. Despite the fact that by 1911 the sex ratio for this group had declined to 132.3, there were still many more women than men in the population of Dundee.

TABLE 2:9 PROPORTION OF WOMEN TO MEN IN DUNDEE,
1871 TO 1911

YEAR	SEX RATIO (F/M X 100)	
	ALL AGES	AGE 15-44
1871	129.5	150.1
1881	128.4	146.2
1891	125.2	136.6
1901	126.9	137.3
1911	125.3	132.3

Source: Census of Scotland, 1871-1911,
Returns of Population.

The explanation for this phenomenon is to be found in the predominance of textiles as an employer of female labour, particularly of adult female labour which accounts for the extreme imbalances of the sexes in the fifteen to forty-four age group. Just as Dundee has been described as a 'woman's town' M.L. Walker describes jute as "a woman's industry" (Walker, 1912). The proportion of males to females in the population reflected the proportion of males and females employed in this industry. This interpretation is supported by the fact that the decline in the number of excess women in the population occurring over the period of study coincided with an increase in the number of men employed in textiles.

It could be assumed that the increase in the proportion of men in Dundee towards the end of the nineteenth century might indicate an increase in rates of marriage amongst women. However, marriage rates did not increase. In fact there was a gradual reduction in the overall numbers of women marrying in the city across the period from 1871 to 1911. This reflected the trends found amongst women in the aggregated figures for Scotland.

As may be expected, from the dearth of men in the population, fewer women married in Dundee compared to Scotland as a whole, but the difference was not as great

as the huge surplus of women might suggest (Table 2:10).

TABLE 2:10 CONJUGAL CONDITIONS OF WOMEN IN DUNDEE,
1871 TO 1911

YEAR	% WOMEN EVER MARRIED	
	AGE 15+	AGE 45-49
1871	54.7	83.3
1881	54.9	82.1
1891	53.6	81.4
1901	53.0	78.5
1911	53.9	76.4

Source: Census of Scotland, 1871 to 1911,
Returns of Population.

Of those women aged fifteen and over in 1871, 54.7 per cent were ever married in Dundee compared to 56.8 per cent of all women in Scotland. Surprisingly, looking at the same year, there were more women in Dundee married in the forty-five to forty-nine age group than in the population of Scotland at large. This indicated that women living in Dundee delayed marriage until later than those in the rest of the population but not indefinitely. When interpreting these figures it should be remembered that a large number of Dundee's wives were deserted by their husbands at this time but may still have been returned as married in the census; there being no categories for those who were separated or divorced. The trends represented in Table 2:10 show a gradual reduction in the overall number of women who were married over the age of fifteen, which remained slightly

lower in Dundee than in the Scottish population across the period. Amongst those aged forty-five to forty-nine the reduction in the number of women ever married over the period is more substantial reaching 76.4 per cent in 1911, thus falling behind the level for Scotland as a whole (78.7). So while the number of men in the population increased relative to the number of women, the likelihood of women marrying did not follow suit but reflected more closely the trends occurring at the aggregate level.

How then were fertility rates in Dundee affected by the imbalance of the sexes and the marriage patterns found in the city, and how do they compare to the general Scottish trends? Table 2:11 shows both legitimate and illegitimate births over the period 1871 to 1911. Compared to Scotland as a whole the number of births per thousand married women in Dundee was considerably lower right across the period.

TABLE 2:11 FERTILITY RATES IN DUNDEE 1871 TO 1911

YEAR	LEGITIMATE BIRTH	ILLEGITIMATE BIRTHS	% BIRTHS ILLEGITIMATE
1871	293.2	25.9	11.9
1881	288.9	22.6	10.6
1891	285.9	17.8	9.2
1901	249.2	15.2	9.1
1911	225.2	13.1	8.2

Source: Census of Scotland, Returns of Population, and Registrar Generals' Annual Reports 1871 to 1911.

In 1871 there were only 293.2 births to every thousand married women in the population of reproductive age in Dundee compared to 317.4 for Scotland as a whole. While trends in Dundee fertility followed those of the rest of Scotland, reducing substantially over the period, there were still far fewer legitimate births in Dundee than in Scotland right up to 1911. During this year there were 225.2 babies born to every thousand married women in Dundee and 231.8 to every thousand married woman in Scotland.

Dundee was, at this time, regarded as a den of impropriety and immorality by socially concerned individuals and the high illegitimacy rates found in the city were considered to be evidence that the many young single women were running amok. Table 2:11 shows that the percentage of births which were illegitimate over the period from 1871 to 1911 was indeed high, and the registrar generals' reports confirm that Dundee had a higher percentage of illegitimate births than any of the other Scottish cities. These figures can not be explained simply by impropriety on the behalf of Dundee women, rather they reflect the number of single and widowed women in the population. Percentages of the number of illegitimate births compared to the number of possible mothers in this category show that Dundee had proportionately fewer illegitimate births than either Glasgow or Aberdeen and only very slightly more than

Edinburgh (P.P. XXXIV, 1890: xiii). Looking at the number of illegitimate births to every thousand single and widowed women we find that rates for Dundee were only slightly higher than in the total Scottish population. In 1871, for example, there were 25.9 illegitimate births to every thousand single and widowed women in Dundee compared to 24.6 at the national level (Table 2:6). The decline in illegitimate fertility rates were evenly matched at both levels over our period and by 1911 the rates in Dundee were almost exactly similar to those found in the Scottish population as a whole.

(ii) PATTERNS OF WOMEN'S EMPLOYMENT IN DUNDEE, 1871-1911

In Dundee the peculiarities of the population and its overall standard of living were undoubtedly determined by the industrial structure of the city. The characterising feature of Dundee's industrialism was the textile industry which was both the city's main employer and predominantly an employer of female labour. Jute was the mainstay of the industry at this time and was manufactured in massive quantities. It was made into goods at the coarse, cheap end of textiles, mainly sacking, backing for carpets, Hessians and the like. The city's economy depended on the jute industry almost entirely as did its population. The jute industry grew up and matured over the latter half of the nineteenth century. Linen, on the other hand, which had predominated during the earlier half of the century

declined rapidly over the period and by 1891 it employed only 2193 women and 918 men.

Dundee's over reliance on textiles as a source of work gave rise to unprecedented levels of female employment. Work for men in the city was comparatively sparse and this led to great concern (D.S.U., 1905). Many authors have commented on the difficulties the city encountered as a one industry economy (Lenman & Gauldie, 1968). Few textile centres, however, provided work for adult men to any substantial extent within the industry itself. What Dundee lacked was the alternative forms of employment which existed in other places (Anderson, 1971). There was some work to be found in shipbuilding and engineering which employed around 2000 men apiece but these industries were declining over the period. The building trade also employed just over 3000 men but on the whole the numbers employed in these industries were small given the number of needy men.

The textile industry employed around three quarters of the female workforce of the city right across our period but only about a third of male workers (Table 2:12). Though the number of men working in textiles increased slightly in 1911, while the number of women declined in the same year, the change was insubstantial. Though, this point did mark the beginning of trends which were to follow in the coming years.

TABLE 2:12 NUMBERS EMPLOYED IN THE TEXTILE INDUSTRY,
DUNDEE 1871 TO 1911.

YEAR	Men in Textiles	% Total Male Workforce	Women in Textiles	Total in Textiles
1871	12,349	37.4	23,398	35,747
1881	9,783	26.1	24,241	34,024
1891	12,346	28.2	25,898	38,244
1901	12,117	26.1	27,635	39,752
1911	13,439	28.4	25,862	39,301

Source: Census of Scotland, 1871 to 1911, Returns of Occupation.

The sex ratio prevailing in the industry became more balanced from 1871 to 1911, both amongst those of all ages and in the fifteen to forty-four age group. The years 1881 to 1911 saw a reduction from three women to every man employed in textile occupations to two women per man employed. Nevertheless, over the entire period there were still twice as many women as there were men employed in the textile industry.

The number of women working in Dundee was as important to the social conditions of the city as the fact that they were concentrated in the textile industry. From 1871 to 1911 women accounted for around forty-five per cent of the workforce in Dundee which was ten per cent more than any of the other cities in Scotland. Amongst women of all ages more than forty per cent were to be found in paid employment throughout the period, again at least ten per cent more than Edinburgh which had the next largest number of women in paid work.

The number of married women in the workforce was also

higher than in any of Scotland's other cities. Table 2:14 shows that the percentage of married women employed in the Scottish cities in 1911 was very low apart from Dundee where approximately five times as many married women worked as anywhere else. The number of widows employed also stood out in Dundee. Again in 1911, thirty-nine per cent of widowed women worked. This compared to Aberdeen with twenty-nine per cent, and Glasgow and Edinburgh where twenty-six per cent of widowed women were in paid employment.

TABLE 2:13 PERCENTAGE OF MARRIED AND WIDOWED WOMEN IN PAID EMPLOYMENT IN THE SCOTTISH CITIES, 1911

	SCOTLAND	GLASGOW	EDINBURGH	DUNDEE	ABERDEEN
MARRIED WOMEN	4.1	5.1	5.5	23.4	3.0
WIDOWED WOMEN	24.0	26.5	26.4	39.0	29.4

Source: Census of Scotland, 1911, Returns of Population.

The high rates of married and widowed women's employment relates to the fact that the jute industry was largely an employer of women. It is also connected to the low wages which the industry paid to its employees, and to the resulting levels of deprivation experienced by Dundee households.

(iii) CONDITIONS OF LIFE IN DUNDEE

The low wages characteristic of the Dundee jute industry suggest much hardship, and secondary texts describe the appalling living standards found in the

city. Rogers in a paper comparing poverty in the Scottish cities at the turn of the century found that Dundee came off worse in the poverty stakes, followed by Glasgow. Using information on Dundee wages and on prices in the city Rogers found that despite the low level of wages the cost of living did not correspond and for many goods and services prices were as high as they were in London (Rogers, 1985).

A report carried out by Dundee Social Union at the beginning of the twentieth century looked at housing and industrial conditions in the city and although it does not estimate poverty levels it does provide evidence that the latter was widespread (D.S.U., 1905). It is interesting to note that the committee communicated with both Charles Booth and Seebhom Rowntree before embarking on the study and that the explanation given for the levels of poverty found in Dundee fell into the two categories developed by them to describe other areas. Wages, as said, were notoriously low compared both to those received in other Scottish cities and those of other textile manufacturing regions. A Board of Trade report on wages in the textile industries published in 1890 placed the Dundee jute industry at bottom of the list. It paid the lowest wages of any textile industry, in nearly all of the occupations which were observed (P.P. LXVIII, 1890). Households with inadequate incomes had to take in lodgers or send children out to work half-time. The half-time system survived in Dundee right

up to the end of the nineteenth century. In most locations it was thought that children would benefit more from full-time education, but in Dundee many youngsters had to work in order to supplement the impoverishing wages which their parents earned in the jute industry. They received exemption certificates from the local Education Board, which policed the Education Act of 1872, in order that they could do so.

Domestic circumstances, particularly "adverse family" forms was the other major determinant of poverty in Dundee, where a third of households were thought to be female headed at this time. The Dundee Social Union report confirms that in 1901 12,000 households out of a total of 37,000 were headed by women. This was significantly higher than in either Glasgow or Edinburgh (D.S.U., 1905: 65). As in Rowntree's study of York many of these households were headed by widowed women, who were characterised as one of the most disadvantaged groups. Others were headed by women who had been deserted by their husbands, a frequent occurrence in Dundee.

The effects of poverty were widespread and similar to those found in London and York. Overcrowding was a particularly bad problem in Dundee with whole families, and sometimes lodgers as well, living in one or two rooms (Gauldie, 1974). Child mortality rates were higher than elsewhere in Scotland, a phenomenon which

aroused great concern. Dundee Social Union blamed the dirt and disease associated with widespread poverty as causes, while more recently W. Walker took a controversial stance when he claimed that the homicide of children was also a likely explanation (Walker, 1987). In a situation where parents and children competed for scarce resources, he argues, the weaker inevitably lost out.

Conditions in Dundee over the period 1871 to 1911 emphasise the distinctiveness of particular geographical locations which can be lost in the aggregated statistics of Scotland. Dundee, at this time, is exemplary of the way in which demographic and employment structures could be mutually determining. The textile industry there and the patterns of employment which it embodied are fundamental to an understanding of both the nature of the population and of living conditions in the city. The extremes found amongst the female population of Dundee in all the contextual areas examined - the disruptions found in patterns of marriage and motherhood, the number of self supporting women and the extent of female employment - single it out as a place of particular interest in relation to issues of home and work.

CONCLUSION

In this chapter information was presented on three areas which were felt to contribute to the life time experiences of women during late nineteenth, early

twentieth century Britain. The picture emerging from this material showed firstly the impact which marriage and the bearing of children had upon women's lives. The large surplus of women in the population meant that many could not marry, nevertheless, the majority of women over this period did marry. In addition, both the married and the unmarried, experienced a very large number of births.

Women also participated in employment. Though figures showed that such experience was largely confined to single women, significant proportions of married and widowed women were also employed at this time. While marital status is suggestive, it does not tell us enough about which women worked and under what circumstances. The poverty literature indicated that circumstances within households were also important in helping to decide this issue; these connections are explored in subsequent chapters. It also stresses the difficulties which women who were heading households could encounter in ensuring their maintenance.

In addition to outlining women's experiences of the period the other main purpose of this chapter was to compare and contrast the Scottish with the English circumstances, and most importantly to underline the significance of the Dundee experience. To begin with the three themes were established for England and Wales. This was followed by a presentation of the circumstances

in Scotland. Over the period 1871 to 1911 the populations of the two countries came to resemble each other, though in reaching this point trends went in opposite directions. For example, in England and Wales the proportion of surplus women in the population increased while in Scotland it declined. Concurrently, marriage rates increased in Scotland, though they declined in England and Wales. In both regions the number of births fell, however, the decline was slower in Scotland than it was in England and Wales.

In Dundee the surplus of women in the population was extreme, though it did resemble textile centres south of the boarder. This affected marriage rates in the city which were comparatively low amongst all ages with women tending to marry as they became older. There were also fewer babies born in Dundee at the time. The demographic structures of the city reflected the nature of employment in the textile industry which was dominated by women. In Dundee women had a larger share of the workforce and more of them worked than in Scotland as a whole. We discovered that fewer married women worked in Scotland than in England and Wales. In Dundee, however, the number of married women working was enormous. The low wages which they received made Dundee the most disadvantaged and poverty stricken of all the Scottish cities at the time.

One important point remains to be made in concluding

this discussion. Although the task of this chapter was to outline the life experiences of 'women' as a group over the period 1871 to 1911, in each of the three areas of women's lives which were examined some kind of variation in experience was apparent. In the discussion of demographic issues the skewed sex ratio, for example, hinted that a number of women were denied the typical experience of marriage and motherhood. In the sections on poverty the impact of household composition and changes in it over the life cycle indicated that women had different experiences from one another and that these experiences altered with time. The sections on women's employment showed that women had different involvement according to whether they were single, married or widowed. This variation in experience is encouraging with respect to the basic assumption of the thesis. In the chapters which follow an attempt is made to identify groups of women according to variation in their experience within the Dundee context. Links are also made between the different aspects of women's lives in order to achieve a better understanding of women's relationship to home and to work.

NOTES

(1). During the years under consideration the census did not record characteristics of the English population separate from those of the Welsh population. Thus the aggregate figures for both countries are presented throughout the text and the tables of this chapter.

(2). The "Household Economics Approach" to the understanding of family history contends that economic concerns at the household level lead to strategies which determine wider demographic structures. A review of this literature appears in M. Anderson, 1980.

(3). The fertility rate used here refers to the number of births which occurred amongst every thousand women of reproductive age, fifteen to forty-four. The legitimate birth rate is calculated by dividing the number of legitimate births by the number of married women of reproductive age, and then multiplying by one thousand. The illegitimate rate is calculated using the same equation; dividing the number of illegitimate births by the number of single and widowed women aged fifteen to forty-four.

(4). In order to assure consistency over the period the proportion of women employed is calculated using the total number of women of all ages in the population. An adjustment is required in the census returns from 1891 onwards as only women aged ten years plus enter the tables depicting returns of employment.

(5). Rowntree defined "primary poverty" as existing in those households whose total earnings were insufficient to obtain the minimum necessary for "physical efficiency". Secondary poverty, he said, existed where the total earnings of a household would have been sufficient to meet this end were it not that a share of the income was absorbed by other expenditures, either "useful or wasteful".

(6). Bob Morris calculated the sex ratios of all the Scottish burghs in the 1901 Census. Though Dundee had one of the largest surpluses of women in its population St. Andrews had the largest in Scotland and several others fell between these two. These figures remain unpublished at present.

CHAPTER THREE

DUNDEE: THE SOURCES AND THE SAMPLE

INTRODUCTION

The study of the Dundee textile community during the late nineteenth century is concerned with developing an understanding of processes which traverse employment and domestic environments. In working towards this goal detailed information regarding these two areas of social life had to be gathered. This chapter looks at the sources of information which were employed. In part one, those which helped to establish the nature of employment within the textile industry are discussed. In addition to general information regarding hours and conditions within the industry, we needed to know about the range of occupations which were available and about how these were organised hierarchically. The former was reconstructed using information held in a variety of printed and archival sources, while the latter was established primarily with the aid of information on the wages paid to those who worked in the textile industry at the time. The second part of the chapter is concerned with outlining the characteristics of the sample of households from the 1891 Census and with comparing this sample to the population of Dundee as a whole. Using information extracted from the Census enumerators books, supplemented with material from printed reports, it became possible to construct a detailed picture of how domestic circumstances were organised in late nineteenth century Dundee. For example, the composition

of households became clearer as did the sex of household heads. This information was also used to relate the domestic circumstances of individuals to their experiences and positions in the textile hierarchy. The issues arising from these activities are all explored in greater detail in the chapters which follow.

PART ONE: EMPLOYMENT STRUCTURE AND WAGE SOURCES

The annual reports of the Inspector of Factories and Workshops which were published in parliamentary papers throughout the period helped to establish the hours worked and the conditions under which work was carried out within Dundee textiles. They also provided information about general issues which concerned the industry such as the state of trade in jute and the fluctuations in wages which accompanied any such change. The annual reports were also concerned with wider issues of the day, such as health and safety in factories, and were thus useful in building up a sense of the wider context in which jute employment occurred. In addition, the reports imparted information about the regulations which constrained women's employment in jute. This came under the jurisdiction of the Factory Acts which covered British textile industries in general. Any changes in these regulations were recorded in the reports as were changes in the regulations governing children's employment, for example, the lowest age at which they could begin to do paid work.

The reports became particularly interesting in the 1890s as comments from various witnesses to the Royal Commission on Labour, 1891, resulted in female factory inspectors being employed for the first time. It had become clear that many of the issues around the employment of women could not be properly investigated by the existing male inspectors. The documentation arising from the Royal Commission on Labour provided one of the most extensive bodies of information covering the period and was thus an invaluable source. The Commission interviewed employers, employees, and union representatives, from all over the country, about many pertinent issues concerning employment at the time. These interviews were published in full in parliamentary papers, as were a plethora of records, both written and statistical, which were initiated by the Commission.

Besides more general issues of employment in Dundee jute towards the end of the nineteenth century, the hierarchy of male and female occupations within the industry had to be reconstructed. This was a two stage process which involved the use of multiple sources. Firstly, a picture of the jute manufacturing process was drawn. This was achieved by looking at texts which described the different processes involved in producing jute from the raw fibre to the finished product. A large body of literature covering the technical aspects of

jute production exists, this contains debates over how best to prepare the brittle raw fibre thus making it pliable for spinning and weaving (Atkinson, 1964: Carmichael, 1969: Moore, 1914: Woodhouse & Brand, 1934). This literature typically discussed particular aspects of production, none of it covered the entire production process from start to finish. Gradually, however, with the help of additional information from the Dundee Year Book and from scant, though surviving, archival material a picture of the five main departments involved in jute production emerged. These included preparing through spinning, reeling and winding to weaving and finishing. The same literature was also useful in outlining the numerous tasks which were incorporated into the different textile departments and in identifying the sex of those carrying out these tasks.

Clarification of, and more detailed information regarding the way in which men and women were segregated in textile occupations was extracted from sources covering the wages paid to the employees of the late nineteenth century Dundee jute industry. These sources were also helpful in establishing the hierarchy of occupations. Though very little by way of original wage book material from the jute industry remained, the outlook was not as bleak as some claimed (Lenman et. al., 1969), and using a combination of original manuscripts and printed sources a fairly detailed picture of wage levels in Dundee was drawn. The monthly

wage books of Baxter Brothers and Company remain intact for the period 1873 to 1891. Unfortunately, these were of little use in establishing the wage hierarchy within textiles because only managers, overseers, and clerks received monthly wages and they were few in number. Regular operatives who comprised the majority of employees on the floors of the textile industry were either paid weekly or by the piece and they did not appear on the pages of these books. More useful were the wage books of the Victoria Spinning Mill which cover the period from 1893 to the end of the nineteenth century. These provide detailed wages - actual earnings, as well as, hourly and weekly rates - for those employed in preparing, spinning, and reeling and winding, all mill jobs. Wages for weavers, which were factory occupations, and for finishers were not included in this source.

Because there was no surviving wage book source which gave comprehensive wage information for all processes in a single company at a particular time, much emphasis was placed upon printed sources in outlining the textile wage hierarchy. This means that the analysis of wages which appears in subsequent chapters was carried out using wage levels rather than using the actual earnings of particular employees. The most comprehensive wage levels were those appearing in a Board of Trade report on 'Earnings in the Minor Textile Trades, which was published in parliamentary papers in 1890 (P.P., 1890 LXVIII). These figures are most probably those which

John Lennox refers to in his thesis of 1906. The wage returns listed in the Board of Trade Report were gathered (in 1886) from a census of wages paid in those textile trades which employed small numbers nationwide, compared to the Cotton and Woollen industries. Dundee, the only major jute manufacturing city was covered in detail. The wage rates which appear in the report are calculated from a survey which covered more than half of the textile employees in the Dundee jute industry and constitute an extremely reliable source. Another good source of information was the Dundee Social Union Report (1905) in which both employers and employees provided details of the wages which they either paid or received. The general returns in parliamentary papers were useful for establishing an idea of the wages paid to those, particularly men, who were in Dundee's non-textile occupations.

Two further sources deserve a special mention because of their usefulness throughout the thesis. They are the Dundee Year Book, and the Dundee Social Union Report. The former was an annual publication composed of extracts from the local paper, The Dundee Advertiser. It listed "Facts and Figures" on a variety of issues concerning the population of Dundee. Every year, across the entire period of study, this publication had something to say about the nature of employment within the jute industry, and about the effects which the industry had upon the social life of the city. The

Dundee Social Union Report (1905), already mentioned in the previous chapter, was a source of more specific information on the connections between the structure of employment in the jute industry and the social conditions prevalent in Dundee at the turn of the century.

Finally, a word about absent sources. Little in the way of qualitative material covering the living and working experiences of the citizens of Dundee during the years of the late nineteenth century exist. Dundee Mill and Factory workers simply did not write diaries, letters or books or, if they did, they have not survived the onslaught of time. Where qualitative impressions survive, they are usually those of middle class, "socially concerned" investigators such as the 'Lady Contributor' to the Dundee Year Book (1884).

PART TWO: THE DUNDEE CENSUS SAMPLE 1891

The most important source used, the enumerators books of the Decennial Censuses of Scotland, combined detailed information about the domestic and employment circumstances of the population of Dundee (1). The books hold all the basic raw data from which the tables appearing in the printed Census Reports are compiled. Details about 'familial relationships' and employment positions are listed for all the members of a household. For the purposes of the study a sample was taken of the

individuals/households contained in the enumerators books of the 1891 Census. The books of this Census were selected because they are the last available for consultation; those of subsequent years are covered by a rule which prohibits public access until one hundred years since the taking of the Census have elapsed. Another reason for using the 1891 books was that during the late nineteenth century many improvements in the Census were made to ensure greater precision both in the collection and classification of information. These improvements meant that the 1891 Census was the most sophisticated to date; it incorporated, for the first time, a complete reassessment of the classification of occupations (Armstrong 1972). Finally, the year 1891 was selected because it sat in the middle of the period under study. The textile industry in Dundee by this time had grown and matured to its full potential. The manufacturing and processing of jute was enjoying great prosperity, and there were high levels of employment in the city. According to the 1891 Report of the Inspector of Factories and Workshops this particular year was one of flourishing trade in the jute industry and several new factories were opened (P.P. 1892 vol.XX [c.6720]).

The 1891 census divided Dundee into 148 enumeration districts gathered together in five registration districts. A sample of four of these districts was taken and from this the main data set of the study was constructed. In order to maximise the number of

households containing textile employees the prime criterion for selecting enumeration districts was their proximity to a textile manufacturing establishment. This criterion was used because it was common knowledge that the low wages and the high cost of living typical of Dundee at the time meant that mill and factory workers tended to live close by their place of work (Lenman et. al., 1969). A picture of the geographical locations of textile works was drawn up using second edition ordnance survey maps of the city published in 1900. These named all manufacturing concerns in the city and marked their locations (2).

The enumeration books take the form of huge ledgers with information filled out in the handwriting of enumeration officers. Every household which falls within the boundaries of a particular enumeration district has its own schedule and these are arranged upon the pages of the books (3). Each person within the household has a single line of the enumeration book devoted to him/her and on this appears that person's name, relation to head of household, marital status, age, sex, occupation, employment status and place of birth. There were a total of 932 schedules or households in the four districts which comprised the sample. The average household had four members and a median of four persons per household also pertained. The smallest households had only one or two members, while the largest had as many as twelve. (Information concerning household size is presented in

Appendix III, Table 1).

Computation of the material selected from the census enumerators books facilitated the reconstruction of household structures in the Dundee textile community. It also enabled detailed investigation of patterns of employment. No other source offered such potential. The first piece of information which appears on each line of the schedule, after the actual name, is the person's relationship to the household head. An often quoted characteristic of late nineteenth century Dundee is the large number of female household heads. But hardly any statistics about how many households were headed by women could be found. Specific studies such as that conducted by the Dundee Social Union (1905) estimated that one third of households in the city were female headed. This question highlights the value of the enumeration books. They are the only source from which the sex of household heads can be extracted. A simple calculation enabled the proportion of females in this position in the sample to be established. The resulting figure was very high, it showed that forty-two per cent (389) of households had a woman at their head. Fifty-eight per cent (543) of households were headed by men.

SEX AND AGE STRUCTURE OF THE SAMPLE

The large number of female household heads was reflective of the imbalance in the sex composition of

the sample. Of the total 4105 individuals included, 1697 were males and 2408 were females. The small number of males in the sample was matched by a huge surplus of women, as was found in the population of Dundee as a whole (Table 3:1).

TABLE 3:1 SEX AND AGE PROFILE OF THE DUNDEE SAMPLE

AGE	SEX		TOTAL
	MEN	WOMEN	
0-4	233	267	500
5-14	476	468	544
15-24	368	544	912
25-34	222	370	592
35-44	162	305	467
45-54	115	217	332
55-64	83	154	237
65+	38	83	121
MISS.	2	-	2
TOTAL	1697	2408	4105

By calculating the sex ratio the extent of the excess was revealed. In 1891 the population of Dundee had 125.2 women for every hundred men of all ages, and 136.6 women to every hundred men in the fifteen to forty-four age group. The sample shows an even greater degree of imbalance. It had 141.9 women to every hundred men amongst those of all ages, and 162.1 women to every hundred men in the fifteen to forty-four age group.

The age profile of each sex is also set out in Table 3:1. These data show that the distribution of the sexes in the sample was fairly similar to the distribution of the sexes in the population at large. The main feature of age and sex composition is a greatly reduced number of males compared to females in the mid teens which

continues on up into the fifties. The male population of the sample is slightly younger than was the male population of Dundee, with forty-two per cent of men under fifteen years of age. The mean age of men in the sample is twenty-two years and the median a much younger eighteen years. The female population of the sample was significantly older than the male, only thirty-one per cent of women were under fifteen years and fifty-one per cent were between fifteen and forty-four. Women in the sample had a mean age of twenty-seven years and a median of twenty-three years. The age distribution was thus similar to that of the female population of Dundee in 1891. The main reason for the age disparity between the sexes was the different availability of work for men and women in the city.

THE SAMPLED ENUMERATION DISTRICTS

The four Dundee enumeration districts which were sampled encircle the city, following the spread of textile manufacturing establishments (Appendix I). The number of people in each of these districts and the sex composition of them can be viewed in Table 3:2. Starting in the South East, the first and most central district selected shall be called the Dens district - it incorporated one of the oldest textile companies in Dundee (Appendix I, Map 1). The Baxter Brothers Dens Works was one of the few which continued to produce linen as well as jute in 1891. This district was the

second largest and had a total of 1304 people living in 316 households: 531 men and 773 women. The second district selected, Caldrum, had the large purpose built Caldrum Works within its boundaries, and undertook both the spinning and the weaving of jute (Appendix I, Map 1). Caldrum district was situated at the edge of the city to the North East corner and was adjacent to district number three, Glamis (Appendix I, Map 1).

TABLE 3:2 SEX COMPOSITION OF THE FOUR ENUMERATION DISTRICTS

DISTRICT	SEX COMPOSITION			SEX RATIOS	
	MEN	WOMEN	TOTAL	ALL AGES	15-44
1. DENS	531	773	1304	145.6	151.6
2. CALDRUM	360	464	824	128.9	153.0
3. GLAMIS	196	213	409	108.7	117.0
4. BOWBRIDGE	610	958	1568	157.0	191.0
TOTAL	1697	2408	4105		

Both Caldrum and Glamis districts were much smaller than Dens. The former had 824 people, the latter only 409. These districts also had more balanced sex compositions than did the remaining two (Table 3:2). The fourth, and final enumeration district, Bowbridge, was chosen from one of the seven which made up the registration district of Lochee (Appendix I, Map 2). This district housed the huge and successful Bowbridge Works owned by the Cox Brothers, probably the largest manufacturer of jute in Dundee. Lochee, in the North West, was formerly a separate village and still remained slightly isolated

from the rest of the city as the 1900 edition maps indicate. This district was the largest of the four with 1568 individuals in total, living in 361 households. The sex composition of the Bowbridge district was the most highly imbalanced with 157.0 women to every hundred men amongst all ages and 191.0 women for every hundred men in the fifteen to forty-four age group.

Table 3:3 shows the sex of household heads in each enumeration district. Looking at this we find that Lochee was again dominated by women.

TABLE 3:3 THE SEX OF HOUSEHOLD HEADS IN THE FOUR ENUMERATION DISTRICTS

DISTRICT	MALE	(%)	FEMALE	(%)	TOTAL	(%)
1. DENS	191	(60)	125	(40)	316	(100)
2. CALDRUM	121	(72)	47	(28)	168	(100)
3. GLAMIS	64	(74)	23	(26)	87	(100)
4. BOWBRIDGE	167	(46)	194	(54)	361	(100)
TOTAL	543		389		932	

A remarkable fifty-four per cent of households in the Bowbridge district had a female at the head. The relative isolation of the Bowbridge Works and its dependence on female labour is likely to explain the unusually large number of women in Lochee, even by Dundee's standards. Dens district, which had the next highest concentration of women, also had a large number of female headed households, forty per cent. The remaining districts had considerably lower proportions

of households headed by women.

CONJUGAL CONDITION OF THE SAMPLE

The conjugal condition of the sample was also similar to that of the population of Dundee, though again circumstances were somewhat more extreme. Table 3:4 shows the marital status of both men and women in the sample. (The age structure of each group is presented in Appendix III, Table 2). This information shows two important patterns. Firstly, the predominance of single people in the sample (66%) and secondly, the proportionally larger number of women in the widowed category. There are almost six times as many widowed women as there are widowed men in the sample.

TABLE 3:4 CONJUGAL CONDITION OF THE SAMPLE,
DUNDEE 1891 (ALL AGES)

MARITAL STATUS	SEX		TOTAL (%)
	MEN (%)	WOMEN (%)	
SINGLE	1153 (68)	1558 (65)	2711 (66)
MARRIED	501 (30)	603 (25)	1104 (27)
WIDOWED	43 (3)	247 (10)	290 (7)
TOTAL	1697 (100)	2408 (100)	4105 (100)

One question which arises from the nature of sex ratios and marital status in the sample is whether patterns of marriage and motherhood are disrupted by the predominance of women. Table 3:5 uses the standard

methods for measuring the incidence of marriage to assess its importance for the women of the sample. From this we can see that the sample has succeeded in capturing the reduced marriage opportunities found generally in Dundee at the time. In 1891 53.6 per cent of women of all ages were ever married in Dundee, and 81.4 percent of women aged forty-five to forty-nine either were married or had been. Amongst the women in the sample, rates of marriage were slightly lower with 50.8 per cent of women of all ages ever married, and 78.6 per cent of women in the forty-five to forty-nine age group.

TABLE 3:5 MARRIAGE RATES AMONGST WOMEN IN THE SAMPLE

ENUMERATION DISTRICTS	PERCENTAGE OF WOMEN EVER MARRIED	
	AGED 15+	AGED 45-49
1. DENS	55.4	74.3
2. CALDRUM	50.6	91.3
3. GLAMIS	59.5	85.7
4. BOWBRIDGE	46.5	75.0
TOTAL SAMPLE	50.8	78.6
TOTAL POPULATION	53.6	81.4

In addition to providing information on marriage for the whole sample, Table 3:5 also breaks down rates for the four enumeration districts. This shows the extent of variation across each with the lower rates of marriage in the Dens and Bowbridge districts, those which also

had the largest number of excess women and the highest proportions of female headed households.

So far we have seen how some of the general demographic features which were prevalent in Dundee at the time were reflected in the sample. Often the patterns characteristic of the sample were more extreme: it had a larger proportion of excess women, lower rates of marriage, and a higher proportion of female household heads. The most likely reason for the large number of women in the sample is the selection of a textile workforce. If an attempt was to be made to establish the validity of this explanation it was important to look at the employment profile of the sample population.

EMPLOYMENT PROFILE OF THE DUNDEE SAMPLE

As discussed in the previous chapter, the demographic features which characterised Dundee are associated with the particular structuring of employment in the city. The textile industry which offered more than twice as much work to women as to men was particularly instrumental. The sample was no different in this respect, in selecting a textile working population it captured patterns of experience which resembled those found in Dundee as a whole. The employment patterns of the individuals comprising the sample are now considered in some detail, and comparisons with employment profiles in the aggregated Dundee material are drawn.

The sex composition of Dundee workforce in 1891 was forty-six per cent female and fifty-four per cent male. The 1891 sample workforce accentuates these circumstances, as can be seen in Table 3:6. Here that figure is reversed and women have the largest share of the workforce, fifty-four per cent, men are forty-six per cent.

TABLE 3:6 EMPLOYMENT STATUS OF MEN AND WOMEN
IN THE SAMPLE (ALL AGES)

	MEN		WOMEN		TOTAL	
	N	(%)	N	(%)	N	(%)
EMPLOYED	1040	(61)	1220	(51)	2260	(100)
(%)	(46)		(54)		(100)	
NOT						
EMPLOYED	657	(39)	1188	(49)	1845	(100)
(%)	(39)		(49)		(100)	
TOTAL	1697	(100)	2408	(100)	4105	

The age structure of the sample's workforce is also in keeping with that characteristic of the rest of Dundee (Appendix III, Table 3). The rapid decline in the size of the male workforce in the late teens and early twenties reflects the lack of adult male employment in the textile industry. Conversely, the continued employment of women in their twenties is due to the abundance of women's work in the industry which continued to draw in women even as they reached the age where they may typically be expected to marry and leave full-time employment.

THE TEXTILE WORKFORCE

Overall the sample captured a population highly dependent on the textile industry for employment. A larger percentage of men and women in the sample were in this type of work than was generally the case amongst the population of Dundee. In 1891 fifty per cent of the Dundee workforce was in textiles, in the sample the proportion of the workforce thus employed was sixty per cent. Dens district had the smallest proportion of its workforce in such jobs, fifty-four per cent, and Bowbridge had the largest, seventy-seven per cent. Caldrum and Glamis fell in between the two with sixty-three per cent and fifty-seven per cent of their respective workforces employed in textiles. Participation in textiles was larger amongst both sexes in the sample. Forty per cent of working men were employed in the textile industry compared to twenty-eight per cent of men in the total workforce of Dundee. Eighty-eight per cent of women in the sample who were in full-time employment worked in textiles compared to seventy-one per cent of women in Dundee as a whole.

The balance of the sexes within the textile industry in the sample looked similar to that of the textile industry in Dundee in 1891. Table 3:7 shows that the sample's textile workforce is composed of more than twice as many women (72%) as it is men (28%). The textile workforce of Dundee as a whole had slightly more

men (32%) and fewer women (68%).

TABLE 3:7 PARTICIPATION IN TEXTILES (ALL AGES)

	TEXTILES		NON-TEXTILES		TOTAL
	N	(%)	N	(%)	
MEN (%)	414 (28)	(40)	626 (81)	(60)	1040 (100)
WOMEN (%)	1070 (72)	(88)	150 (19)	(12)	1220 (100)
TOTAL	1484 (100)		775 (100)		2260

The age structure of the textile workforce (Appendix III, Table 3) shows that the lack of adult male employment in the industry helped to determine the small numbers of men in the total workforce of the sample, as it did in the wider population of Dundee. Men in the age groups affected probably migrated out of Dundee in search of work elsewhere bringing about the imbalance of men and women which was found in the population.

Variations in the proportion of men and women who were employed by the textile industry in the four enumeration districts existed (Appendix III, Table 4). Dens had the smallest number employed in textiles, both men and women, compared to the other three districts in the sample. Because it was not geographically isolated in the way that the other districts were Dens, which was positioned in the town centre, had a more heterogeneous, urban style employment structure (Appendix I, Map 1). Caldrum and Glamis were similar to each other with large proportions of their workforces

dependent upon textiles. Bowbridge, situated out at Lochee, had the largest proportion of its workforce dependent upon the industry. In Bowbridge most women who were in paid employment worked in textiles (92%) and more than half of the male workforce were in this type of employment (52%). These figures give substance to the claim that high female employment in the textile industry accounted for the prominence of women, and female household heads in Bowbridge. The comparatively fewer opportunities for the employment of women which existed in Dens is associated with the more balanced sex ratio, and higher incidence of male headed households found in this location.

WOMEN'S EMPLOYMENT

In general, the number of women in paid employment was high in Dundee, as seen in the previous chapter. The sample has captured this feature of the city, in fact the proportion of women employed in the sample is considerably larger. Referring back to Table 3:6, the percentage of women in the sample who were in paid employment was fifty-one per cent. This compares to a figure of forty-three per cent for women in Dundee in 1891. The earliest at which children could work was ten, though they could only do so part-time until they were thirteen years old. Re-calculating the number of women working in the sample as a proportion of those aged ten years plus, the percentage employed rises from fifty-one to sixty-four (4). This figure was high partly

because women continued to work during their middle adult years.

Women's employment in Dundee was also high because so many married women worked. The sample featured a very high incidence of married women's employment. The figures in Table 3:8 show that thirty-four per cent of married women were employed. There are no figures for married women's employment in the Census reports of 1891, however, in the first year that this information was available (1911) the Census recorded that twenty-three per cent of married women in Dundee were employed. Thus in addition to capturing a greater number of employed women in general, the sample appears to have tapped a larger number of employed married women. Typically, more widowed women than married women worked and the number of widows in Dundee was particularly high. Of the total widows in the sample fifty-seven per cent were in full-time paid employment. This compared to thirty-nine per cent of widowed women amongst the total population of Dundee in 1911.

TABLE 3:8 THE FEMALE WORKFORCE OF THE SAMPLE (ALL AGES)

	SINGLE		MARRIED		WIDOWED		TOTAL	
	N	(%)	N	(%)	N	(%)	N	(%)
EMPLOYED	876	(56)	204	(34)	140	(57)	1220	(51)
NOT EMPLOY.	682	(44)	399	(66)	107	(43)	1188	(49)
TOTAL	1558	(100)	603	(100)	247	(100)	2408	(100)

Women in the sample who were members of these

different marital status groups worked overwhelmingly in textiles (Table 3:9). Of those married women who were employed ninety-two per cent were in textile jobs. As a group they were most likely to be found in this type of work. Single women followed closely behind married women, eighty-eight per cent of them were in textiles. Widowed women, by contrast, had a comparatively low incidence of employment in the industry, 'only' seventy-five per cent were in textile jobs. So though the majority of widows were highly dependent upon the textile industry for employment, a significant proportion of them were in non-textile occupations.

TABLE 3:9 WOMEN'S EMPLOYMENT IN TEXTILES BY MARITAL STATUS

(ALL AGES)

	TEXTILES		NON-TEXTILES		TOTAL	
	N	(%)	N	(%)	N	(%)
SINGLE	778	(89)	97	(11)	875	(100)
(%)	(73)		(65)			
MARRIED	187	(92)	17	(8)	204	(100)
(%)	(17)		(11)			
WIDOWED	105	(75)	35	(25)	140	(100)
(%)	(10)		(23)			
TOTAL	1070	(88)	149	(12)	1218	(100)
(%)	(100)		(100)			

Despite the extensive employment of married and widowed women in textiles, single women dominated the picture. The latter accounted for seventy-three per cent of the female textile workforce, married women were seventeen per cent and widows were ten per cent of the total.

In summarising the employment profile of the sample we can make claims to have captured a largely textile

working population. The patterns found amongst the workforce in the aggregated Dundee material are reflected in the sample, though the latter shows higher levels of concentration in textiles. This fact, coupled with the extremes found in the demographic circumstances emphasise the inter-connectedness of demographic and employment patterns.

MIGRANT POPULATIONS

Ethnicity is the feature of the sample which remains to be considered. Ethnicity was relevant to Dundee during the late nineteenth century because there was such a large migrant population in the city at that time. Many came from outside of Dundee to work in the jute industry. Often migrants came from the surrounding Forfarshire area, while others came from further afield, for example, from the Highlands of Scotland. The largest single group of migrants to the city were the Irish, most of whom arrived in Dundee from the late 1840s onwards following the Potato Famine. By 1891 Irish migration had all but ceased. Nevertheless, there remained a fairly large and important Irish community.

The birthplaces of the men and women in the sample are presented in Table 3:10. The majority of people in the sample were born in Dundee or in the surrounding district (69%). Eighteen per cent were from parts of Scotland outside the Forfarshire area, and ten per cent

were from Ireland. The Irish born of the sample were overwhelmingly female. Calculation of the sex ratio for this group showed that there were 239 women for every hundred men amongst those of all ages. As was typical of the sample there were even more women in the fifteen to forty-four age group; 243 women were found for every hundred men. The sex ratios for those groups born either in Dundee and District or elsewhere in Scotland were more balanced than those found amongst the Irish born. Women were attracted to Dundee by the numerous employment opportunities which the jute industry offered, and this explains the surplus of women amongst the Irish people in the sample.

TABLE 3:10 BIRTHPLACES OF MEN AND WOMEN IN THE SAMPLE

BIRTHPLACE	MEN	WOMEN	TOTAL	(%)
DUNDEE AND DISTRICT	1286	1564	2850	(69)
SCOTLAND	239	493	732	(18)
IRELAND	121	289	410	(10)
OTHER*	51	62	113	(3)
TOTAL	1697	2408	4105	(100)

*(England, Wales, France, Canada etc.)

As said, by 1891 Irish migration to Dundee had virtually stopped. The children of Irish born parents were being returned in the census as Scottish born. This had the effect of skewing the age profile of the Irish population and helps to account for the fact that the Irish in the sample were an aging group (Appendix III,

Table 5). Ninety-two per cent of Irish born are over the age of twenty-five, and a quarter are older than forty-five years. In the sample as a whole, only seventy per cent were over the age of twenty-five.

Perhaps surprisingly, the large surplus of women in the Irish born of the sample did not affect their rates of marriage and more of this group were married than was true of the total sample. Sixty-eight per cent of Irish women of all ages were ever married (Table 3:11) compared to only fifty-two per cent of those in the sample as a whole. By the age of forty-nine eighty-six per cent of this group either were, or had been, married but only seventy-eight per cent of women in the sample. The majority of Irish men in the sample were ever married, eighty-two per cent.

TABLE 3:11 MARITAL STATUS OF THE SAMPLE'S IRISH BORN

MARITAL STATUS	SEX		FEMALES		
	MALES		N	(%)	
	N	(%)	N	(%)	
SINGLE	22	(18)	93	(32)	
MARRIED	89	(74)	99	(34)	
WIDOWED	10	(8)	97	(34)	
TOTAL	121	(100)	289	(100)	(N 410)

Irish women came to Dundee to work in the textile industry, (Table 3:12). Sixty-four per cent of Irish women in the sample were employed, and nearly all of them were in textile occupations (96%). But fewer Irish men found work in textiles. Only thirty-four per cent of

Irish men in the sample were in textiles, compared to forty-three per cent of Scottish men.

TABLE 3:12 EMPLOYMENT OF IRISH MEN AND WOMEN IN THE SAMPLE

INDUSTRY	SEX MEN		WOMEN		TOTAL
	N	(%)	N	(%)	N
TEXTILES	34	(34)	176	(96)	210
NON-TEX.	66	(66)	8	(4)	74
TOTAL	100	(100)	184	(100)	284

As in the sample as a whole, women of all marital status groups were employed. However, in both the single and married group Irish women showed a higher incidence of participation. Eighty-six per cent of single women, and forty-four per cent of married women were employed. The percentage of Irish widows who worked was similar to that found for the overall sample. There was virtually no variation in the proportion of each marital status group employed in textiles, nearly all Irish women who worked were to be found in the industry.

CONCLUSION

In part one of this chapter the sources which were used in order to recreate the structure of employment and the hierarchy of wages in the late nineteenth century Dundee textile industry were discussed. Generally speaking, though these sources were heterogeneous and wide ranging they were in most cases published and readily available. Archival material for

Dundee at this time was sparse and limited. That which had survived took the form of company records. Very few qualitative sources existed. The second part of the chapter introduced the sample of individuals and households from the 1891 Census enumerators books, the source which provided the raw data for the present study. In comparison with the population of Dundee as a whole, the sample had greater extremes of the features which characterised the city. It had a greater surplus of women, lower incidence of marriage amongst women, and more female headed households. The underlying explanation for the extremes of the sample was to be found in the numbers employed in textiles. The sample was successful in capturing a largely textile working population and it was, therefore, characterised by the features which were associated with this in Dundee at the time. The Irish comprised a significant proportion of Dundee's population in 1891 and the information from the enumerators books helped to outline some characteristics of this group for the first time. This finding is incorporated into the analysis of household/employment processes which takes place in following chapters.

NOTES

(1). The Enumeration books of the decennial census of Scotland are housed in New Registrar House, Edinburgh.

(2). The maps which appear in Appendix 1 are copies taken from the original second edition Ordnance Survey maps of Dundee (1900) which are housed in the map section of the national library of Scotland.

(3). See Appendix II for an example of the information which is given in one of these schedules.

(4). For the purposes of comparison across census years this figure again had to be calculated for women of all ages. See note (4) chapter 2 for further clarification of this point.

CHAPTER FOUR

WOMEN'S WORK IN THE LATE NINETEENTH CENTURY DUNDEE TEXTILE INDUSTRY

INTRODUCTION

In his most recent contribution to the social history of Scotland, T.C. Smout contrasts the gender composition of the workforce in Glasgow and Dundee at the turn of the century. On the one hand was Glasgow, characterised by a "male-dominated working class culture", on the other was Dundee with its preponderance of females (Smout, 1986: 88). Smout argues that the sheer number of women in the population and the textile industry of Dundee brought about a distinctive female culture. Despite a plethora of references to Dundee of this sort there is very little documentation of the specific nature of employment, including the types of occupations which were open to the female textile workforce. An even greater dearth of information surrounds the characteristics of women who were employed in these different occupations. This chapter, which is presented in two parts, seeks to set about providing information of both sorts.

In part one general information regarding the experience of employment is examined. The main focus here is on the nature of hours and conditions within the late nineteenth century Dundee textile industry. This is followed by a description of the different occupations which were open to women in the four main departments

and an outline of the hierarchy of wages which corresponds to them. The range of occupations and wages within the textile hierarchy which emerges from this exercise suggests a highly differentiated female workforce. The final section of part one brings together information from the literature and folklore of the city which helps to establish characteristics of the women who were employed in different sections of the industry. The picture which emerges, however, is somewhat sketchy and unsystematic. As a result, part two of the chapter, uses information from the sample of the 1891 Census to build up a more detailed picture of who did what in the female textile hierarchy. In addition to considering the distribution of women in the industry by age and marital status, this section looks at the jobs which Irish women did in the textile workforce and establishes their disadvantage compared to the workforce as a whole.

PART ONE: WOMEN'S WORK IN THE DUNDEE JUTE INDUSTRY

(i) HOURS AND CONDITIONS

The working day for women in Dundee's nineteenth century jute mills and factories was long and arduous leaving little time over for domestic chores. The "Ten Hours Act" of 1847 had set the hours which women could work in textiles to ten a day and to fifty-eight a week. Overtime was also barred as part of this legislation (Wood, 1902). A typical day in one of the Dundee's mills or factories was still governed by this Act as the

nineteenth century drew to a close. For both men and women in jute, work began at six in the morning. At nine o'clock there was a break of an hour for breakfast work starting again at ten and continuing through until two in the afternoon. Two o'clock signalled dinner time, which also lasted for an hour, work resuming at three and the day finishing at six in the evening (John Walkers' evidence to the R.C.L., 1891). A total of ten hours were worked each day from Monday to Friday. Six hours were worked on Saturdays; beginning again at six, breaking between nine and ten, and stopping at one.

Adult women who worked in jute crammed in domestic tasks at any free moment. The evidence suggests that during the meal breaks many would return home to eat and attend to any chores which could be managed. Food was not generally provided in the mills or factories but cooked food was available in local Cookshops where soup and hot meals could be bought daily, and which seem to have been well used by those who could afford the extra cost. Mothers who had babies and young children would use the meal times to nurse them, visiting the childminder who was usually a neighbour or a relative. Though some creches existed in Dundee at this time, they were not well attended (D.S.U., 1905, 69). Breaks were also used by women to clean their machines. This was especially true for weavers who were under pressure to maintain production during working hours. The sanctity of the break appears to have been a matter many of the

women textile operatives considered worth fighting for (Gordon, 1987). In an industry with little worker organisation, strikes by women over this issue were apparently frequent in the earlier part of the period.

The long hours and the demanding nature of the work in Dundee textiles meant that women had little time or energy left over for domestic tasks, a burden which must have been particularly felt by many of the women in the industry who had young children. The length of time spent by women at work meant that the conditions under which they laboured were all-important, an issue to which the state grew more sensitive over the course of the century. Those employed in the newer purpose-built mills and factories fared better in this respect than those who worked in the older institutions.

The first female inspectors of factories and workshops, introduced as a result of the Royal Commission on Labour 1891, were given responsibility for uncovering the nature and conditions of women's work. The issues which appeared in their first reports were those of safety, sanitation, ventilation and drinking water. Though most textile establishments in Dundee provided separate sanitary accommodation for men and women, Scotland's first 'lady' inspector, Miss Paterson, stated in her 1894 report that the number of such facilities was quite insufficient (P.P. XXI, 1895). Contradictory reports exist over the conditions which prevailed in jute

textile establishments. The Dundee Year Book, for example, blows the trumpet regarding the physical state of the mills and factories but factory inspectors painted a rather different picture. On the whole, Dundee came off no better or worse than other areas in this respect.

Disputes over conditions which were documented in the factory reports were often connected to issues of the need to sexually segregate the workforce, though this does not appear to have been a major concern in Dundee. On the subject of sexual segregation Dundee Social Union argue that there was a lack of definition between men's and women's work in the jute industry and that this was to blame for the low wages which men received:

"Men and women are employed indiscriminately as preparers, batchers, rovers, shifters, sweepers, weighers, and in some calendering processes." (D.S.U., 1905: 51)

This scenario, however, does not really describe the division of the sexes in Dundee's mills and factories. Men and women neither did the same work, nor were they in direct competition. Those men who were preparers, rovers, and shifters were usually boys and young lads who left the industry at seventeen or eighteen years. Adult men would rarely be found in these positions. Batching was one of the few tasks in which both men and women were employed but even here men took the heavier work, and some firms, claimed M. Irwin in her report to the Royal Commission on Labour, did not employ women as

batchers at all, adding that it was "monotonous dirty work" (P.P. XXVII, 1893-94: 301).

In the spinning mills the vast majority of operatives were women. Nearly all overseers, on the other hand, were men. But the number of male overseers was small compared to the number of operatives; there could be as many as seventy women to each (Gordon, 1987). In the weaving factories supervision was a somewhat different matter and here men and women worked along side each other, if not in the same jobs. Weavers were hired by male 'tenters', who looked after the mechanical workings of the looms and whose wages were partially dependent on the output of their weavers. Tenters were on bounty wages which were composed partly of time rates and partly of piece rates. This interdependence led to a considerable amount of conflict between the two with reports of tenters bullying weavers into turning out more cloth so that they could up their wages (D.Y.B., 1893: 176: R.C.L., P.P. XXXV, 1892). On the whole, it can be said that sexual segregation was a marked feature of the Dundee textile industry with a large amount of differentiation existing between the tasks which men did and those which women did. In general, women featured strongly in most areas of jute manufacture while men were spread sparsely across a few. In the following section the distribution of women across the jute industry is examined in some detail.

(ii) WOMEN'S TEXTILE OCCUPATIONS AND THEIR WAGES (1)

The basic tasks involved in the process of producing textiles in Dundee were more or less the same in different companies and the manufacturing processes followed for both jute and linen were also similar. By the 1870s machinery had been long implemented in all branches of production and to a large degree it had been perfected. Some companies were solely engaged in the spinning of jute yarns, while others wove yarn into cloth. But many manufactured both and there was a trend towards large businesses which covered most areas of yarn and cloth production, apart from the finishing of cloths which continued to be carried out by "Public Calanders" (P.P. XXV, 1982: 445).

The processing of jute incorporated a vast array of tasks and by outlining these in detail the huge number of different occupations which were involved can be seen. There were around forty occupations in jute production which employed men and at least thirty which employed women. Some of these tasks, particularly in the preparing stages, are difficult to differentiate. By contrast, a large degree of distinction is visible in the later stages of production. In what follows the activities involved in the manufacturing of jute are examined and the jobs which women, and men did in the industry are specified.

The numerous tasks involved in the production of jute and the occupations which corresponded to them took place in five identifiable departments. In addition there were a few miscellaneous occupations which were scattered across them. The first three departments, the preparing, the spinning, and the reeling and winding departments, were located in the Spinning Mills and together they employed around forty-four per cent of the jute workforce. The Weaving Factories were composed solely of the weaving department and accounted for forty-one per cent of the total workforce. The finishing department, which was usually found at a distance to the mills and the factories, provided work for two per cent of the textile working population. Miscellaneous occupations throughout the industry, usually labouring of various sorts, employed the remaining thirteen per cent.

Women predominated in all of the three departments found in the spinning mills. They were spread more or less evenly across them, though spinning employed slightly more than either the preparing or the reeling and winding departments. In preparing the jute fibre was processed from the raw material to the stage where it was ready to be spun. Drawers, Rovers and Feeders constituted the major part of the female workforce in this section, though smaller numbers of women were employed as Carders and Batchers. The two supporting

tasks of "shifting" and "balling" were occupations which employed children and young people. The major activity of jobs in preparing was the minding of machinery such as the roving and drawing frames. The young shifters moved full bobbins from these roving frames and replaced them with empty ones.

The preparing department was the second largest employer of men in jute, though even here women outnumbered men overwhelmingly. There were almost three times as many women as men in the preparing workforce. Nevertheless, preparing was a significant employer of men, and if any blurring of segregation by sex occurred, it was in the labour intensive occupations, such as batching, which were found in this department. The children who worked in preparing were nearly all young boys; very few girls were employed in this section of the industry. Two thirds of the boys who were employed as shifters worked only half-time. This meant that they were under thirteen years of age, and that they would spend half of their day in school which was sometimes attached to the firm where they worked (Lenman et. al., 1969).

Preparing was probably the most heterogeneous of the departments in terms of the jobs which were available. A far smaller range of occupations was offered in the remaining textile departments. The spinning department is a case in point. It offered a much smaller choice of occupations, though it offered them to a large number

of women and also to young girls. Spinning was the second largest department in the industry, it employed about a quarter of the entire textile workforce. Only the weaving department occupied more than spinning. Fifty per cent of the total spinning workforce were adult women and forty per cent were girls. Spinning had very little work to offer men; those employed in this department were either overseers or carriers. The supervision of spinning jennies, which had around eighty spindles per frame, was the main task of spinners who accounted for almost ninety per cent of the women employed in this department. Two very much smaller occupations, piecing and twisting, which supported spinning, employed most of the women who remained. One or two women worked as "shifting mistresses" which was one of the most coveted female occupations in jute, it involved the supervision of the young girls and boys who were shifters.

The third and final department housed in the mill was that in which reeling and winding occurred. In this department the spun yarn was transferred from bobbins to cops in preparation for weaving. In fact, this process was often regarded as the first stage of weaving. Reeling and winding was a small department which employed slightly less than ten per cent of the jute workforce. It was composed largely of adult women and had even fewer opportunities for adult men than did spinning, and virtually none for children.

Moving over to the factory, weaving, the last department to employ large numbers of women was to be found. In total a third of the textile labour force was employed in the weaving section of the industry and eighty per cent of them were women. The warpers, who set up the looms ready for weaving were small in number compared to the 'army' of women who worked as weavers. In contrast to the spinning mills, there were few children employed in Dundee's weaving factories. Men came into their own in weaving, here there were more opportunities for them than in any of the other main departments of the industry. Though their numbers were small, the weaving jobs done by men, particularly those of tenter, dresser, and beamer, were some of the most lucrative in the industry. Unlike the preparing department there was no blurring of sexual segregation in weaving. The jobs which men and women did were quite distinct, and it is safe to say that there was never any crossover.

The jute industry in Dundee during the late nineteenth century, then, offered almost unlimited work for women. The preparing, spinning and weaving of the raw material were the areas where most women were employed. By contrast, the number of men working in jute production in Dundee throughout the period was very small. Overall, men composed a third of the workforce and were

concentrated in particular areas of production. It was only in the very small department of finishing, and in the warehouses that men outnumbered women. Male employment in the jute industry was largely concentrated in preparing and in weaving. In the former men and women would very occasionally be found doing similar sorts of jobs. In the latter, a rigid segregation of the occupations done by men and women pertained.

Dundee was notorious as an area of low pay during the period under study. Jute, which was nearly all manufactured in Dundee, came out as the lowest paid industry in the 1890 Board of Trade Report on Wages in the Minor Textile Trades. Factory Inspectors reports also stated that wages in Dundee were very low (P.P. XVII, 1887) and showed that in textile towns immediately surrounding the city they were often even lower (T. Roy's evidence, R.C.L., 1892). Though it has been argued that women in jute could earn higher wages than men which resulted in a certain amount of role reversal in the city (Gordon, 1987) the evidence does not really substantiate this claim. Some women in Dundee textiles were able to earn reasonably high wage rates but these rarely came close to those earned by men in the industry. The latter, in turn, apart from those in a few high paying jobs, received poor wages compared to men in non-textile employment (Lenman et. al., 1969).

The wage levels which appear in the following pages are

based on the returns of wages in Dundee for 1886 and are published in the 1890 Board of Trade Report. In order to establish their validity they have been compared with figures appearing in other printed sources and with wage book information surviving for the period. Though the precise wages given in these different sources did not always match those appearing in the Report, this was because the sources referred to years other than 1886. But the fact that the ranking of wages levels was similar in each case to the ranking of wages in the Report provides evidence to ensure a degree of confidence in using these figures.

The hierarchy of women's wages within the jute industry followed the process of manufacturing. They were lowest in the preparing stages of the mill and highest in the weaving factories, at the end of the production line. Table 4:1 presents the wages which correspond to the occupations done by women. For those working in preparing, most wages were paid weekly, or by time. Though hours were restricted under the factory legislation to fifty-eight per week, in Dundee most women worked for fifty-six hours a week. In preparing, the small occupation of batching offered piece rates to a third of women employed in this job. For those on piece rates, batching was the highest paid occupation in the preparing section of the industry. The average earnings of batchers on piece rates was 11s 7d per week. But two thirds of batchers were on time rates and

received an average of only 9s 4d per week. Other wage levels in preparing hovered around the 8s average. Drawers, for example, received 7s 9d, rovers 8s 7d and feeders 7s 8d. The wages in preparing were some of the lowest paid to women in the jute industry. The older youths, who aided the women and did similar tasks, received roughly equivalent wages, while the little half-timers were paid 3s exactly for their efforts.

Conditions in the spinning flats were preferable to the dust and dirt of the preparing department but wages were no better. To the puzzlement of many commentators, though spinning was considered to be a skilled job requiring a fairly long apprenticeship, it came quite low down the hierarchy of textile wages. All wages in spinning were paid according to time, an adult female spinner could expect to take home an average of 8s 3d per week, piecers received 8s 5d per week and twistors 9s 3d. The few women who were shifting mistresses were paid around 12s 1d, the highest wage for women in spinning and almost equivalent to those obtainable in weaving. The young girls who were shifters in the spinning department got an average of 5s 9d for a weeks work. If they were half-timers, as about fifty per cent of them were, then they got 2s 5d.

TABLE 4:1
 THE WAGES PAID TO ADULT WOMEN IN THE FOUR MAIN
 DEPARTMENTS OF THE DUNDEE JUTE INDUSTRY, 1886

DEPARTMENT	WAGE RATES (Average)		WAGE TYPE Time/Piece
<u>THE MILL</u>			
<u>PREPARING</u>			
Rovers	s. 8	d. 7	Time
Preparers	8	6	Time
Batchers	9	4	Time
	11	7	Piece
Drawers	7	9	Time
Carders	7	7	Time
Cutters	8	5	Time
Feeders	7	8	Time
<u>SPINNING</u>			
Shifter	7	6	Time
Piecer	8	5	Time
Spinner	8	3	Time
Twister	9	3	Time
Shifting	12	1	Time
Mistress			
<u>REELING & WINDING</u>			
Reeler	9	7	Time
	10	1	Piece
Winder	8	10	Time
	11	0	Piece
<u>THE FACTORY</u>			
<u>WEAVING</u>			
Weavers Single Loom	9	6	Piece
Double Loom	12	6	Piece
Warpers	12	4	Time
	12	7	Piece
<u>FINISHING</u>			
Sack Sewer	(10	0)	Piece
Finisher	(8	7)	Time
<u>UNCLASSIFIED</u>			
Mill Worker	8	7	Piece & Time
Factory Worker	8	7	Piece & Time
Jute Worker	8	7	Piece & Time

Source: Board of Trade Report, figures for 1886, in
 Returns of Wages in the Minor Textile Trades
 (P.P. LXiii, 1890 [c.6161])

As one travels through the departments of the mill, starting in preparing, there is a notable improvement in wages. Those in the reeling and winding department earned more than most of the other women in the mills, getting significantly higher wages than those in the two preceding sections of the industry. An obvious factor contributing to this difference was the greater incidence of piece rates in reeling and winding. Those doing these occupations were paid according both to time, and by the piece, but the greater proportion employed in each received the latter. Eighty-eight per cent of reelers were on piece rates and earned a weekly wage of around 10s 1d. Women on time rates were paid slightly lower at 9s 7d per week. The margin of difference was far greater in the case of winders. Those who received piece rates (97%) got an average weekly wage of 11s. The few winders who were paid time rates earned an average of only 8s 10d per week.

Moving across to the factory, wages for women reached their peak in weaving were some of the highest levels were to be found. Weavers, who were all paid piece rates, could expect an average weekly wage of 12s 6d, some earned as much as 14s 11d. However, there were variations in the wages paid to women in this department. The highest wages were paid to women working on double looms. Those working on single looms received only 9s 6d a week. Unfortunately, no substantial

information could be found which made it possible to identify the processes governing this differentiation, though it seems likely that progression from the single to the double loom went with age and experience. Warping, the other main occupation done by women in this department, was again paid by the piece, those in this job received around 12s 7d per week.

Women's wages in jute progressed with each department in the mill, starting off low in preparing and reaching their peak in reeling and winding. There were one or two high paid jobs to be found in the preparing and spinning sections of the mill but these employed few women. Jobs in the reeling and winding department were fairly well rewarded but were not as highly paid as those in the factory. In the factories the highest wages for women were found, though there was some variation in the wages paid to weavers. On the whole, women in the highest paid jute jobs were on piece rates. Workers on time rates nearly always received lower wages.

(iii) THE WOMEN WHO WORKED IN DUNDEE'S MILLS AND FACTORIES

The outline of the occupations open to women and the hierarchy of wages which corresponds to them, provides a picture of the "empty places" which composed the structure of female employment in the late nineteenth century Dundee textile industry. Of central importance to the thesis are the characteristics of the incumbents of these "empty places". In order to build a preliminary

profile of the women who inhabited textile occupations the literature and folklore of the city was plundered.

Evidence extracted from the Census in chapter two suggested that there was a considerable amount of differentiation amongst the women employed in the industry. The census showed that women's participation in employment did not decrease as much in Dundee across the twenty to forty-four age group as it did elsewhere, and that there was an unusually large number of married and widowed women working in the city. The women working in the jute industry must, therefore, have displayed a variety of characteristics: some were young, others were old, some were single while others were married, some held prime responsibility for their households, others did not. The female workforce of Dundee's textile industry was not a homogeneous entity, rather it incorporated a variety of different women.

The wage differentials which prevailed across the occupational hierarchy coupled with indications of a differentiated workforce inspired a quest to find out whether women from different backgrounds were doing different jobs in the textile industry. Though women's wages in jute clustered according to department, moving slowly upwards from preparing, and reaching their peak in weaving, a distinction upon which great emphasis was placed in contemporary commentaries was that between the Mills and the Factories. It was 'common knowledge' that

women who worked in the mills were different from women who worked in the factories.

The spinning mills and the weaving factories employed equivalent proportions of the female textile workforce (around 50% each) but divisions in skill, status and wage levels existed between the occupations which composed these two sections of the industry. In general, mill jobs were at the bottom of the hierarchy and factory jobs were at the top. The mills and the factories employed quite different categories of women:

"Below the surf of industrious, respectable, and respected factory workers ebb and surge the flotsam and jetsam of the stream - the millworkers." (D.Y.B., 1893, 176)

For some the mill was said to breed a distinctive female lifestyle. William Walker, for example, argues for the existence of a strong millgirl culture amongst the mill women of Dundee. (Walker, 1979). This was said to be characterised by young, single and carefree girls, who were fun loving and without responsibility (D.Y.B., 1984) The pursuits of this culture were thought to involve indulging in the hedonistic pleasures associated with alcohol and drug taking. These women were the subject of moral reprehension from the socially concerned, middle class who said that they wandered the streets in groups looking for excitement (Walker, 1912).

It was felt that the mill girls constituted a lower

class of worker, they were thought to conduct themselves in a particular manner and to have a distinctive mode of dress. Mill girls were easy to spot on the streets of Dundee as a "Lady Contributor" to the Dundee Year Book describes:

"... one has little difficulty in marking them out as they pass to and fro to their work. The mass of frowsy hair reaching down to their eyebrows, the loud talk, the bare arms, the "shawlie", and the stripped wincey petticoat are all familiar to us." (D.Y.B., 1893: 176)

The female factory workers of Dundee were characterised quite differently to the mill workers. Walker, for example, described the women weavers as a female "aristocracy of labour" and used the language of "malestream" labour history to explain the elevated conditions of employment and the life-style of this group of women.

The female "aristocratic" weavers, and the warpers who worked alongside them in the factory, can be distinguished from their "degraded" and "deviant" millworking sisters on several counts. In the first instance, as we saw in the earlier discussion of wages, weavers received considerably higher levels of pay than did women in preparing and spinning. The conditions of work in the factory were also better than those existing in the mill with the absence of the large amounts of dust which emanated from the raw jute fibre during the early stages of production (Kay, 1980). On the whole, factory weavers enjoyed a superior social position

compared to millworkers. Weavers, states Dundee Social Union, were usually "drawn from a somewhat different class from preparers and spinners" (D.S.U., 1905: 49). The distinctiveness of the weavers was visible through their superior self presentation both in terms of dress and of conduct. M.L. Walker describes them as:

"... a hard working, thrifty, and self-respecting bunch of workers. They impress visitors by the neatness of their dress and the decorum of their manners." (M.L. Walker, 1912: 70)

Nineteenth century literature and folklore suggested that women working in the mill and those working in the factory were separate and quite distinct from one another. But what exactly are the characteristics that separated these two categories of worker? The mill girl is typified as young and carefree with few responsibilities. Were the women in the factory, by implication, older and did they have greater responsibilities? These sorts of questions can not be answered systematically using secondary sources.

Though mill girls are described as young and carefree and weavers as mature and sensible it seems unlikely that the women in the weaving factories were merely mill workers grown up. As the "Lady Contributor" commented:

"It seems to be a recognised fact "Once a millworker aye a millworker..." (D.Y.B., 1893: 176).

There was virtually no interchange between the mill and the factory, and the former can in no way be seen as

providing an apprenticeship to the latter. The factory women were insular and kept themselves apart from the mill working women, as this oral history interview with Mary, who worked as a jute weaver during the early years of the twentieth century confirms:

"I had no friends among the spinners - nothing to do with the spinners. I was never in a mill in my life, I'd never seen the inside o' a mill. When you went into your work, the factory was on one side, the mill was on another side...The spinners were all mill workers, you see, and we thought we were a cut above the mill workers". (Kay, 1980: 40)

While it may be true to say that the mill and the factory were quite distinct, other information existing on the backgrounds of women working in the spinning mills suggests that the composition of women mill workers was rather more complex than the picture drawn in successive discussions of the 'millgirl'. This detail serves to question the understanding of the mill as an employer of a homogeneous workforce. Much less information about the backgrounds of women working in the weaving factories exists, but again the indications are that here too was a differentiated female workforce. That literature which comments on the composition of the female mill workforce points to two areas which indicate that different types of women were employed in the mills. Firstly, information on the marital status of women in preparing and spinning, and secondly, information on the backgrounds of women in the reeling and winding department raised doubts about the homogeneity of the mill workforce.

In studies where an attempt is made to disaggregate the female workforce marital status is often considered a delineator of women workers. It was, in fact, the unusually large number of married and widowed women who worked in late nineteenth century Dundee which first suggested that disaggregation of the workforce here would prove fruitful. The marital status composition of the female textile workforce was not available at the disaggregated level in the printed census reports. Nevertheless, some contemporary literature provides an indication of where the greatest number of married women were to be found. M.L. Walker identified one area of the Dundee textile industry in which married women worked:

"It is in the spinning and preparing department that the largest proportion of married women, who are the mothers of young children, is found." (M.L. Walker, 1912: 70).

So in addition to the young, single women already identified, there were adult married women working in the mill. It seems that many of the married women worked in spinning, though the literature suggests that those with dependent children were more likely to be found in the preparing department. Preparing was composed of a variety of 'unskilled' and 'semi-skilled' occupations which could be taken up by women with comparative ease, at times when adverse circumstances required financial input on their part. More specific training was necessary in the spinning department. Poverty, or adverse circumstances of some sort, probably lay behind the participation of the following group of women who

were also identified as working in the mill:

"The workers who deal with jute in its early stages are for the most part elderly women, supplemented by a flock of boys who do the simpler parts." (D.Y.B., 1884: 63)

So far little has been said about the reeling and winding department which came under the jurisdiction of the mill despite the fact that these processes really constituted the first stages of weaving. Although the information which exists on the backgrounds of women employed in this department is scant, it also serves to question the homogeneity of the female mill workforce. It is clear that the women working in these occupations were thought to be more similar to the women employed in weaving than to those employed in preparing and spinning. Many allude to the women in reeling and winding as they do to those in weaving as coming from a "different" and "better" class and they did receive higher wage rates. Though details on the nature of women employed in these occupations was sparse it seems fair to say that reelers and winders stood somewhat apart from preparers and spinners.

The sketchy impressions which existed in the local literature of Dundee were of limited value in building up a profile of the characteristics of women who worked in the late nineteenth century textile industry. With respect to women working in the mill, different types of literature identified women from different marital status groups, assuming that is that a large number of the elderly women in the mill were widowed. Because this

information was not systematic further details about mill working women are still required if a clear picture of those working there is to be drawn.

With respect to the women working in the factory there were few real indicators of background in contemporary accounts. There was no mention of the age or of the marital status of women weavers. All there was to go on in identifying the characteristics of the largest single group of women working in late nineteenth century Dundee, a third of the entire textile workforce, were the impressionistic descriptions of their so called "better class" and of their "fancy" dress. Though weavers and warpers are presented as mirror images of the mill working women, it can not be assumed that they were older and with more responsibilities. Besides, a unitary understanding of mill working women is no longer feasible because the literature indicates that the mills employed a variety of women.

It was not possible that all weavers were older than mill workers. The evidence suggests that there was little or no movement from the mill to the factory, so young women must have been recruited directly into weaving. Such a process is indicated in the different wage levels which weavers received, and it implies that, like the mill, the factory had a heterogeneous workforce. Within the category "weaving" there were two different rates of pay, those tending "single looms"

received considerably less than those working "double looms". Of those weavers whose wages were returned in the 1890 Board of Trade Report almost two thirds (64%) received the lower of the two wage rates, 9s 6d per week, and only slightly more than a third (36%) earned the higher wage which came in at around 12s 6d a week. Warpings received wages equivalent to those of the higher paid weavers (Table 4:1).

In sum, information on the backgrounds of operatives in the mill indicate that the women working here included large numbers who did not fit the description given of the typical "mill girl". In fact, the literature shows that mill women were a considerably diverse group. Those in preparing and spinning were sometimes young, sometimes single, they were often married women, and many had children. There were also elderly women, many of whom were probably widows. The grouping of women in reeling and winding with those in weaving provides further evidence that the mill did not have a homogeneous workforce. Evidence on pay rates within weaving suggested that there were also variations to be found in this part of the industry. The mill/factory distinction made by many contemporaries leaves untouched variations occurring within Dundee's mills and factories, and thus ignores pertinent divisions amongst the women employed in each. The distinction is not subtle enough to explain the variations in the wage, status and skill levels of

occupations occurring within these two sections of the industry.

PART TWO: WOMEN TEXTILE WORKERS IN THE 1891 CENSUS SAMPLE

The data from the 1891 census sample is a major source, it helps to sort out the unsystematic and incomplete impressions of the incumbents of jobs which populate the literature. In this section of the chapter a preliminary examination is made of the characteristics of women textile workers in the sample. This provides a much more detailed profile of the types of women employed in the different sections of the industry.

There was no indication that 1891 was a peculiar year for textiles, so there were no unusual factors to be taken into consideration when using the data. Equally, the employment structure reflected in the sample did not appear to be untypical in any way, though it did capture a slightly higher proportion of textile workers than existed in the population at large. In order that our calculations could avoid the special considerations which adolescent employment in late nineteenth century Dundee requires adult women in the sample over fifteen years of age are examined. Starting with the most basic information which the sample provided, age and marital status, we began to construct an outline of the characteristics of women employed in the textile

industry.

As stated in the previous chapter, the female textile workforce of the sample was dominated by young women. Once those under fifteen had been removed, the workforce retained its youthful profile with approaching half (47%) below the age of twenty-four (Table 4:2). In total seventy-one per cent of women were under thirty-five but the fact that a large proportion (29%) of the female workforce was above this age is also significant.

TABLE 4:2 WOMEN IN TEXTILES AGED 15+,
CENSUS SAMPLE 1891

AGE	N	(%)
15-24	454	(47)
25-34	233	(24)
35-44	143	(15)
45+	135	(14)
TOTAL	965	(100)

In order to get an idea of the ages of women employed in the different sections of the textile industry, the ages of those who worked in the four main departments were examined (Table 4:3) (2). Although every department was dominated by young women, because there were so many of them in the industry, it was still possible to identify the areas which employed proportionately more older women.

Of the three mill departments, preparing had the lowest proportion of women under the age of thirty-five (61%), and the highest of those above thirty-five (39%).

This was in keeping with the assertion made in the literature that elderly women were more likely to be found in preparing than in other sections of mill production. The spinning department, by contrast, employed a generally younger workforce, eighty-one per cent were under thirty-five years of age. This section of the mill also had the lowest proportion of its workforce in the older age group (19%). Reeling and winding was the smallest of the departments in the mill and although the workforce here was more evenly balanced with respect to age than either of the other two, it was still the case that more than two thirds were under thirty-five; slightly less than a third were over thirty-five.

TABLE 4:3 AGES OF WOMEN IN THE FOUR MAIN TEXTILE DEPARTMENTS

AGE	MILL PREPARING		SPINNING		REELING		FACTORY WEAVING & WINDING		TOTAL
	N	%	N	%	N	%	N	%	
15-34	177	61	164	81	122	73	206	73	659
(%)		(27)		(25)		(17)		(31)	(100)
35+	115	39	37	19	41	27	77	27	270
(%)		(43)		(14)		(15)		(29)	(100)
TOTAL	292	100	201	100	153	100	283	100	929

Looking at the ages of women employed in the factory it became clear that those who were weavers were more similar to those in reeling and winding, in respect to age, than they were to those in either preparing or spinning. Weaving had exactly the same proportion of its workforce under the age of thirty-five as the reeling

and winding department, and thus an equivalent proportion above thirty-five. The weaving workforce, like the other departments in the industry, was dominated by young women. It did offer employment to older women, though not on the scale found in preparing.

It is true to say that, in the mills, young women were a highly significant proportion of the spinning department while older women were concentrated in preparing. The workforces in the reeling and winding department and in the weaving factories both had the same proportions of younger and older women. Spinning had the most youthful workforce and preparing the most aged.

Just as the majority of the sample's female workforce was young so it was single (70%). Nineteen per cent were married, and eleven per cent were widows. The proportion of the workforce who were single was lowest in preparing but increased gradually over the mill departments and was highest in reeling and winding. Across in the factory single women accounted for a larger proportion of the weaving department than they did for any of those in the mill. Weaving was particularly important for single women. As could be guessed from their respective age structures, preparing employed fewer single women than the spinning department (Table 4:4). Both departments had relatively high proportions of married women in their workforces, particularly spinning where they accounted for twenty-

six per cent of the total workforce.

TABLE 4:4 MARITAL STATUS OF WOMEN IN THE FOUR MAIN TEXTILE DEPARTMENTS

MARITAL STATUS	MILL				FACTORY				TOTAL
	PREPARING		SPINNING		REELING		WEAVING & WINDING		
	N	%	N	%	N	%	N	%	
SINGLE (%)	176	60 (27)	139	69 (21)	110	72 (17)	225	80 (34)	650 (100)
MARRIED (%)	61	21 (35)	52	26 (30)	28	18 (16)	37	13 (21)	176 (100)
WIDOWED (%)	55	19 (54)	10	5 (9)	15	10 (15)	21	7 (21)	101 (100)
TOTAL	292	100	201	100	153	100	283	100	929

In line with its more elderly age structure preparing had a higher proportion of widowed women than any of the other textile departments (19%). The spinning department employed very few widowed women. Similar proportions of women from each marital status group worked in the reeling and winding department, though single women were again the largest presence in the workforce. Married and widowed women were less likely than single women to be employed in the factory, although a significant proportion of each group, were in weaving (21%), the highest paid department in textiles.

With respect to the distribution of women in the sample by marital status single women were in the best position: weaving employed the largest proportion of this group. Married women by comparison were concentrated in the lower paying sections of the mill, in the preparing and the spinning departments. Widowed

women came off worst, they were largely employed in preparing, the lowest paid department of the mill.

Much of the literature and folklore of late nineteenth century Dundee held imprecise information about the characteristics of women who worked in the different sections of the textile industry. The poem which follows, by way of contrast, captures a certain reality with respect to the backgrounds and experiences of Dundee's female mill workers.

'A Dundee Lassie' by Mary Brooksbank (3)

"I'm a Dundee lassie, you can see,
You'll aye find me cheerful
Nae maitter whar I be;
Tho' at times I feel doonhearted,
Sad or ill,
I'm a spinner intae Baxter's Mill.

My mither dee'd when I was young,
My father fell in France,
I'd a' liked tae been a teacher,
But I never got the chance;
I'll soon be getting merried
Tae a lad ca'd Tammy Hill
He's an iler intae Halley's Mill.

I'm chumming wi' a lassie,
They ca' her Teenie Bain,
She says she'll never mairry,
Her lad got kilt in Spain;
I affen hear her speak aboot
A place they ca' Tereul,
She's a winder intae Craigie Mill."
(Brooksbank, n.d.)

The young woman who was the subject of the poem, though at the time single was about to be married. She was also a spinner, and as we have just seen, there were more married women in this department than in any other in

the industry. In addition, the man who this woman was marrying was also a mill worker; the significance of which shall become clear in the following chapter where processes connecting husbands and wives jobs are examined. Finally, and again in keeping with reality, the friend of the young woman was a winder who vowed that she would never marry. Single women, of course, composed a larger proportion of the workforce in reeling and winding than in any other department in the mill.

Next the variables of age and marital status were looked at simultaneously so that the effect which age had upon the pay levels of single and married women in the sample's textile workforce could be examined (Table 4:5). Widowed women, who were largely absent from the younger age groups, were not included in these calculations. Once again, the distinctions found earlier between single and married women whereby the former dominate the high paying departments and the latter are clustered in those with lower wages reappears when age is introduced.

TABLE 4:5 AGES OF SINGLE AND MARRIED WOMEN IN TEXTILE DEPARTMENTS

SINGLE WOMEN

DEPARTMENT	AGE		35+		TOTAL
	15-34		N	(%)	
	N	(%)	N	(%)	
<u>MILL</u>					
PREPARING	142	(26)	34	(32)	176
SPINNING	127	(23)	12	(11)	139
REEEL. & WIND.	94	(17)	16	(15)	110
<u>FACTORY</u>					
WEAVING	182	(33)	43	(41)	225
TOTAL	545	(100)	105	(100)	650

MARRIED WOMEN

DEPARTMENT	AGE		35+		TOTAL
	15-34		N	(%)	
	N	(%)	N	(%)	
<u>MILL</u>					
PREPARING	32	(31)	29	(39)	61
SPINNING	36	(35)	16	(21)	52
REEL. & WIND.	17	(17)	11	(15)	28
<u>FACTORY</u>					
WEAVING	18	(17)	19	(25)	37
TOTAL	103	(100)	75	(100)	178

In the younger age group, those under thirty-five, the disparity between these two is already substantial. Thirty-three per cent of single women in this age group are in weaving, the highest paid department, while only seventeen per cent of similarly aged married women are employed there. Younger married women are largely found in the spinning and preparing departments of the mill, as is characteristic of this group as a whole. Conversely, proportionately fewer young, single women are to be found in these departments. In the thirty-five plus age category the disparity between single and married women is equally pronounced. Forty-one per cent

of single women in this age group are in the highest paying department compared to only twenty-five per cent of married women. On the whole, therefore, single women of all ages in the sample fared better in terms of wages than did married women of all ages.

The proportion of both married and single women in the highest paid department is larger amongst older women. The percentage of single women in weaving is thirty-three in the case of the under thirty-fives, it is forty-one per cent amongst those aged thirty-five plus. Twenty-five per cent of married women who were over thirty-five were employed in weaving. This compares to seventeen per cent in the younger age group. Speaking generally, both single and married women over thirty-five in the sample were polarised at either end of the textile industry; this pattern was also found amongst widows. The proportion in each group who were in the highest paid department was larger as was the proportion employed in the lowest paid, preparing.

Amongst women in general, then, there is no dramatic 'progression' upwards to jobs paying higher wages with age, in fact the younger women dominate the high paying jobs while older women are concentrated in the low paid ones. However, when age and marital status are examined simultaneously, and widowed women are removed from the calculations, such a 'progression' becomes apparent. Here older married and single women were to be found in

higher paid jobs than younger single and married women. 'Progression' is one interpretation but it could be the wrong word. Earlier an assertion was made that there was no overlap between the mills and the factories. Thus the increased proportion in weaving is possibly due to the fact that older women remained in high paying jobs but left lower paying jobs altogether. This meant that weavers became a larger proportion of those who were left behind (4). In addition, it should not be forgotten that larger proportions of older women were also to be found in the lowest paid jobs which means that a progression argument could not be made for all women.

SCOTTISH AND IRISH WOMEN IN TEXTILE EMPLOYMENT

It became clear while looking at the general features of the sample that Irish women were particularly dependent upon the textile industry for employment in late nineteenth century Dundee. This finding made it important both to compare the characteristics of Scottish and Irish women who were working in the industry, and to look at any differences in the jobs done by these two groups. In keeping with the general features of the Irish population, and in contrast to the youthfulness of the female textile workforce as a whole, Irish women in the industry were an older group. Whereas the majority of the Scottish female workforce were under thirty-five years of age (79%) the majority of Irish women in textiles were over the age of thirty-

five (67%). The fact that the Irish female textile workforce was dominated by older women meant that the majority of those employed in each of the four main textile departments were also over the age of thirty-five (5).

In the spinning mills, the distribution of Scottish and Irish women by age was very similar. Those who were under thirty-five were concentrated in preparing and spinning while the over thirty-fives were predominantly found in the preparing department. The major difference between the two groups lay in the numbers employed in the weaving factories. Irish women simply did not make it into the weaving department on anything like the scale characteristic of Scottish women (Table 4:6). Weaving employed a third of the under thirty-five Scottish female textile workforce. This proportion was larger amongst the older age group. Of the Scottish women in the workforce who were over thirty-five, forty-one per cent were in weaving. The proportion of Irish women who were in weaving was already comparatively low in the younger age group, and it was lower still amongst the older women. Some compensation was granted to older Irish women; more of them were employed in reeling and winding, the highest paying mill department, compared to the equivalent group of Scottish women.

TABLE 4:6 PROPORTION OF SCOTTISH AND IRISH FEMALE WORKFORCES IN WEAVING BY AGE

AGE	SCOTTISH		IRISH	
	N	%	N	%
15-34	192	(33)	7	(13)
35+	64	(41)	12	(11)
TOTAL	256		19	

As a group Irish women were found in the worst paid sections of the textile industry. Eighty-eight per cent of the Irish women in the sample who were employed in textiles were in the mills, and only twelve per cent were in the factories. By comparison sixty-five per cent of Scottish women were in the lower paid departments of the mills and thirty-five per cent were in the higher paying weaving factories. The disadvantage which Irish women experienced in the Dundee jute industry was not merely a feature of their age. Compared to Scottish women, Irish women of both age groups were far more likely to work in the mills.

The disadvantage which Irish women faced with respect to their distribution across the textile industry by age came to the fore again when their distribution by marital status was considered. Unlike single Scottish women who, though spread across the mill departments, were also concentrated in weaving, single Irish women were to be found largely in preparing and spinning. Half of the married Irish women in the sample were in

preparing, unlike their Scottish sisters, many more of whom were employed in spinning. Widows were the most disadvantaged group of Irish women. Two thirds of them were in preparing, the lowest paid department, compared to slightly over a third of Scottish women. Irish widows did not find compensation for their absence in weaving through increased employment in the highest paying mill department, reeling and winding, as did their single and married sisters. There was no clustering of Irish widowed women in the highest and lowest paid textile departments, the pattern found amongst Scottish widows in the sample.

When age and marital status were looked at it became clear that older Irish women, both single and married, were highly disadvantaged compared to older Scottish women. Though more single women aged thirty-five plus were in weaving than single women under thirty-five, the proportion was considerably smaller than that found amongst older single Scottish women. (18% of single Irish women aged thirty-five plus were in the weaving department compared to 52% of Scottish women.)

In the Scottish case the proportion of older married women employed in weaving was significant. By comparison, no such pattern was found amongst older married Irish (Table 4:7). In fact, more married Irish women under thirty-five than over thirty-five were employed in weaving.

TABLE 4:7 TEXTILE DEPARTMENTS OF SCOTTISH AND IRISH MARRIED WOMEN UNDER AND OVER THIRTY-FIVE YEARS OF AGE

DEPARTMENT	SCOTTISH		IRISH					
	AGE		15-34		35+			
	N	(%)	N	(%)	N	(%)		
<u>MILL</u>								
PREPARING	24	(28)	16	(33)	8	(47)	12	(46)
SPINNING	34	(40)	9	(19)	2	(12)	7	(27)
REEL.& WIND.	12	(14)	6	(13)	5	(29)	5	(19)
<u>FACTORY</u>								
WEAVING	12	(18)	17	(35)	2	(12)	2	(8)
TOTAL	85	(100)	48	(100)	17	(100)	26	(100)

(N=206)

Married Irish women who were over thirty-five were concentrated in preparing and in spinning. A quite different set of circumstances to that found amongst married Scottish women of the same age. Though large numbers of young Scottish women were employed in spinning the numbers doing this work amongst the older age group was very small. One explanation may be that married Scottish women left spinning as they became older while married Irish women remained in this type of work. Again, it is not possible to substantiate this proposition with the existing data (see note 4). Older single Irish women were apparently 'compensated' for their lack of opportunity in weaving jobs with jobs in the highest paid mill department, reeling and winding, the number of married Irish women employed in reeling and winding was lower amongst the older age group. In general, the sample's older Irish women in textile employment were a considerably disadvantaged group.

CONCLUSION

Work for women in the late nineteenth century Dundee textile industry took place in four main departments. The first three, which were located in the mills, dealt with the preparation and spinning of the raw fibre. In the factories, the spun yarn was woven into cloth. On the whole, the work which women did was segregated from that done by men. Most men were employed in the preparing and weaving departments, and while very occasionally they would be found doing the same job as women in the former, there was never any breakdown in sexual segregation in the latter. The hierarchy of wages paid to women followed the production process; wages were lowest in preparing, increased across the subsequent departments, and were highest in weaving.

The variation in the wages paid to women employed in different sections of the textile industry suggested a significant degree of differentiation in the female workforce. An exploration of the literature and folklore of Dundee found no systematic information on the characteristics of women who worked in the four departments. One division which was commonly made was that between women mill and factory workers. But references throughout the literature to age and marital status indicated that there was a considerable amount of variation amongst the female mill workforce. Similarly,

wage differences within the factory suggested that women with different characteristics worked there. Both pieces of information served to limit the sociological validity of the mill/factory division.

In part two, an attempt was made to develop a more systematic understanding of the characteristics of women employed in the Dundee textile industry using the sample of households from the 1891 Census enumerators books. With respect to age, the female textile workforce of the sample was very young. In fact, young women dominated all four departments, though spinning had the most youthful workforce. While older women in the industry were largely in preparing, the lowest paid department, a significant number were in weaving the highest paid.

Groupings by marital status showed that single women were employed in fairly even proportions across the industry, appearing in both the mill and the factory. Married women, on the other hand, were largely in the mill, particularly in the spinning department, but also in preparing. Widowed women clustered at either end of the textile hierarchy. Most were in the poorest paid preparing department, though a reasonable percentage were in weaving which was the highest paid. A similar pattern of concentration was found amongst older single and married women. In both groups, those women in employment over the age of thirty-five were either in the highest or lowest paid departments of the industry,

there were few older women in the medium paying sections of the textile industry. The proportion of married women over thirty-five in high paid weaving jobs was small compared to the number of single women of the same age who were in weaving.

A comparison of Scottish and Irish women in the sample's textile workforce found that the latter were considerably older and were more likely to be working in lower paid mill jobs - very few were in weaving. Both married and widowed Irish women were most often in the preparing department. Unlike married Scottish women, the Irish were not concentrated in spinning, and there were very few Irish widows in weaving. When age and marital status were combined for the two groups there was again a larger proportion of older single women employed in weaving. Many more older Scottish women were employed in weaving compared to Irish women, though the latter were more likely to be employed in high paid mill jobs in reeling and winding. In the case of married women, the proportion employed in weaving was much smaller amongst the Irish than it was amongst the Scottish. Older married Irish women unlike their single sisters were poorly represented in reeling and winding. Older Irish women, in general, were over-represented in poor paying jobs.

In the following chapters, processes which help to account for the positions which particular women held in

the textile industry are examined. One process which seems to be occurring is that whereby households restrict access to occupations by 'reserving' jobs for their members. It is possible that this process inhibits access for individuals who do not have family members already in occupations, particularly in the case of higher paid jobs. The household processes which are identified operate across the spheres of production and reproduction and are partly responsible for the maintenance of patterns of inequality in the Dundee textile community.

NOTES

(1). The information which appears in this section of the chapter, regarding the proportion of the female workforce employed in the different sections of the textile industry and the wages which were received by individuals in these different sections, is gleaned largely from a Wages Census conducted by the Board of Trade in 1886 and published in Parliamentary Papers in 1890. The report, "Returns of Wages in the Minor Textile Trades", looked at the numbers of people employed by different sections of the textile industry and at the level of operatives wages in these sections over one month in 1886 (P.P. LXVIII, 1890). Information about the jute industry was all for Dundee and was tabulated from the returns of a large representative sample of establishments which were located in the city and collected by the Chamber of Commerce there. The total number of individuals listed was 13,921 which amounted to around half of the total number employed in the jute industry at that time. This was broken down into 7,981 women, 2,265 men, 1,715 girls and 1,960 boys. From the information given it is possible to identify the proportions employed in the textile departments and in the occupations of which these were composed. Information on wage rates, which is also provided makes it possible to get some idea of the income levels of those employed and to rank the occupations according to pay.

(2). The women who have been left out of these calculations were doing occupations which could not be attributed to a single department. In addition four batchers have been omitted from the preparing department on the grounds that their higher wages, compared to other women in the department, made it likely that they had different characteristics from the majority.

(3). Mary Brooksbanks was a Socialist and Lyricist who worked in the jute industry during the first two decades of the 20th century. This poem, 'A Dundee Lassie', is extracted from a book of her mill songs. There is, however, no publication date given in this book.

(4). Because the data is cross-sectional it is difficult to be sure that the larger proportion of women found in higher paying jobs amongst the older age groups is the outcome of a process of 'progression'. Longitudinal data would have to be used in order to substantiate the operation of such a process.

(5). A methodological problem arises in relation to ethnicity which has implications for our understanding of the topic. By Irish is meant those who were returned in the census as born in Ireland. The Irish born in Dundee were an aging population. During the late 1870s

the numbers emigrating from Ireland were beginning to dwindle. As a result, the Irish born population of Dundee went into decline. By 1891 very few were entering the city. This change helps to account for the small numbers of younger Irish women in the sample's textile workforce. Because of the nature of the data it is sometimes difficult to be sure about patterns for younger Irish women, so many of the comparisons with the Scottish born have to be carried out in the older age group. By identifying Irish households (those with Irish born heads) it becomes possible to look a little more closely at the experiences of the younger members. This analysis is presented in the two following chapters. Despite these difficulties there are clear patterns associated with ethnicity both amongst individuals and households in the sample.

CHAPTER FIVE

HOUSEHOLD SITUATIONS AND EMPLOYMENT POSITIONS: HOUSEHOLD PROCESSES AND THE STRUCTURING OF INEQUALITY IN THE DUNDEE TEXTILE COMMUNITY

INTRODUCTION

This chapter, and the following look at aspects of the relationship between households and employment circumstances in the late nineteenth century Dundee textile community (1). Analysis of the sample data demonstrates that the types of employment in which individuals were found, could to some extent be understood by examining their households. There were processes operating across the structures of production and reproduction which were significant in accounting for the position which people held in the textile hierarchy. Household/employment processes in the data were manifest in two main ways, and these are examined in turn. In this chapter, the focus will be on the way in which informal household networks are associated with the types of jobs which individual members were doing. These links seem to have been influential in creating and maintaining patterns of inequality within the Dundee textile community. Chapter six looks at the role which households played in structuring opportunities in ways that cut across levels of household requirements. The strategies which were employed by households which came off badly as a result of these processes are also explored in this chapter.

The argument put forward in chapter five is that household processes have an important role to play in maintaining the structure of opportunity affixed to employment. Patterns of labour market experience cluster by household, for example, husbands and wives are to be found doing jobs in the same areas of textile production. Similarly, in female-headed households, other female members of the household are to be found in jobs which coincided with that done by the head. Chapter six contends that household/employment processes of the sort identified often result in a disjunction between the requirements of households and the ability of members to secure access to wages which are sufficient to meet the level of requirements within households.

(I) HOUSEHOLD NETWORKS AND JOB OPPORTUNITIES

Until quite recently, a consensus amongst historians and lay persons alike assumed that the links between family and working life were severed with the demise of domestic manufacture and the rise of factory production in the 1830s and 40s. Smelser, one of the most notable proponents of this view, argued that the sharp differentiation of home and work which occurred at this time coincided with a reduction in adult male authority and control over the work process which enabled the full scale consolidation of industrial capitalism (Smelser, 1959). This argument implies that the household as a unit no longer had any direct relationship to employment but rather that the capitalist system

employed individuals for individual wages. In the analysis of the Dundee material, the discovery that household processes were important both in helping to create the structure of opportunity and in influencing the allocation of individuals to occupations, stands in stark contrast to the position taken by Smelser.

More recent social historical and feminist writers have sought to demonstrate the spurious nature of the division espoused by Smelser and the like and have stressed the interconnectedness of the family and the employment structure (Anderson, 1971; Davidoff & Hall, 1987; Joyce, 1980). Much of this work has focused on the Lancashire textile industry in which whole families, and extended families, were employed. Patrick Joyce, for example, in a radical reappraisal of Smelser argues that families were not torn apart at the time of widespread factory development but rather that a process occurred whereby the family was reconstituted in the factory. Joyce goes as far as to say that the employment of several members of a family in one mill made the change over to mechanised factory production possible. He argues, that the acceptance and maintenance of the social order of the factory was ensured when an entire household was dependent upon one employer (Joyce, 1980: 65). He says that:

"Family employment, recruitment and training of labour characterised most of the factory textile trades throughout the century." (Joyce, 1980: 55)

The evidence is strong that both formal and informal household processes were transported into the factory, and that they helped to maintain the structure of opportunity which developed there.

One of the ways in which the family was formally reconstituted in the factory was through the system of subcontracting. Such a system pertained from the onset of factory production, particularly in the more highly skilled textile trades such as spinning, but also outside of textiles. Jane Humphries found that a family system of labour was practised in some nineteenth century coal mining regions (Humphries, 1981). Subcontracting was a system whereby only the principal operative was hired directly by the employer; subsidiary workers were recruited and hired by the operative himself. In many cases a spinner, for example, would employ his wife and/or his children. Should there be insufficient numbers in the immediate family, a spinner would take on members of his wider kin network, and failing this, lodgers, friends and neighbours (Anderson, 1971: 115).

The system of subcontracting is often viewed as a temporary structure which characterised the transition to capitalist production. The argument generally made is that capitalists conceded control over the work process to some highly skilled men in order to get them into the factories. This control was later to be broken down when

the position of such men became weaker as they were incorporated into the factory system. But even where a formal system of family labour such as this did not exist, for example amongst unskilled groups, there is plenty of evidence to suggest that family ties have been historically instrumental in getting people jobs. Joyce points out, that in some Lancashire mills and factories, entire families would be employed, not necessarily in the same jobs but often throughout the range of textile occupations (Joyce, 1980: 111). The household, and the wider familial networks of nineteenth century textile communities definitely provided avenues, however informal, for the recruitment of worthy personnel:

"Many employers consciously set out to recruit whole families, or all the younger members of families as they reached working age, or at least welcomed especially relatives of their employees". (Anderson, 1977: 118)

The ability of operatives to secure jobs for family members was particularly evident on a generational basis and amongst men, where sons would enter the occupations of their fathers. In a study, again of the Lancashire area at the turn of the century, Chapman and Abbot (1912) found that in the regions' five principal textile towns well over half of the total number of male textile employees had sons working in the same trades as their fathers. They concluded that it was not "taste or personal inclination" which were the deciding factors in getting young men jobs but access to opportunities, and that fathers played a crucial role in opening up such

opportunities for their sons (Chapman and Abbot, 1912: 603).

Women also obtained jobs through processes which connected the household to the working environment. As a result of the prevalence of occupational segregation, men's and women's work was distinct in most locations throughout the nineteenth century, and women were rarely to be found in the same jobs as their husbands. Nevertheless, where it is available, the evidence shows that households were involved in the patterning of husbands' and wives' jobs. Margaret Hewitt, taking a lead from Engels, found in her sample of Lancashire households from the 1851 and 1871 censuses that over sixty percent of married female cotton operatives had husbands who were also engaged in cotton manufacture (64 per cent and 62 per cent respectively). Though the textile industry was a major employer in Lancashire at the time there were alternative forms of employment available to both women and men in many areas (Hewitt, 1958, 191-192).

Household processes, therefore, through their role in securing the recruitment and training of family members played a large part in maintaining general patterns of inequality. In the Lancashire textile industry adult males in highly paid jobs were able in a sense to reserve access to occupations for their sons and for other household members. This process helped to limit

opportunities for the sons of lower paid workers who were also likely to 'follow in their fathers' footsteps'. Women's jobs, it seems, were also related to their households of origin, though the processes operating here have yet to be fully outlined.

(II) HOUSEHOLD/EMPLOYMENT PROCESSES IN NINETEENTH CENTURY DUNDEE

Analysis of the 1891 census data (see Appendix IV) suggested that 'informal' household networks were important means by which women gained access to the hierarchy of occupations in the Dundee textile industry. Evidence, both that households had a large part to play in structuring patterns of employment, and that they were probably instrumental in providing the mechanisms by which family members got jobs, can be seen in male-headed households where there is a coincidence of husbands and wives jobs at key points in the process of recruitment to occupations, both in the mill and in the factory. It is also visible in female-headed households where the jobs of other female members and the head coincide. The probability that household members restricted access to occupations by 'reserving' jobs for family members suggests that households here, as in Lancashire, featured in the maintenance of more general patterns of inequality. Regardless of the interpretation placed upon these findings, the jobs done by individuals in the sample were clearly patterned in relation to those of others in the household.

(i) HOUSEHOLD/EMPLOYMENT PROCESSES IN MALE HEADED HOUSEHOLDS

An examination of the jobs done by husbands and wives in the sample provides the first piece of evidence that household processes of this sort were operating in late nineteenth century Dundee. A coincidence of the occupations of husbands and wives in the sample occurred in the highest and lowest paid departments of the textile industry. It is possible that spouses were either influential in securing jobs for each other or that textile workers married those of a similar social standing. The coincidence of husbands' and wives' jobs in the highest and lowest paid textile departments suggests that household/employment processes were important means by which broader patterns of advantage/disadvantage were maintained.

As we saw, most of the working wives in the sample were in textile jobs (90%). This was not the case with husbands of whom only thirty-nine per cent were in textile jobs. Husbands in textiles were more likely to have wives in textiles (96%), those in non-textile jobs were slightly less likely to have wives in textile jobs (89%). Similarly, wives in non-textile jobs were mainly married to non-textile working husbands (82%). There are no real distinctions to be made between Scottish and Irish households in terms of the overall sectoral employment of husband and wife. Around ninety percent of the women themselves are to be found in textile jobs and

both Scottish and Irish wives have the same proportions of husbands in textile occupations. There are some distinctions to be made by age but these are slight, and hold true for both Scottish and Irish wives. The under thirty-fives stick to the general pattern. Amongst the over thirty-fives, however, husbands are more likely to be in textile occupations (43%). There were some lighter jobs for older men in textiles, however, it is not clear from the information available whether men moved into these as they became older, or whether the same men had grown older whilst doing the jobs. At the general level it seems safe to say that, though textiles employed large numbers in Dundee, women who were in textile jobs were more likely to have husbands who were also in textile jobs than were women in non-textile employment.

Concentrating solely on married women in the sample who did textile jobs and their spouses, the extent to which family networking was influential in accounting for the employment of family members within the Dundee jute industry is now explored. The analysis found that household connections are important for understanding the distribution of women across jobs in the textile hierarchy. These connections are particularly apparent amongst women in the highest and lowest paid departments. Household/employment processes were found to be operating amongst women of all ages, though the pattern was strongest amongst Scottish women under thirty-five. The same sorts of processes did not appear

to be operating in the Irish case. Married women were spread across the range of female textile jobs. Though they were most commonly found in the lower paying mill jobs, particularly in spinning, some were in the higher paid mill jobs and in the factory.

It is worth briefly restating the ordering of textile occupations. As established earlier, women's jobs in the Dundee textile industry constituted a hierarchy which followed the process of jute manufacture from the raw material to the finished product. The lowest paid jobs were to be found in the early stages of production where the jute fibre was prepared. Although spinning, which came after preparing, was only marginally better paid, it was a cleaner, dust free and altogether a more desirable occupation. Reeling and winding which concluded production in the mills were the highest paid jobs in this section of the industry. The hierarchy of women's textile employment continued in the factory where warping and weaving, the highest ranking of textile jobs were carried out. Mobility between mill and factory was virtually unknown; women either worked in the mills or in the factories, they did not seem to move between the two.

Recruitment into the mills appears to have occurred in preparing, and to some extent in spinning, and there was also direct recruitment into the factory. Women and girls who started their working lives in preparing, as

shifters, for example, could move upwards to spinning as they grew older, and some no doubt eventually worked their way into reeling and winding. Those women who entered the factory began their lives as weavers almost straight away, though there was an initial training period of six weeks. Weavers began working on single looms, they moved on to double looms and higher pay most probably with age and experience. Though it employed large numbers of women, weaving appears to have been a coveted and insular occupation. This was partly maintained by the fixed training period required which, though short and hardly amounting to a formal apprenticeship, was to some extent successful in restricting access to the occupation, thus keeping jobs open for those women who underwent this initial period.

For purposes of analysing the relationship between wives' and husbands' occupations, women's jobs in the textile industry were grouped according to department. Their husbands were grouped according to whether they did jobs which fell into textile or non-textile industries. An examination of married women in these four departments provided evidence to suggest that household/employment processes featured in the structuring and maintenance of the textile hierarchy. These processes were manifest in a patterning of husbands' and wives' jobs at particular points along this hierarchy. The first significant finding is that while the husbands of women in the highest and the

lowest paid textile departments are concentrated in textile occupations, the husbands of women in the two middle groupings are employed in non-textile occupations (Table 5:1).

TABLE 5:1 THE JOBS OF HUSBANDS WITH WIVES IN TEXTILES

HUSBANDS JOBS	WIVES JOBS			
	TEXTILE DEPARTMENT			
	<u>MILL</u>		<u>FACTORY</u>	
INDUSTRY	PREPARING	SPINNING	REEL.&WIND.	WEAVING
TOTAL	N (%)	N (%)	N (%)	N (%)
TEXTILE 42	20 (61)	7 (25)	4 (23)	11 (61)
NON-TEXTILE 54	13 (39)	21 (75)	13 (77)	7 (39)
TOTAL 96	33 (100)	28 (100)	17 (100)	18 (100)

Wives in preparing, the lowest paid department, had a large proportion of husbands in textile jobs (61%). Wives in the highest paid department, where warping and weaving took place, were also more likely to have husbands who were in textile jobs (61%) than they were to have husbands in non-textile jobs. The women who were found in the spinning and in the reeling and winding departments had husbands who were predominantly in non-textile employment. Seventy-five per cent of those in spinning had husbands in non-textile jobs, as did seventy-seven per cent of women in reeling and winding.

One possible explanation for this patterning of wives and husbands jobs in the data, is that husbands were able to secure jobs for their wives, and as we have seen, both these areas of employment were points of entry into textiles. Husbands' could only have influence within their own areas of employment, and of course, the majority of men who worked in textiles, as became clear in chapter four, were either in the preparing or the weaving departments. It follows from this that were husbands and wives jobs to coincide, they would be more likely to do so in these departments.

Occupations in the preparing departments of Dundee's spinning mills employed a large number of older women, as was uncovered in the previous chapter. These were jobs that older women could enter with comparative ease, because they were largely undefined, and unskilled. If husbands were already employed in preparing then it was possible that they could be influential in getting jobs for their wives. Younger girls moved from jobs in preparing, into spinning, and some, no doubt, into reeling and winding as they grew in age and experience, but older women are more likely to have used these low paid jobs in times of need, coming and going as their circumstances required. The fact that the husbands of women in the preparing department were also in mill employment could help to confirm the proposition that informal household networks were an important part of

the recruitment of wives into these low paid jobs.

It seems that household networks were also important in the weaving factories where women were again more likely to have husbands in textiles. It is unlikely that the women in weaving had the same relationship to their jobs as the women in preparing. The jobs in the factory were highly skilled and could not be taken up and dropped in the same way. The fact that women in the weaving department had husbands in occupations within the same department suggests that even if husbands did not secure the employment of their wives, they may have been influential in ensuring that they had good jobs within weaving. This is a reasonable supposition given that the men who were employed in weaving were, on the whole, the most powerful and highly paid in the industry. In the last chapter we saw how tenters were dependent upon weavers with whom they were paired. It is possible that tenters married weavers - what better way to ensure a good wage?

The fact that women in the spinning, and the reeling and winding departments were less likely to have husbands in textiles suggests that household networks became less important as one moved up the mill hierarchy. If the argument is correct, this pattern also indicates that the ability of husbands to find employment for their wives was limited, unsurprisingly, to the areas in which most men were employed, and in the

spinning mills most men were found in preparing. These findings suggest that the entry of women into both the mills and the factories, and the presence of women in one or the other, was at least partly based on household networking processes.

We should hesitate to overstate any causal connections in this context, an alternative explanation must also be taken seriously. It is possible that men and women in preparing and weaving met each other at work, married and continued in their pre-marriage employment. It would require longitudinal data to separate out what explains different women's positions within the textile industry with more certainty. If it is marriage patterns that have been identified, the likelihood that both partners in a marriage were in low paid or high paid jobs, implies that if family members did not help to find work for each other, like married like and general patterns of inequality were sustained.

The prevalence of the general pattern with a clustering of husband's and wife's occupations at certain points in the textile hierarchy is replicated when the category of "wife" is broken down by age. Women, both under thirty-five years and over, who were employed in the preparing and weaving departments, were more likely to have husbands employed in the textile industry. Amongst the over thirty-fives, though the numbers of women employed in the preparing department

are considerably smaller, the proportion with husbands in textile employment is larger. By way of contrast, amongst the older women who are employed in the weaving department, there is more of a balance between the number who have husbands in textiles and those with husbands in non-textile jobs. The pattern is strong amongst Scottish spouses, and to some extent it exists amongst Irish wives and their husbands. However, in this instance the coincidence of husbands' and wives' jobs is confined to the low paid, because there were so few married Irish women in weaving and few Irish men in textiles in general.

Establishing with greater precision the role which household processes had in bringing about the coincidence of advantage/disadvantage within marriages can be achieved through a more extensive examination of the jobs which the husbands of women in textile employment were doing. The coincidence of husbands' and wives' jobs which has been described is most accentuated amongst younger wives in the sample. For this reason Scottish wives under the age of thirty-five are taken as an example to elaborate on the overall pattern. Table 5:2 shows the distribution of women in this group across the four main departments of the textile industry.

TABLE 5:2 HUSBANDS JOBS BY WIVES JOBS,
SCOTTISH AND UNDER THIRTY FIVE-YEARS

HUSBANDS JOBS	WIVES JOBS							
	TEXTILE DEPARTMENT						FACTORY	
	<u>MILL</u>							
INDUSTRY	PREPARING		SPINNING		REEL.& WIND.		WEAVING	
TOTAL	N	(%)	N	(%)	N	(%)	N	(%)
TEXTILE	9	(60)	6	(29)	2	(22)	4	(67)
21								
NON-TEXTILE	6	(40)	15	(71)	7	(78)	2	(17)
30								
TOTAL	15	(100)	21	(100)	9	(100)	6	(100)
51								

The general pattern was strong amongst this group; women in the lowest and highest paying departments were again more likely to have husbands who were in textile occupations. A more in depth examination of actual jobs demonstrates the extent to which those of husbands' are connected to those done by wives, at key points in the textile hierarchy.

Married women in preparing, the lowest paid department in the textile industry, had husbands' who were also mainly in textile work. These men were nearly all employed in the mill in similarly unclassified positions to their wives (83%). They earned around 17s 11d, about the same as general labourers earned in Dundee at the time. Those in preparing whose husbands were in non-textile jobs, were unskilled and poorly

paid, the majority were porters and labourers. This data, in displaying not only the likelihood that low paid millworking women will have husbands who work in textiles, but husbands who are in low paid male jobs both within textiles, and in non-textiles, suggests that the household processes identified relate to wider patterns of inequality. Low paid female mill jobs were important for married women, particularly those who were married to low paid men because they did not require anything in the way of prior experience and could thus be taken up in situations of great need (Collet, 1898a: 31).

Of the very much more distinct occupations which compose the spinning department of the mill, spinning itself was the largest employer. Seventeen out of twenty-one married Scottish women who were under thirty-five were spinners. Unlike the lowest paid, the husbands of these women mostly worked in non-textile occupations, particularly in the building trade as masons' labourers, and in boot and shoe making too. More than a third were skilled or semi-skilled labourers earning around 19s 2d. Those who were in textile work were in reasonably well paid jobs within the mill. Over the age of thirty-five wives working in this occupation almost disappear. As it is unlikely that these women moved upwards into reeling and winding, for the number employed is so small in the older age group, they probably left textiles, and paid work altogether.

Perhaps the earnings of their husbands' increased with age.

The data shows that household processes were not as important in the recruitment of women into the spinning department. Household processes had a similar standing amongst women in reeling and winding, the highest paid department in the mill. The husbands of women in this group were doing better jobs than those of women in spinning. Women who were winders and reelers had husbands who were employed predominantly in non-textile occupations. The husbands of these women were found in semi-skilled trades, some were van drivers and ship foremen, while others were found in the construction industry as slaters and labourers.

Over in the factory, household processes also seemed to be operating amongst women in the highest paid textile work. The majority of Scottish wives under thirty-five in the sample who are in weaving, have husbands who are in textile employment. These men are generally to be found in weaving where high paid male jobs were also available; they were tenters earning around 27s 6d a week, and beamers who earned 23s 3d a week. Those whose husbands were in non-textile work, were at the top end of the available non-textile range in the iron and ship building industries. Some were ship rivetters with an average weekly wage of 24s 11d, others were slaters whose average weekly wage was 25s

ld. Women who were weavers were doubly advantaged in the sense that both themselves and their husbands held good positions in the employment structure.

It seems that household connections are important for understanding the distribution of Scottish women across jobs in the hierarchy of the late nineteenth century Dundee textile industry. These connections were most prominent amongst women in the highest and lowest paid sections of the industry, and amongst the under thirty-fives. This was possibly reflective of the role which household networking processes had in securing work for women; these were also the areas of the industry in which men were employed. Women over thirty-five who were in the highest and lowest paid jobs still displayed a tendency to have husbands in textile jobs, which helps to confirm the importance of household ties. However, amongst this group women, especially those in the high paid jobs, there was an evening up of husbands in textile and non-textile employment.

Though the data suggests that household recruitment processes decline in importance as women increase in age, households still seem to have influenced older women's employment experiences. This can be read from the considerable reduction of married women in textile jobs, particularly in the middle paying occupations. There are less than half the number of Scottish wives over thirty-five in textile jobs than there are in the

younger group, and most of those who remain are concentrated in the highest and lowest paid sections of the industry. A plausible explanation is that women left paid work once their domestic responsibilities had abated, either because their children had reached working age or because their husband's wages had increased.

As we have seen, spinning was the preserve of young wives. The fact that the numbers of older married women employed in reeling and winding were low suggests that wives were not working rather than moving to higher paid jobs. The concentration of women who remained at work in the highest and lowest paid jobs seems to indicate that women stayed at work either because they were highly paid or because they were poor.

The argument that women in spinning left as they became older, and that male textile wages increased with age is corroborated to some extent by Clara Collet in her 1898 report on the employment of women (Collet, 1898a). Using wage figures for 1896 which are broken down by age Collet calculated that the wages of spinners in the Dundee textile industry decreased with age. She states that the average wage of a spinner who was over twenty-five years of age was a good deal lower than the average wage paid to women who were under twenty-five years of age (Collet, 1898a, 31). She found that the converse was true of men in textile jobs amongst whom

the average wage of those over twenty-five was higher than the average found for men aged eighteen to twenty-four.

Amongst the Irish born in the sample the general pattern is not so clear (Table 5:3). There is not the same clustering of husbands' and wives' jobs in the high and low paid sections of the industry. In both departments similar numbers of women are married to men in textile and in non-textile occupations. This suggests that Scottish households were successful in restricting access to occupations, particularly to those which were higher paid. In the under and over thirty-five groups, women in the two middle paying categories of textile work are, as with the Scottish, married to men in non-textile occupations.

TABLE 5:3 HUSBANDS JOBS BY WIVES JOBS: IRISH, AND UNDER THIRTY-FIVE YEARS

HUSBANDS JOBS	INDUSTRY WEAVING	WIVES JOBS TEXTILE DEPARTMENT								
		TOTAL	<u>MILL</u>				<u>FACTORY</u>			
			PREPARING		SPINNING		REEL.&		WIND	
		N	(%)	N	(%)	N	(%)	N	(%)	
TEXTILE (50)	5	3	(53)	0	0	1	(25)	1		
NON-TEXTILE (50)	9	4	(57)	0	(100)	3	(75)	1		
TOTAL (100)	13	7	(100)	1	(100)	4	(100)	2		

In an industry which was crying out for women it must have been fairly difficult to restrict opportunities to family members, especially when there were so many immigrant communities willing to step into any available job, no doubt at cheaper rates. Nevertheless, the Dundee weavers may have been successful to some degree in this endeavour, barring access to the factory for Irish born women. Neither of the Irish wives here held the job of weaver (2). The Scottish wives in high paid jobs, adding both age groups together, were all weavers but one. The position held by Scottish women, however, was apparently breaking down. The data shows that younger single Irish women were entering weaving as the Irish became incorporated into the textile working community.

The general pattern to emerge from this exercise shows a coincidence of advantage/disadvantage running across the employment of husbands and wives, particularly amongst the Scottish born. It appears that advantage/disadvantage runs across households in terms of the type of job done, or more specifically in relative wage levels. On the whole, Scottish women in high paid jobs are married to Scottish men in high paid jobs, while low paid women are married low paid men. A similar process did not seem to be operating in the Irish case.

(ii). HOUSEHOLD/EMPLOYMENT PROCESSES IN FEMALE-HEADED HOUSEHOLDS

Late nineteenth century Dundee provides the perfect

setting for looking at the extent to which the processes connecting households to employment experience found amongst men in late nineteenth century Lancashire, were replicated in the case of women household heads in textiles. There were indications that household ties were important ways through which girls and women obtained jobs in this location, particularly on a generational basis whereby daughters did the same jobs as their mothers. In the late seventies Billy Kay talked to a number of women who started their working lives in the Dundee mills and factories around the turn of the century, these interviews provide confirmation of this claim (Kay, 1980).

Opportunities for entering employment were partly opened up on a generational basis in Dundee, as they were in Lancashire. Girls often entered into the same occupations as their mothers, like Mrs Cockburn who was a Rover:

"The first mill I went in was Halley's in the Ferry Road. And it was what they cried the rovins-shuftin'rovins. My mother was in what they cried 'the low mill' and of coorse I thocht, if I go in aside my mother I was a'richt; young lassie, fourteen, got in aside ma mother-wis okay-naebody would touch us, ye see." (Kay, 1980: 39)

Should a girl's mother not be in work, access was usually assisted by an employed female relative who would provide an introduction. Sarah Craig, for example, who started her working life as a shifter, before moving on to spinning, got her job through her sister:

"Previous to goin' in when I was fourteen, I was goin' in an' workin' from I was ten-and-a-half on my sisters' lines an' makin' out I was ma sister for tae earn money" (Kay, 1980: 39)

A common means of entry into the jute mills was that described by Sarah where a younger sister, prior to beginning full-time work, would stand in for an older one should she require a day off. This served several functions, it kept women's jobs open for them, it maintained the household income, and it provided an informal method of learning a skill before taking on a full-time job. Sarah said that the mill overseer never realised that she was occasionally substituted for her sister. These sorts of processes whereby women secured work meant that it was usual to find all the adult female members of one household, where they were employed, in the same or similar occupations.

In the chapter which follows the composition of different types of female headed households are examined in detail, and the employment positions of heads are discussed. Here the two most typical types of female head found in the sample, single and widowed women, are picked out in order to exemplify the connections between households and the structuring of employment. On the whole, these women had similar experiences in relation to this issue as were found amongst male heads. Female relatives in these households were likely to be found in

similar types of work to the female head.

The examination of the occupations of employed relatives in households headed by women in the sample provided detailed evidence to consolidate the argument that household connections were important in securing jobs for their members, particularly those who were female. In female-headed households, we found that other members of the household were frequently in similar occupations to the head herself, providing wages on a par to those received by her. This was less so for male relatives than for female relatives. The gender difference is probably to be explained, at least in part, by the lack of jobs for men in the textile industry. Where female relatives in female headed households are concerned, it is not just the wage level of the job which coincides with that of the household head but, in many instances, the specific occupation itself.

For the purposes of this exercise, households where the head was in textiles, and which also had other members in textiles, were selected. Households which were composed of one person, where children were not old enough to work, or in which other members were in non-textile jobs, were excluded from the calculations. In the households which remained, the jobs done by employed relatives were compared to job done by the female head. The outcome in both Scottish and Irish

cases indicated that the majority of household members were doing jobs which fell into the same textile department as the job done by the head (Table 5:4).

TABLE 5:4 JOBS DONE BY RELATIVES IN FEMALE HEADED HOUSEHOLDS

Households with relatives in textile occupations	Households with relatives in the same department as the Head	
	N	(% of total group)
<u>SCOTTISH</u>		
<u>Over 35 Years</u>		
Widowed Heads	22	(61)
*Single Heads	11	(40)
<u>Under 35 Years</u>		
*Single Heads	14	(42)
<u>IRISH</u>		
<u>Over 35 Years</u>		
Widowed Heads	10	(60)
Single Heads	28	(61)
Total	85	(53)

The pattern described was strongest in households headed by Scottish women, particularly by Scottish women who were single and over thirty-five. In one hundred per cent of these households relatives were doing jobs in the same department as the head. The figure for widowed Scottish women heading households is somewhat lower. This group have a total of eighty-six per cent of relatives doing similar sorts of jobs to the head. One possible explanation for this lower figure is to be found in the higher incidence of sons in these households for whom textiles offered very few jobs. The households of Single Scottish women under thirty-five also had a smaller proportion of relatives in similar

jobs to the head. Although the difference is really quite small, the fact that the relatives of widowed and single heads under thirty-five are less likely to be in jobs of an equivalent standing as the head, suggests that age and a continuous employment profile were possibly factors in determining the greater clout which single female heads had to find jobs for other members of their households.

It is not simply the department and the wage levels of the occupations which coincide, in most cases the particular job itself is the same. Female household heads who are weavers are likely to have female relatives in their household who are also weavers. This is true whether these relatives are daughters or, as is often the case in households headed by single women, whether they are sisters. Amongst Scottish female heads over thirty-five who are weavers, and who have female relatives, we find that eighty per cent of these relatives are also employed as weavers. (In this instance female boarders were also employed as weavers.) Females in the households of heads in the spinning department of the mill, whether relatives or boarders, were mostly employed as spinners, (75%) Women in the lowest paying department had similar experiences. All of the female heads working here are preparers and one hundred percent of female relatives, who were working, were also preparers.

Although the relatives of Irish female heads are also more likely to be found in jobs falling into the same textile department as the head, the overall incidence of this pattern is considerably lower in these households (Table 5:4). In sixty per cent of households headed by single and widowed Irish heads over thirty-five, other related members, who were employed in textiles did jobs within the department of the head. The relatives of widowed heads were more likely to be doing similar jobs to the head when the latter is in a low paid rather than a high paid job. This suggests that Irish women in the better paid jobs had less influence than their Scottish counterparts. In households with Irish single heads it was those in the lower paid jobs who were less likely to have relatives in similar types of textile jobs. This indicates a degree of 'upward mobility' to the better paid jobs amongst younger Irish women. The latter may have managed to break down the household networking processes which kept Scottish women in better paid jobs in some way, in order to obtain positions in the higher paid sections of the mill, and even in the factory.

CONCLUSION

In sum it is fair to say that processes connected to the household unit, rather than being of little importance in the Dundee textile industry as the nineteenth century drew to a close, remained important

for understanding women's employment experiences. The data showed that there were connections between the types of jobs in which different household members were employed. In male-headed households the jobs done by husbands and wives coincided in the highest and lowest paid textile departments. This pattern suggests that spouses could be influential in finding work for each other in the textile industry. It could equally signal the fact that people married those with similar backgrounds and whom they worked alongside.

In female-headed households, the pattern of job coincidence was even more stark. In such households the process seems to have had a generational impact. This meant that daughters were more often than not employed in similar jobs to their mothers. The strength of these processes amongst the Scottish born population helps to account for their weakness amongst the Irish born. Evidence which indicated that younger Irish women were breaking into the ranks of the higher paid suggested that household/employment processes of this sort were becoming stronger amongst this group.

The household processes identified limited opportunities for men and women in particular households and thus reinforced and reproduced existing patterns of inequality in the textile working community. The lack of mobility which was built into these sorts of processes meant that men and women in low paid jobs had little

chance of moving up the textile hierarchy.

In the final chapter, the repercussions of the household/employment processes identified are explored. In households which came off badly as a result of these processes, a variety of strategies were employed in order to meet household needs.

NOTES

(1). This chapter is the first to make use of the household database, details of which are given in Appendix IV.

(2). Neither of the Irish wives employed in the weaving department were actually employed as weavers, they were both warpers which was a slightly lower paid occupation.

CHAPTER SIX:

COMPOSITION, DEPENDENCY AND MAINTENANCE STRATEGIES IN TEXTILE HOUSEHOLDS

INTRODUCTION

This chapter continues the analysis of households in the sample by looking at the composition of different types of male and female-headed households. By looking at the employment positions of women in different household circumstances we are able to develop our understanding of the characteristics of different women who were employed in the Dundee textile industry. In general we find that the household/employment processes uncovered in chapter five result in a disjunction between the earnings of household heads and the needs of their households. This means that many households had to find additional means of income in order to fulfil their requirements.

The first section of the chapter looks at households in the sample in general, and identifies different types of male and female household heads. Scottish and Irish households are compared, and their distinctive features are discussed. In section two, the households headed by men and women in textile employment are examined at the disaggregated level. Aspects of composition such as size and number of children shall be outlined to begin with. This is followed by an examination of dependency levels within the textiles households of the sample, which looks at the employment status of household members, and

to establish the pressures on the wages coming into different households. This was done using a measure, 'balance' which was specifically created for the purpose. In the third section, the strategies employed in ensuring the maintenance of textile households is considered. Here we look at which household members were working, and at the methods employed to supplement the income of wage earners. In the final section of the chapter, information on household composition is used in conjunction with information on the occupational positions of household heads, in order to look at the way in which the household processes identified in chapter five cut across levels of household requirements. Some household heads with high levels of dependency were in jobs which allowed them to meet their needs, but many were not, and had to find additional means of support. (The methods used to analyse household level information can be viewed in Appendix Four.)

(I). MALE AND FEMALE HEADED HOUSEHOLDS IN THE SAMPLE

The sample captured the large number of female headed households which was characteristic of Dundee during the late nineteenth century. Dundee social union estimated that a third of the city's households were headed by women at that time (D.S.U., 1905: 65). In the sample, considerably more than this were female headed. Of the 932 households included, 389 (41%) were headed by women and 543 (58%) by men. A categorisation based on the sex

and marital status of all household heads, referred to as headtype, provided some details about the different sorts of men and women who were heading households.

The categories of which this classification is composed are presented in Table 6:1. This shows that just over half (52%) of female household heads in the sample were widows (1). They are perhaps the most likely group of women to be in this position, inheriting households upon the death of their spouses. Almost a third of female household heads were single women, although these women could also have inherited households, perhaps after the death of their parents, some of them must have established their households independently. The remaining female households heads (19%) were those of married women. They probably became household heads because they were separated from, or had been deserted by their husbands, or because their husbands, unable to find work in Dundee, were working away from the city.

TABLE 6:1 HEADTYPE: THE SEX AND MARITAL STATUS OF HOUSEHOLD HEADS IN THE 1891 CENSUS SAMPLE

HEADTYPE			
FEMALE HEADED HOUSEHOLDS			
	N	TOTAL HOUSEHOLDS	% FEMALE HEADED
SINGLE	110	12	28
WIDOWED	206	22	53
MARRIED	73	8	19
(No spouse present)			
TOTAL FEMALE	389	(42)	(100)
MALE HEADED HOUSEHOLDS			
	N		% MALE HEADED
COUPLE (MAN & WIFE)	479	51	88
SINGLE	28	3	5
WIDOWED	30	3	5
MARRIED	6	1	1
(No spouse present)			
TOTAL MALE	543	(58)	(100)
TOTAL HOUSEHOLDS	932	(100)	

Compared to female-headed households those headed by males were a more homogeneous group. Eighty-eight per cent of male-headed households were composed of a married man and his co-residing wife. Only five per cent of male heads were single and the same percentage were widowed. A tiny one per cent were married men with no wife present.

In looking for connections between households and the employment structure, and in order to identify textile households, the distribution of male and female heads according to industry was considered (Table 6:2). This exercise uncovered a similar patterning of male and female heads across textile and non-textile industries as was found amongst the wider male and female

workforce.

TABLE 6:2 MALE AND FEMALE HEADS IN TEXTILE EMPLOYMENT

HEADTYPE	ALL N	% TEXTILES
<u>FEMALE HEADS</u>		
SINGLE	92	92
WIDOWED	88	75
MARRIED	46	98
TOTAL FEMALE	226	85
<u>MALE HEADS</u>		
MARRIED (Wife Present)	139	31
SINGLE	6	23
WIDOWED	10	37
MARRIED (Wife Absent)	3	50
TOTAL MALE	158	31
TOTAL	384	

Female heads in the sample, were far more frequently found in textile occupations than were male heads, who were more likely to work in non-textile jobs. Both married and widowed female heads had lower proportions in paid employment than did single heads; widowed heads were the least likely to work (57%). More single heads, by comparison, were employed than any other group, along with married heads, the majority of them were employed in the textile industry (92%).

In the sample as a whole, as well as being the group who were least likely to be in employment, widowed female heads were also the least likely to be working in the textile industry (75%). The remainder were to be found in a variety of non-textile occupations. Some had shops and small businesses which they had probably inherited from their husbands. Others participated in a

variety of home based occupations - many were, for example, dressmakers.

Male household heads had a similar pattern of employment in textiles to men in general. Around a third of married male heads, whose wives were present, were in textile occupations. The small number of widowed male heads, and those whose wives were not present, were both more likely to be in textiles. Single male heads had the lowest presence in the textile industry (23%).

The notable characteristics of the immigrant Irish population of Dundee, as established in preceding chapters were; the huge imbalance in the number of men and women, and the unusual age structure - this was a comparatively aged group. These observations re-emerge in the breakdown of headtype by place of birth. At the individual level the Irish were a relatively small group, but they are a much larger proportion of the sample's household heads. Of the total number (410) of individuals returned as Irish born 236 were household heads (58%). This meant that almost a fifth of the total sample lived in a household which had an Irish head. The experience of those living in Irish households is thus obscured at the individual level because the children of Irish heads were mostly returned as Scottish born.

A majority of Irish households in the sample were headed by women (59%) compared to thirty-six per cent of

Scottish households (2). The Irish and Scottish populations had similar proportions of single and married female heads (Table 6:3). The fact that so many Irish households were headed by women is explained partly by the large number of widows in that population, and partly by the small percentage of male heads within this ethnic group. Thirty-five per cent of Irish households are headed by widowed women; almost double the proportion found in the Scottish case. When Scottish and Irish male-headed households were examined, we found a comparatively small proportion of nuclear family type households (a male head and his co-residing wife) amongst the Irish. Thirty-seven per cent of Irish households were of this type compared to fifty-six per cent of Scottish households. The majority of Irish households were headed by women, most of whom were widows.

TABLE 6:3 SCOTTISH AND IRISH HEADS IN THE SAMPLE

FEMALE HEADS	SCOTTISH		IRISH	
	N	%	N	%
SINGLE	73	11	35	15
WIDOWED	119	18	83	35
MARRIED (no spouse present)	51	8	21	9
MALE HEADS	425	63	97	41
TOTAL	668	100	236	100

Scottish and Irish male heads had similar employment experiences, only slightly fewer Irish than Scottish male heads were employed in the textile industry. By way of contrast, the employment of Scottish and Irish female

heads were somewhat different from each other. In accordance with the more general figures there was a greater concentration of Irish female heads in textile jobs than there was of Scottish female heads. Amongst single and married heads the proportion of Scottish women who were employed in textiles was only slightly lower than the proportion of Irish women. But the employment experience of widowed heads was quite different in the two groups. Irish widowed heads were more likely to be in paid work than were Scottish widowed heads. (67% of the former were employed compared to 54% of the latter.) Within employment the experiences of these two groups were also distinct. Irish widowed heads were nearly all found in textile occupations (91%). Scottish widowed heads were far less likely to work in textiles (59%). This was in keeping with widows in the sample as a whole; Scottish widows were far more often found in non-textile jobs than were the Irish.

By deconstructing the female household head category the type of women who were in this position became apparent. Though half of female heads in the sample were widows, a third of such households were headed by single women. More Irish households in the sample were headed by women than by men, and this was also due to the large number of widows in this section of the population. Irish female heads were more likely to be found in textile jobs, including those who were widowed, that

their Scottish sisters, more of whom found work in non-textile occupations.

(II) COMPOSITION AND DEPENDENCY IN THE SAMPLE'S TEXTILE HOUSEHOLDS

In this section, the internal composition of households in the sample are examined in order to identify features of households with different sorts of heads. To begin with the characteristics of all households headed by men and women who worked in textiles are examined, variations within these categories follow later. Two aspects of household composition are dealt with. Firstly, variables which denote the size and shape of the household are considered, such as: the number of persons, the number of children, and the number of boarders. The focus then shifts to levels of dependency within households. Here, the dependency status of children is examined, that is whether or not they are employed. The aim is to outline the similarities and differences between households headed by men and those headed by women.

A fuller assessment of the dependency component of households was achieved by examining the proportion of people who were dependent on the wages coming into a households. This was done by creating a summary measure, 'balance', which consisted of dividing the number of waged members of the household by the number persons in the household. This measure enabled the assessment of overall dependency levels within

households at a glance. The balance measure takes account of all the members of a family who were living in the same household, whether nuclear or extended. It does not include boarders, who are thought to represent additional means of household income, though their standing within certain households was open to debate. Nor does it include children who worked half-time.

The measure works in the following way: the nearer the value of 'balance' is to one, the more 'in balance' are the number of people and the number of wage earners in a household. The value goes down as levels of dependency within households go up, or where more people are dependent upon fewer wages. For example, the high levels of dependency found in male headed households are captured in the low 'balance' value amongst this group - the average value of 'balance' found amongst households with male heads was only 0.48. Female headed households by comparison experienced far lower levels of dependency, this was reflected in a higher average balance value of 0.71 for this group. In other words the number of household members and the number of wages were more in balance in female headed households.

(i) MALE HEADS

Two main types of male head were identified as working in textiles. There were those whose wives were also employed in textiles, and there were those wives were not in paid work (3). The main difference between these

two groups appears to be related to their life-course position. Although it is difficult to get at life course processes using cross sectional data, they are suggested. Those male headed households in which the wife does not work seem to be at a more advanced stage of the life-course than those in which the wife is employed. This interpretation is supported by variables depicting both the size and shape of these household and by the levels of dependency within them (Table 6:4).

In the first place, the age of heads and wives in each group suggests that the households in which wives do not work are further along the life-course than those in which wives are employed. There are more than ten years of difference between the ages of male heads in these two types of household and a similar difference is observable between the ages of their wives.

TABLE 6:4 SOME CHARACTERISTICS OF THE HOUSEHOLDS OF MEN IN TEXTILE EMPLOYMENT

	HOUSEHOLDS WITH NON-EMPLOYED WIVES (MEANS)	HOUSEHOLDS WITH EMPLOYED WIVES (MEANS)
HOUSEHOLD SIZE	5.6	4.8
AGE OF HEAD	45 YEARS	34 YEARS
AGE OF WIFE	43 YEARS	32 YEARS
"BALANCE"	0.47	0.64
(N)	(95)	(42)

The households in which wives work are smaller than those with non-employed wives, which is largely because the former have more children than the latter. The fact that non-employed wives are at the end of their

reproductive lives, indicates that their households have probably reached their maximum size, at least with respect to the number of children in them. With more than ten of their reproductive years remaining, wives who work are quite likely to bear more children. Their households are, therefore, likely to grow in size.

The levels of dependency which exist in the households of these two groups is another indicator of life-course stage. Although overall levels of dependency are higher in the households with non-working wives, indicated by the low value of the balance ratio for this group, this is due precisely to the fact that wives, themselves, are not employed. Households in which wives work have a somewhat higher balance value. Although it appears from this pattern that households with non-working wives had greater burdens on the wages coming into them, in fact, male headed households with working wives were probably under greater financial pressure, as can be seen when the dependency status of children is considered (Table 6:5).

TABLE 6:5 CHILDREN IN THE HOUSEHOLDS OF MALE HEADS IN TEXTILE EMPLOYMENT

	NON WORKING WIFE		WORKING WIFE	
	% WITH	MEAN NUMBER	% WITH	MEAN NUMBER
CHILDREN	87	3.8	86	2.8
DEPENDENT	65	2.8	76	2.4
WORKING	58	2.6	33	1.5
(N)	(95)		(42)	

In an equivalent proportion of both types of male headed households under discussion children were present. However, largely because they were younger, households with working wives had, on average, fewer children than those in which wives did not work. Despite there being more children in the latter sort of household, less of these children were dependent, a substantially higher proportion of these households had children who worked. Households with working wives, on the other hand, had both more dependent children and fewer working children than households with non working wives.

There is thus a coincidence of employed children, and non-employed wives, in the older male headed households of the sample. This suggest that as children grew up and entered employment, wives returned to the home. Of course, the limitations of the data preclude absolute certainty on this matter. Wives may not have worked in households where the male head held a superior position in employment, though the data suggests otherwise. Whatever the explanation, in the sample, households in which wives did not work had fewer dependent children, or more working children, than households in which wives were employed.

As there were fewer jobs for Irish men in the Dundee textile industry than for either Scottish men, or Irish women, the number of Irish male heads who worked in

textiles was small. Of the twenty-two Irish men in the sample who were both household heads and employed in textiles, fifteen had employed wives (68%). Scottish male heads seem to have been in a far better position. In the equivalent group, only twenty-three per cent had wives who were in paid employment. The households of Scottish and Irish men in textiles with non-working wives were both older and thus further along the life-course than those in which wives did work. Irish wives in both types of household were older than their Scottish counterparts and more had working, fewer had dependent children. Far fewer older Irish than Scottish women left employment as their children got older and this is further confirmation of the inequity experienced by the Irish.

(ii) FEMALE HEADS

The households of female heads who worked in the textile industry were a far less homogeneous group than households headed by men. Households with female heads in the sample were quite different from either of the male-headed types which have been discussed (Table 6:6). Female-headed households were very small in comparison with those headed by men. This was due partly to the absence of a male head, and partly to the fact that a lower proportion of these households had children. With respect to age, female heads were closer to male heads whose wives did not work, than to those in which wives worked, though here the resemblance ends.

TABLE 6:6 SOME CHARACTERISTICS OF THE HOUSEHOLDS OF FEMALE HEADS WHO WERE IN TEXTILE EMPLOYMENT

	MEAN
SIZE OF HOUSEHOLD	2.9
AGE OF HEAD	42 YEARS
"BALANCE"	0.83
(N)	(226)

Levels of dependency within female-headed households were extremely low compared to either type of male-headed household. This can be seen in the high value of balance found for this group (Table 6:6) . This did not signify that households with female heads were more financially secure than those headed by men; only one third of the female headed households under consideration could rely upon the wages of children (Table 6:7).

TABLE 6:7 CHILDREN IN THE HOUSEHOLDS OF ALL FEMALE HEADS IN TEXTILE EMPLOYMENT

	% WITH	MEAN NUMBER
CHILDREN	52	2
DEPENDENT	24	2
WORKING	37	1.6
(N)	(226)	

Fifty-two per cent of female-headed households had children, which helps to account for their small size. A quarter of the total number of female-headed households had dependent children, which though much lower than the proportion found in male-headed households, was significant for households which lacked the support of a male (wage). Boarders helped in this respect, and there were many in female-headed households, as shall become

clear shortly.

At the aggregate level households headed by Scottish and Irish women who worked in textiles were very similar. But more of the Irish households were headed by widows which meant that there were slight differences with respect to the dependency status of children in Scottish and Irish households. Irish female heads were older as a group than their Scottish sisters, less of them had dependent children, and more had children who were employed.

When female heads were looked at according to groupings by marital status, differences within the category began to emerge. The households of ever married women, those with married and widowed female heads, were more similar to those which were headed by men than those which were headed by single women. This resemblance is to do with the fact that the households of married and widowed women were headed by men in the past. Households headed by married women had experienced an interruption in the 'typical' life-course which male headed households follow. This resulted in 'adverse' circumstances. Households which were headed by widowed women, by contrast, are the outcome of the 'natural' progression of male-headed households at the end of their life-course. Though widowhood can also be experienced by relatively young women, it is more likely to be an experience of older women. The households

headed by single women will have their own life-course, how permanent they are is a question which remains to be answered.

MARRIED FEMALE HEADS

The households of married female heads are those most similar to the male-headed ones which were described earlier. Whether this group of women are really the heads of their households or not is difficult to assess. These women may have been deserted by their husbands, a reasonably frequent occurrence in Dundee during the late nineteenth century, or they may have had husbands working at a distance to Dundee, who were absent from home on the night of the census. If this were the case, then the wife would have been returned as the household head. The husbands of these women may or may not still have been contributing to the maintenance of the household.

Married female heads in the sample have the largest of the households headed by women (Table 6:8). On average there was one person less in each of these households than in those which were headed by men with working wives. This difference is easily accounted for by the absence of the spouse, were he present then they would have been of an equivalent size. These households were more similar to male-headed households with working wives, than they were to any other type of household,

either male or female, in terms of dependency levels. This is apparent in the average "balance" of wage earners to members found in each, which was higher than in other categories of female-headed household.

TABLE 6:8 SOME CHARACTERISTICS OF THE HOUSEHOLDS OF MARRIED FEMALE HEADS WHO WORKED IN TEXTILES

	MEAN
SIZE OF HOUSEHOLD	3.7
AGE OF HEAD	39 YEARS
"BALANCE"	0.68
(N)	46

Married female heads are several years older than male heads with wives who worked, and dependency levels are composed differently in their households. With respect to the numbers with dependent and the numbers with working children their experience can probably be placed somewhere between the two types of male-headed households identified (Table 6:9).

TABLE 6:9 THE DEPENDENCY STATUS OF CHILDREN IN THE HOUSEHOLDS OF MARRIED FEMALE HEADS

	% WITH	MEAN NUMBER
CHILDREN	74	2.5
DEPENDENT	57	2
WORKING	37	1.8
(N)	46	

Fewer households headed by married women have children compared to households headed by men. This could be due to the disappearance of the spouse before families were completed. While the proportion of households with

dependent children is similar to male-headed households in which wives did not work, the proportion with working children is more akin to that found in male-headed households with working wives.

WIDOWED FEMALE HEADS

The households of widowed female heads are the oldest group under discussion and were at some time in the past male-headed. They display extremes of the characteristics of male-headed households in which the wife does not work, and which accompany their position along the household life-course. These households are somewhat smaller than those headed by men (Table 6:10). This is to be attributed to the death of the male head, and thus his removal from the household, and also presumably to the likelihood that older children will have left home.

TABLE 6:10 SOME CHARACTERISTICS OF THE HOUSEHOLDS OF WIDOWED HEADS IN TEXTILE EMPLOYMENT

	MEAN
SIZE OF HOUSEHOLD	3.2
AGE OF HEAD	49 YEARS
"BALANCE"	0.87
(N)	88

The high average value of the "balance" measure found amongst this group of female heads, the highest to date, indicates that there are comparatively few dependents in these households. Indeed, though seventy-two per cent of them have children, a similar proportion to the households of married female heads, only nineteen per

cent have children who are dependent (Table 6:11). Working children are thus an important means of support in these households. Sixty-one per cent have children in employment. This is similar to the level found in male-headed households where the wife does not work.

TABLE 6:11 CHILDREN IN THE HOUSEHOLDS OF WIDOWED FEMALE HEADS

	% WITH	MEAN NUMBER
CHILDREN	72	2
DEPENDENT	19	2
WORKING	61	1.7
(N)	88	

SINGLE FEMALE HEADS

Finally, single female heads. This is the only group which have never been male-headed, and they display distinctive characteristics. Single female heads are the second youngest heading households and they have the low levels of dependency within their households. These households are the smallest in the sample, which is partly because more than a quarter of them have only one person. It is also due to the fact that a comparatively small number of these households have children.

TABLE 6:12 SOME CHARACTERISTICS OF THE HOUSEHOLDS OF SINGLE FEMALE HEADS IN TEXTILE EMPLOYMENT

	MEAN
SIZE OF HOUSEHOLD	2.4
AGE OF HEAD	38 YEARS
"BALANCE"	0.88
(N)	92

Twenty-three per cent have children, and while this is considerably lower than the figures found amongst the other two groups of female-headed households, it is a significant number for a group of households which have never relied upon a male wage. Despite having similar levels of dependency to the households of widowed female heads, households with single female heads have less by way of support from working children, though admittedly only comparatively few have dependent children (Table 6:13).

TABLE 6:13 CHILDREN IN THE HOUSEHOLDS OF SINGLE FEMALE HEADS

	% WITH	MEAN NUMBER
CHILDREN	23	1.3
DEPENDENT	12	1
WORKING	14	1.5
(N)	92	

Boarders are significant in increasing the size of single women's households and the average size would have been even smaller without them. The standing of boarders in households headed by single women is open to question. Some of the boarders were no doubt friends of the head with whom a joint household was established. This would be one way in which a single woman might overcome the difficulties of maintaining a household on her own. But it is difficult to tell from the census data when this was the case, and when it was not.

Of the three types of female heads who were in

textiles widowed women were the largest group. More of the latter were Irish than Scottish. This was the only group of female heads in which Irish women dominated. Single and married heads were both two thirds Scottish. In terms of household composition and dependency levels there were no real distinctions to be made between Scottish and Irish households headed by women in the three groups of female heads. Those differences which did exist were due to age differences between Scottish and Irish women and they were manifest in the way found amongst male-headed households. More households headed by single and married Irish women had working children and less had dependent children than was true of Scottish households. The households of Scottish and Irish widowed heads looked more alike than any of the other types of household, and in this group Scottish and Irish heads were of the same average age.

Two types of male-headed households were identified, those in which wives worked and those with non-working wives. They appeared to be distinguished by life-course position; households in which wives worked were younger and more had dependent children, than households where wives were not employed. Female-headed households were smaller than those headed by men as fewer had children, they thus had lower levels of dependency. Households headed by married women were most similar to those headed by men with non-working wives, many of them had dependent children. Widows were the largest group in

this category, the majority had children who were not dependent. Single women had the smallest households and less of them had children than the other two groups. The composition of both Scottish and Irish male and female-headed households were similar, though the Irish tended to be older.

(III) INCOME COMPOSITION IN TEXTILE HOUSEHOLDS

In this section, the strategies which different households in the sample employed in order to meet their financial requirements are explored. The extent of gainful employment within households will be considered, as will the way in which income was composed; that is which family members were working. Variations in income composition across households in the sample are thought to relate to age and life-course differences. Additional means of support, namely the employment of young children and the existence of boarders, are also discussed. The presence or absence of both of these in households is taken as a reflection of the inadequacy or adequacy of household income. (Evidence which helps to support this claim is presented in the final section.) The comparison of the strategies employed by households in order to meet their needs begins with an examination of the households headed by men who were employed in textiles. This is followed by a comparison of income composition in the different types of female-headed households. Distinctions existing between the households

headed by Scottish and Irish men and women are interspersed with the general discussion.

(i) MALE HEADS

Male heads who worked in textiles, with non-working wives, included those who were the sole supporters of their households. A quarter of this group provided the only wage coming into the household. They had no additional earnings from any source, at least as far as the information given in the enumerators books can tell us. In households where the male wage was supplemented, it was usually done with the earnings of working children. The latter were present in a large percentage of male households with non-working wives. In this older group of households, it appears to be the case that the employment of grown children was substituted for that of wives. The additional earnings of older children were still insufficient to support some households, and they had to send younger children to work half-time. Though the proportion of households which did so was very small, more did so in this group than in any other group of male-headed households (Table 6: 14). Further income could be had by taking in boarders, but again the number of male-headed households with working wives who had them was small.

TABLE 6:14 BOARDERS AND HALF-TIMERS IN THE HOUSEHOLDS OF MALE HEADS IN TEXTILES

	HOUSEHOLDS WITH NON EMPLOYED WIVES		HOUSEHOLDS WITH EMPLOYED WIVES	
	% WITH	MEAN	% WITH	MEAN
BOARDERS	8	1.4	19	1.4
HALF TIMERS	6	1	5	1
(N)	(95)		(42)	

Financial stresses encountered by younger male-headed households with high levels of dependency meant that young wives often had to work. If the wage of the male head was low, then this fact, in combination with high dependency levels could, in all probability, plunge households into poverty, as the early literature on the subject suggests. More of the younger male headed households in the sample with working wives had dependent children to care for compared to older households. The greater financial burdens characteristic of this group probably lay behind the employment of wives in the first place. The presence of yet further forms of wage supplementation indicates that households were still unable to meet their needs despite the additional income of wives. Children are likely to have been too young to work full-time, yet the number working half-time was no greater than in male-headed households where wives did not work (Table 6:14). Those households which were required to further supplement their income, did so by taking in boarders. A fifth of male-headed households with working wives in the sample had boarders compared to less than ten per cent of

households with non-working wives.

A comparison of Scottish and Irish male heads in the sample with non-working wives found that household income was composed in a similar way. Most of these households relied upon the earnings of the head in conjunction with those of grown up working children. Though some also required additional support from boarders and children working half-time, the number who did so was small compared to other groups. In contrast, Scottish and Irish male-headed households with working wives were to some degree distinct with respect to income composition. More Irish than Scottish households of this type had working children and many more of them also had boarders (27% of the Irish had boarders, but only 16% of the Scottish. This indicated that the Irish received lower wages. Though their number was small, more Scottish male headed households of this sort had children working half-time.

Only a quarter of the men employed in textiles in the sample supported households independently, the majority of male-headed households required additional means of support. In those with non-working wives, the earnings of older children were relied upon heavily. Many of the younger households, in which wives worked, further supplemented their income by taking in boarders. Children in these households were often too young to work, yet a few were sent into textiles half-time. Irish

male-headed households with non-working wives were similar to the Scottish. Those with working wives had to further supplement their incomes, a much larger proportion of them had boarders.

(ii) FEMALE HEADS

A far larger proportion of female, than male household, heads who worked in textiles were the sole supporters of their households (32%). Many of these women were single, and they were more likely to have a one person household. Supporting a household alone on the wages paid to women in the Dundee jute industry, whatever the level, must have required careful budgeting.

Overall, it is difficult to assess the maintenance strategies which were followed by female heads as a group, these become much clearer when the category is disaggregated. Only a third of female headed households were in a position to rely upon the earnings of employed children. Female-headed households were far more dependent than were male headed households upon the income which could be gained from boarders. Boarders were found in over a quarter of their households (Table 6:15). The earnings of half-timers were not very important to this group, they were present in very few female-headed households at the aggregated level.

MARRIED HEADS

The households of married female heads, compared both to other types of female-headed, and to male-headed households appear to have been under extreme financial stress. If their circumstances were of the variety identified earlier, should their husbands be providing some kind of financial support then their situation would have been somewhat alleviated. If there was no money coming from husbands then this group were probably the most likely of all the households in the sample to experience poverty. With far more supporting dependent children and only a small proportion having children who worked, this group had high levels of dependency and few wages to meet the cost. The fact that twenty-two per cent of these households had boarders, a figure similar to that found amongst male-headed households with working wives, suggests that they were similar to this group and had contributing husbands. However, they also had the largest number of households with children working half-time which tended to support the more gloomy interpretation (Table 6:15).

TABLE 6:15 BOARDERS AND HALF-TIMERS IN HOUSEHOLDS
HEADED BY WOMEN IN TEXTILES

HEADTYPE MARRIED	SINGLE		WIDOWED		TOTAL FEMALE HEADS			
	%With	Mean	%With	Mean	%With	Mean	%With	Mean
BOARDERS	22	2.6	32	1.7	26	2	27	2
HALF-TIMERS	9	1.5	1	1	1	1	3	1.3
(N)	(46)		(92)		(88)		(226)	

WIDOWED HEADS

The households of widowed female heads were one of the groups most likely to experience poverty according to Rowntree's 1902 study of York. In the 1891 sample of Dundee textile workers, however, the other types of female headed households probably had even greater struggles with maintaining their households. Widowed female heads were "better off" than deserted wives largely because of their age. The older children who inhabited the households of widowed heads were less likely to be dependent, and more likely to be employed and thus contributing to the upkeep of the household. In fact, more households in this group had earnings from working children than did any other group in the sample, either male or female-headed. This is not to say that the households headed by widowed women fared better than those headed by men, a very unlikely scenario, as they did not have the wage of a male head for support. But it is likely that, depending of course upon the position which they held in the textile industry, that their circumstances were probably at least more favourable

than those in which single female heads found themselves. The fact that the households of widowed heads did feel the pinch is visible in the large number which had boarders (26%).

SINGLE HEADS

Many of the households headed by single women working in textiles, as said, were one person households (26%). Many more would have been so were it not for the presence of boarders. While this group had the lowest overall levels of dependency within their households of any of the groups being discussed, they more frequently faced the obligation of maintaining a household on their own. Some of the households of single female heads had children; few had dependent children, and a smaller number had the support of working children on which to rely. The most important source of additional income, in a third of these households, came from boarders. Despite the question as to whether or not these people were actually boarders, they may have been friends who shared the cost of maintaining the household, they were contributing in some way to overall household costs.

At the aggregate level, Scottish and Irish female headed households resembled each other with respect to household income composition. More of them supplemented their income with earnings from boarders compared to male-headed households, with the exception of those headed by men whose wives worked; a similar proportion

of their households had boarders as did those of female heads.

It was the predominance of widows amongst female heads which accounted for the similarities existing between Scottish and Irish female heads with respect to income composition at the aggregate level. In both groups, the households of widowed heads relied upon the wages of working children and boarders for support. Scottish and Irish single female heads by comparison, looked similar in terms of the number of households with working children but were somewhat different in other ways. For example, more Scottish women (33%) had boarders in their households than Irish women (27%). The most significant differences were found between the households of Scottish and Irish married heads. Though amongst the Irish this was a small group, a third of households had boarders compared to sixteen percent of Scottish. But while the Irish had no children working half-time, thirteen per cent of Scottish households had them. This was the largest proportion found amongst any group and was partly due to the fact that these women were younger than their Irish equivalents.

On the whole, female-headed households supplemented their incomes, where necessary, in similar ways to those headed by men. Married heads, who appeared to be in the most desperate position, relied on the income generated by boarders and children working half-time. Contrary to

early poverty studies, widowed heads in the sample were comparatively well off, more of them had working children than any other group of female heads. However, a third of them also relied on income from boarders. Many single female heads had to support households alone, the preferred method of supplementing income amongst this group was with boarders.

So far features of the households of male and female heads in textile employment have been outlined. This exercise helped to establish the relationship between household composition and the "strategies" employed by households in supporting themselves. Both the composition and the "strategies" of households appeared to vary over the life course. This could be seen particularly in the case of male headed households where the employment of wives is replaced by that of children as the latter reach working age. Female-headed households of different types also displayed characteristics which indicated that age and composition helped to determine the means by which they were maintained. Those who were married tended to rely on income from half-timers while households of single and widowed female heads were heavily dependent upon income from boarders.

There were few distinctions to be made between the households of Scottish and Irish male heads particularly those with working wives, though both the Scottish and

Irish required earnings in addition to those of adult working members. In the Irish case this more often came from boarders and in the Scottish from half timers. Generally speaking, Irish households were older than Scottish ones, and this helped to account for the differences in the form which additional income took. Age also helped to account for the differences pertaining amongst Scottish and Irish female heads in the sample with respect to income composition. Widowed female heads in both groups were the same age and income composition was very similar in their households. But age differences between Scottish and Irish married heads meant that more Scottish married heads relied on the earnings of half-timers and less on those of boarders than Irish married heads.

(IV) JOB POSITIONS AND THE STRATEGIES USED BY MEN AND WOMEN TO COMBAT THE INADEQUACY OF WAGES

The final section of this chapter explores the relationship between household composition, and employment position amongst male and female household heads who worked in the late nineteenth century Dundee textile industry. This involves looking at how adequate the wages received by male and female heads were to the task of meeting the needs of their households. Overall levels of dependency, given by the value of balance, are examined for the households of men and women in high and low paid jobs within textiles. This is followed by an outline of the levels of additional income existing in

the households of the high and low paid. The patterning of boarders and half-timers across the households of men and women in different positions within textiles, which emerges from this exercise reflects the adequacy of wages paid to household heads.

MALE HEADS IN TEXTILES

Compared to the knowledge which had been built up around the jobs women did in the Dundee textile industry, that relating to the jobs done by men was somewhat sketchy. Women's jobs in the industry were in a sense easier to categorise mainly because they were unambiguously connected to particular parts of the manufacturing process. This meant that they could be firmly located in one of the four main departments, as seen in the previous chapters. Men's jobs on the other hand were far more difficult to place. Many of them were described in general terms, for example: overseer, foreman, mechanic, labourer. Men doing these sorts of job were employed in all of the textile departments and, from the information given in the census enumerators books they could not be allocated to any particular one of these departments. Men's factory jobs were more simple to place than their mill jobs; those of tenter, beamer and dresser quite definitely took place in the weaving department. As well as being more difficult to categorise the hierarchy of wages paid to men did not closely follow the production process in the way that

women's wages did. Overseers, for example, were highly paid and appeared in each of the main departments. In order to make distinctions in the wages paid to male household heads in textiles a very basic mill/factory division was drawn. Only those men doing jobs which fitted unambiguously into one or other of these locations were included in the calculations.

Of the male heads in the industry with non-employed wives, those who were sole supporters seem to have been financially secure. Though the average value of balance amongst this group was extremely low at 0.30, the fact that there were no visible sources of additional income in their households suggests that sole supporters earned enough by themselves to maintain the high levels of dependency which characterised their households. Sole supporting men were all Scottish, and an equal number of them were employed in the mill and the factory. Despite wages being lower in the former than in the latter, sole supporting male heads in the sample were, generally speaking, in jobs which paid similar levels of wages. Those who worked in the mill were nearly all overseers while those who worked in the factory were nearly all tenters.

Scottish male heads who had non-working wives but additional sources of income and those whose wives were employed, displayed a similar patterning with respect to 'need' and job position. Amongst both groups men who

were employed in the generally higher paid factory jobs had higher levels of dependency within their households than those in the lower paying mill jobs (Table 6:16). The fact that those in the lower paid jobs were under greater financial stress than those in the high paid jobs is made clear by the patterning of additional sources of income across the two groups. More households, both of male heads with working wives and those with non-working wives, where the head was in the lower paid mill jobs had boarders, and more had children who worked half-time, compared to male heads who were in the higher paid factory jobs.

TABLE 6: 16 WAGES, DEPENDENCY AND ADDITIONAL WAGES IN THE HOUSEHOLDS OF MALE HEADS IN TEXTILES

	NON-WORKING WIVES				WORKING WIVES			
	MILL		FACTORY		MILL		FACTORY	
	%	Mean	%	Mean	%	Mean	%	Mean
BOARDERS	21	(2)	6	(1)	25	(3)	0	(0)
HALF-TIMERS	11	(2)	6	(1)	13	(1)	0	(0)
MEAN BALANCE	0.54		0.52		0.72		0.50	
(N)	(19)		(18)		(8)		(0)	

Because there were so few Irish male heads in the sample it was difficult to make comparisons with the Scottish groups which were identified. Irish men in textiles, like Irish women, were rarely employed in the factory. Patterns across the mill and factory, therefore, did not exist. One group of Irish male heads which was large enough to comment upon were those with working wives who were in the mill. Like their Scottish

equivalents, a large number of the households of these low-paid men had boarders.

FEMALE HEADS IN TEXTILES

The distribution of women across jobs in the textile hierarchy in relation to household dependency levels was somewhat different to that found amongst male heads just examined. At the general level there was a disjunction between the wages which some women received and the requirements of their households. (This was true for wives as well as for female heads.) In most groups, those who were employed in weaving, the department which paid the highest wages, had lower overall levels of dependency within their households than did those who were employed in preparing, the lowest paid department. In many cases, it seems, that women, especially those in low-paid jobs, had incomes which were probably inadequate with respect to meeting the maintenance costs of the households.

The strategies used by women to supplement household income in cases where wages were insufficient were similar to those used by men. More of the women who were employed in the low-paid preparing department had children working half-time, or boarders living in their households, than did women in the higher-paid weaving department. The fact that women who were in low paid jobs had higher levels of dependency and that more of

their households had sources of additional income, suggested that the wages which they received were inadequate to their needs. This patterning helped to confirm the argument that the presence of boarders, and/or children working half-time, was indicative of inadequate wages in the first place.

The general pattern is exemplified by single female heads who were over thirty-five (Table 6:17). On average, the households of Scottish women in the higher paid weaving department had fewer members dependent upon the wages coming in than did the households of Scottish women in the preparing department. The income of those in preparing were clearly inadequate to meeting the higher levels of dependency within their households, this is shown by the large proportion who had boarders. A similar situation pertains amongst Irish single female heads who were over thirty-five. A characteristic typical of the households of Irish female heads was the high balance of members and wages. Though all Irish single heads who were over thirty-five had households with low levels of dependency, those in weaving were lower than those in preparing. By means of compensation, more of the households of Irish single heads in preparing, like their Scottish counterparts, had boarders compared to those who were in weaving.

TABLE 6:17 WAGES, DEPENDENCY AND ADDITIONAL INCOME IN THE HOUSEHOLDS OF SINGLE FEMALE HEADS 35+

	SCOTTISH		IRISH	
	PREPARING % MEAN	WEAVING % MEAN	PREPARING % MEAN	WEAVING % MEAN
BOARDERS	60 (2)	8 (2)	38 (2)	17 (1)
HALF-TIMERS	0	0	0	0
MEAN BALANCE	0.72	0.92	0.94	1.0
(N)	(5)	(12)	(13)	(6)

Scottish widowed heads strayed somewhat from the general pattern which has been described. Those in preparing and weaving had equivalent levels of dependency in their households, shown by the average value of balance for both groups (Table 6:18). The similarity of these two groups with respect to dependency is most likely to be due to homogeneity with respect to life course stage. Scottish widowed heads who worked in preparing, dealt with their inadequate wages in ways similar to other groups; more of them had boarders living in their households than was true of widowed heads who worked in weaving. Irish widowed heads also looked slightly peculiar. Those employed in weaving, though very small in number had higher levels of dependency than did those who worked in preparing. Irish widows in weaving seem to have earned sufficient to meet their extra requirements, for none of them had boarders. However, they were a small group and the majority of Irish widowed heads were in the preparing department. Like their Scottish sisters many were dependent upon additional earnings which they gained

from boarders.

TABLE 6:18 WAGES, DEPENDENCY AND ADDITIONAL INCOME IN THE HOUSEHOLDS OF WIDOWED FEMALE HEADS 35+

	SCOTTISH PREPARING		WEAVING		IRISH PREPARING		WEAVING	
	%	MEAN	%	MEAN	%	MEAN	%	MEAN
BOARDERS	29	(3)	18	(1)	30	(2)	0	0
HALFTIMERS	0		0		0		0	
MEAN BALANCE	0.85		0.85		0.91		0.67	
(N)	(14)		(11)		(30)		(2)	

Most female-headed households which found it necessary to supplement their income had boarders rather than children who worked half-time. This was because they were older and because fewer had children compared to male-headed households. Married female heads were the exception (Table 6: 19). They were very similar to male-headed households with working wives; amongst those who were Scottish and over the age of thirty-five, an equivalent number had boarders and half-timers.

TABLE 6:19 WAGES, DEPENDENCY AND ADDITIONAL INCOME IN THE HOUSEHOLDS OF MARRIED FEMALE HEADS 35+

	SCOTTISH PREPARING		WEAVING	
	%	MEAN	%	MEAN
BOARDERS	25	(2)	20	(3)
HALF TIMERS	25	(2)	20	(3)
MEAN BALANCE	0.79		0.56	
(N)	(8)		(5)	

Analysis showed that household/employment processes operating in the Dundee textile community often resulted

in a disjunction between the wages which household heads received and the needs of their households. In the case of male-headed households, there was a slight tendency for heads with higher levels of dependency to be in higher paid jobs, both where the wife worked and where she did not. But many did not earn enough to meet their needs. A clear pattern emerged, in both groups, whereby many more of those in low-paid jobs had boarders compared to those in high-paid jobs. This was true of both Scottish and Irish households. Many female heads earned wages inadequate to meet their needs. This is demonstrated by the fact that those in higher paid jobs had lower levels of dependency than did those in lower-paid jobs. As a result, female heads in preparing had many more boarders, and/or half-timers, in their households than did those in weaving. Because the Irish women in similar circumstances were older, they generally relied more on boarders and less on half-timers.

CONCLUSION

In this chapter features of the households headed by the sample's male and female textile workers were examined. The majority of female heads were widowed women, especially amongst the Irish.

An outline of the composition of households in the Dundee textile community, a picture which has not been drawn before, was presented primarily to establish more

details about the household processes which were examined in the previous chapter. The elaboration of these processes shows that they cut across levels of household requirements. As a consequence of this, households employed different strategies in order to meet their needs. In households where earnings were inadequate these included, sending children out to work half-time, and taking in boarders.

In the case of male textile heads, both household composition and income composition appeared to follow life-course stages. Households in which wives were employed were younger than those in which wives did not work. The same proportion of both types of household had children, however, more of those with working wives had dependent children than was true of male-headed households with non-employed wives. The fact that the former experienced greater financial stress is evident in the fact that almost a fifth of households had boarders. In the older male-headed households with non-employed wives children were also older and, therefore, many more were in employment. This helps to explain the non-employment of wives in these households. Though overall levels of dependency were higher, shown by the low value of balance found for this group, the wages of the combined income of the head and his working children were sufficient, in most cases, to maintain the household because comparatively few had boarders.

The women employed in the textile industry who were heading households were a varied group. On the whole, their households were smaller, had lower levels of dependency and fewer had children compared to male headed households. The households of ever married women were more similar to those with male heads than to those of single women. Married female heads appeared to be under the greatest financial stress, their households had the highest overall levels of dependency because many of them had dependent children. This group of households are more similar to those of male heads with employed wives than to other female headed households and the same proportion had boarders. It is possible that they had husbands contributing to the household income. They had the largest proportion of young children working half-time, which suggests that many probably lacked such support.

Though turn of the century poverty studies identified the households of widowed female heads as experiencing high levels of poverty, in the Dundee context this group, particularly those who were Scottish born, probably fared better than other female heads. This was largely because they were older, had been married and were more likely to have children in employment. But the fact that widowed female heads found it difficult in many instances to meet the requirements of their households is demonstrated in the large number who had

boarders. Single female heads had the lowest overall levels of dependency compared to the other groups, this was largely because comparatively few had children. This group more often had to support their households alone, and though some had working children to help out, many relied upon the additional income which boarders provided.

There were few distinctions to be made between the Scottish and Irish with respect to household composition and income composition. Those which existed were the result of the age differences between these two groups. Children in Irish households were older and were, therefore, more likely to be contributing to the maintenance of the household. In spite of this, many more Irish households had boarders present than did equivalent Scottish groups. This was because the Irish did not have access to higher paying jobs and, consequently, used other household resources to generate income.

The final section of the chapter looked at the consequences of household processes which structured employment opportunities in the late nineteenth Dundee textile community. These processes often bore little relationship to variations in the levels of household need with the result that there was often a disjunction between the requirements of households and the ability to meet these needs. Though access to higher wages was

limited by the obstacles to mobility which household processes maintained, households compensated for deficiencies in earnings through strategies for achieving additional sources of income. The general pattern was one whereby a large proportion of the households with heads in low-paid textile jobs, and which had high levels of dependency, displayed evidence of additional sources of income. Strategies varied according to headtype in some cases. Younger households, for example, those of male heads with working wives had both children working half-time and boarders, while older households, especially those which were female-headed, were more likely to have boarders.

NOTES

(1). One reason why there are so many households headed by widows in the sample, compared to the number headed by widowers is that the latter, in Dundee, as elsewhere, were more likely to remarry. Widowed women were less likely to find suitable partners for second marriages in Dundee, a city with so few eligible men.

(2). In this and the following table, the 28 households not included, were headed by men and women who were born not in Scotland or in Ireland but in England and Wales, or further afield. Of these households, 73% were headed by men, and only 27% by women.

(3). The vast majority of working wives in the sample were employed in the textile industry. The fact that so few were employed in non-textiles, justifies the concentration on households in which wives worked in textiles.

CHAPTER SEVEN: CONCLUSION

At the beginning of this thesis I argued that there was a division between theoretical and empirical undertakings in the history of women's employment. I also suggested that the problems which face these two endeavours might benefit from an approach which integrates them. Empirical studies in the area have a tendency to be very detailed and specific, and on the whole, the wider theoretical implications of findings are not addressed. The theoretical literature, on the other hand, is generally too abstract and has found it increasingly difficult to explain the processes which structure everyday life. The need for an approach which integrates empirical and theoretical undertakings is paralleled by a need, increasingly expounded in theoretical work, for an understanding of the history of women's employment which integrates issues of production and those of reproduction. The crisis in theoretical works and the division between theoretical and empirical undertakings can both be attributed to the demise of traditional Marxist understandings of inequality. This thesis looked at the problems inhibiting the development of explanations which sustain integrated understandings of production and reproduction, and suggested ways in which some of these problems could be overcome.

The crisis in Marxism and the recognition of the need

to incorporate gender into a theory of inequality came to a head during the 1970s with the growth of evidence depicting differences in the experiences of men and women. The first attempts to integrate production and reproduction in understandings of the sexual division of labour took the form of dual systems theories. In these protagonists argue that a system of capitalism and a system of gender inequality co-exist. These have been increasingly viewed as inadequate. More recent contributions have sought explanations which fully integrate production and reproduction, and suggest that single rather than dual understandings of these processes are necessary. But single systems theories also have problems in sustaining arguments and often return to dual systems theories.

The difficulties which theorists have in integrating production and reproduction in explanations of women's employment in the historical context, were identified as originating in three main areas. The first area of difficulty, common to most of the authors discussed, arose from the continued use of Marxist categories despite the recognition of the inability of these to explain gendered experiences of employment. The assumption that Marxism takes care of the employment structure means that this is not adequately reconceptualised in the light of gender differences. Issues of gender and employment indicate that a capitalist market for labour is not operating and

therefore raise long term questions about the coherence of the language of capitalism, suggesting the need to transcend Marxist explanations.

Dual systems theorists view a Marxist theory of capitalism as inadequate to the task of explaining gender, and supplement it with a theory of patriarchy. But the operation of patriarchy is limited. Hartmann, for example, does not see how gender is important in creating structures within employment, this is attributed to capitalist processes. Recent attempts to modernise the concept of patriarchy do not manage to turn it into the historicised entity which they are desire. Single systems understandings also retain Marxist theories of capitalism, and employ ad hoc theoretical principles to account for gender. Explanations of gendered experience in employment and in the domestic setting from those purporting a single system are also limited, though on this occasion temporally, because capitalist processes are said to be re-established at a later date. From this angle there is no need to dispense with Marxist explanations altogether, they are merely put on hold for the time being. Within this school of thought, those who attempt to reconstruct the detail of male and female experience have more success at sustaining understandings of the inter-relationship of production and reproduction than do those whose arguments are more abstract. But both hold on to the essence of Marxism, and thus find

themselves presenting a dual systems understanding. This is particularly true of those who employ the concept of relative autonomy.

The continued use of Marxist understandings of the employment structure has the effect of inhibiting the development of approaches which integrate production and reproduction in theories of inequality. If capitalist processes are held entirely responsible for structuring employment then there is no space left over for the organisation of social reproduction in helping to bring this about.

The second area of difficulty common to theorists lies in the use of gender in explanations of the history of women's employment. Problems with Marxist understandings are recognised in the literature, though they are not always sufficiently addressed. Problems with analysing male and female experience using gender categories, on the other hand are relatively unexplored. The debate in contemporary quarters concerning the need to incorporate variations within the sexes into explanations has not yet permeated the historical literature as much as it needs to. Those who employ a theory of patriarchy quite obviously fail to perceive the problematic nature of gender categories. They view their task as that of explaining aggregate differences between men and women which manifest themselves in the sexual division of labour. But single

systems theorists also tend to rely upon undifferentiated distinctions between men and women. In both types of writing men and women emerge as meaningful social categories, the underlying assumption is that their sex is the most significant determinant of their experiences. This assumption is tantamount to equating gender with sex and any sociological explanation should surely be wary of using biology as the basis for understanding differentiation. It seems necessary to dispense with the belief that gender has more meaning than other aspects of individual experience, and to begin to explore what lies behind differences in women's, and men's experiences. The divergence of experience within these two groups has become increasingly apparent at the empirical level and needs to be carried over into the theoretical understanding if explanations are to be integrated and sustained.

The final area of difficulty is that of how to sustain an understanding of the way in which the organisation of life outside employment enters into and effects the structure of employment itself. Problems with sustaining an understanding of this sort could be said to arise from the failure to reconceptualise the use of Marxism and gender in explanations. The main aim of theorists has been to incorporate gender into a Marxist theory of inequality. This has resulted in a very programmatic and abstracted use of gender. A new approach needs to be developed which can explain the

relationship between production and reproduction, and which can account for variations within women's, and men's experience. We can reconceptualise the rigid divisions incorporated in understandings of the sexual division of labour by identifying process which cut across the areas of production and reproduction and which are composed of women's and men's experience of home and employment. In order to identify these satisfactorily, historical works will have to build up a detailed picture of the range of experience which women and men encountered, both in employment and in the domestic setting.

The undertaking is not solely empirical. It is empirical in the sense that we need to know exactly what the processes which join production and reproduction are, but it is also theoretical because we must be able to explain what the processes are and how they operate. We need to fuse empirical and theoretical undertakings if we are to develop understandings of historical social processes.

In order to develop a fully integrated theory of patterns of experience amongst women who are in paid employment we really need to know how differences in their experiences outside of employment related to and affected their experiences inside employment. The household has been identified as important in determining members experience of employment. Any study,

therefore, is required to deconstruct women's experience of employment, and their life outside of employment, particularly that within the household.

In order to explore the relationship between production and reproduction, and to identify processes which cut across these two areas of social life, the thesis took a "bottom-up" approach. Rather than focusing upon a few, supposedly key events, I sought to reconstruct the circumstances of everyday life in a detailed and systematic fashion. This involved an historical study of the late nineteenth century Dundee textile community. An unprecedented number of women were employed across the range of occupations within the textile industry at the time. This meant that Dundee offered a unique opportunity to study variations in women's experience of employment. The extent of female employment within the industry meant that wider social conditions were also unusual in the city. This was manifest particularly in a large number of female-headed households. In this sense, the city presented a unique opportunity for researching variations in women's experiences of their households. The purpose of the thesis was not to develop a water-tight theoretical understanding of women's employment experience in the late nineteenth century, but merely to show that this related to their experience outside of employment. Nevertheless, the household/employment processes identified do have ramifications for traditional

theoretical understandings of women's relationship to employment.

The early chapters of the thesis presented the general context of the study. To begin with issues of demography, employment, and poverty were examined for England and Wales, Scotland, and Dundee. The comparison of these three geographical locations underlined the extreme nature of employment circumstances and domestic arrangements characteristic of late nineteenth century Dundee. Many of the extreme social features of the city related to the structure of employment within the textile industry. The fact that the industry dominated Dundee and that it employed a largely female, low paid, workforce had repercussions for all other aspects of life. That there was a highly imbalanced sex ratio in Dundee throughout the century, low rates of marriage amongst women, and few opportunities of work for men, can be related to the nature of employment within the textile industry. The large migrant population within the city, the largest group of whom were Irish, also came to work in textiles.

There followed an outline of the sample of Dundee enumeration districts from the 1891 Census enumerators books. The sample captured a largely textile working population, and analysis of it helped to confirm that the unusual features of the population of Dundee at the time were due to characteristics of the textile

industry. A large proportion of Dundee households at the time were female-headed; forty-two per cent of households in the sample were female-headed. The Irish population also had distinctive features, most of the Irish born in the sample were female, and compared to the Scottish born they were an older group.

Using a variety of sources, the hierarchy of female textile occupations was reconstructed. This hierarchy followed the production process. Wages were lowest in the preparing department but increased as one moved through the mill departments from spinning to reeling and winding. Across in the factory women's wages reached their peak. Weavers were the highest paid women in the industry. Sexual segregation was a marked feature of employment in Dundee textiles, though the number of men employed was very small. Men were employed as overseers in most departments, but the largest numbers were to be found in preparing and in weaving. As was the case with women who worked in these two departments, men in preparing earned less than men in weaving.

An examination of the characteristics of the women who worked in the Dundee textile industry pointed to considerable variation, with different types of women employed in different sections of the industry. All of the main textile departments employed substantial numbers of young women. However, spinning had the most youthful workforce and preparing the most aged. Single

women were employed across the range of occupations but married women were most likely to be found in spinning. Widows, on the other hand, were mostly concentrated in preparing, though they were found in smaller numbers in the weaving department. Scottish women fared better in textiles than did their Irish counterparts. This was largely because the latter were older and were thus more likely to be found in the low paid jobs characteristic of their age.

Moving beyond the individual characteristics of women employed in the textile industry to a consideration of their wider circumstances, the significance of the household in determining patterns of employment within the Dundee textile community emerged. In order to develop an understanding of the processes which integrated people's employment experiences and their lives outside of employment in late nineteenth century Dundee, the job positions of household members were compared to each other. In both male and female-headed households the employment position of the head was found, in many cases, to correspond to that of other members of the household. In male-headed households the job done by the husband often corresponded with that of his wife. This pattern followed lines of sexual segregation in the industry. Women employed at the opposite ends of the hierarchy that is in the preparing and weaving departments were likely to have husbands who were also employed in textiles. These were the

departments in which the majority of men were also employed. Wives employed in spinning and reeling and winding were more likely to have husbands who worked in non-textile occupations. In female-headed households the pattern was even stronger. Nearly all the employed female members of these households were found in a similar occupation to that done by the head. The coincidence of jobs found amongst members of Irish households was less apparent than was the case amongst the Scottish born of the sample. Though, amongst younger age groups the patterns were more similar for the Scottish and Irish than they were for the older age groups.

The clustering of the jobs of household members in both male and female-headed households was connected to wider patterns of inequality in the Dundee textile community. Because household members were generally to be found in work of a similar standing as each other, household processes were quite likely to have acted as barriers to mobility for those who were comparatively disadvantaged. In some cases these processes cut across levels of household need. This became a problem in circumstances where household requirements were larger than could be met by the wages which were paid to household members. The number of households which were unable to meet subsistence costs through the wages of their members was large, as became apparent from the examination of composition and dependency levels within

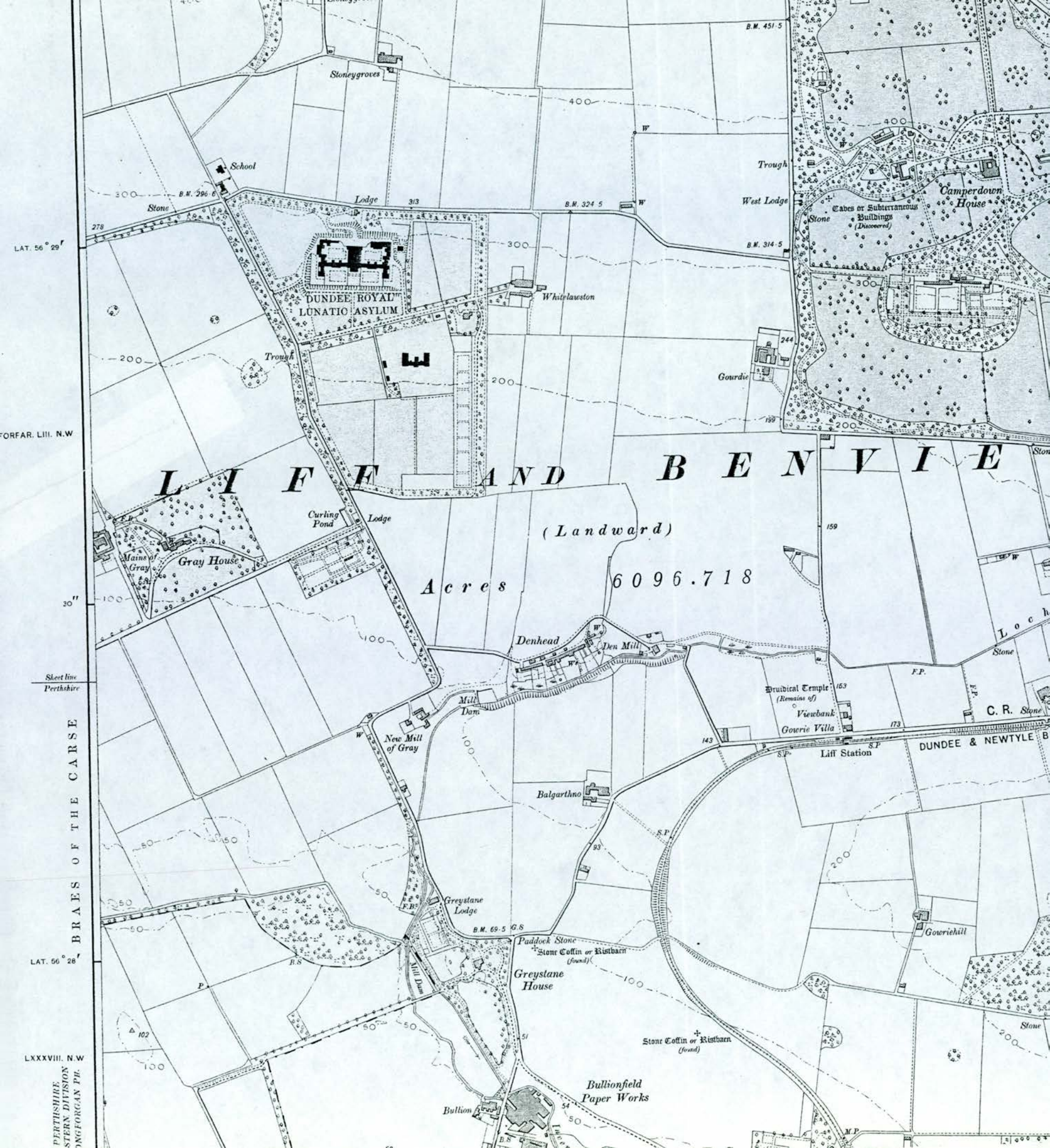
the households of the sample. Because total household income was insufficient, these households employed strategies which helped to supplement their wages. In particular they sent children to work half-time and took in boarders. The presence of either, or both of these in a household usually signified an inability to meet the level of requirements present. The strategies which households employed varied to some extent according to the characteristics of the household head.

That household/employment processes which were operating in the Dundee textile community during the late nineteenth century suggests that traditional understandings of the labour market were not operating in this instance. In addition, contrary to arguments which contend that the household was of declining importance in determining members experiences of paid work with the emergence of widespread factory employment, these processes evidently remained important factors at least up to the end of the nineteenth century in Dundee.

As well as demonstrating that employment processes in Dundee were not centred around a capitalist market for labour, the findings of the research indicate that the experience of gender was differentiated in the city. Women clearly had a great variety of experiences both in employment and in the domestic setting. These experiences could not be understood using a theoretical

framework which concentrated upon the aggregate differences between men and women. In the late nineteenth century Dundee textile community, the sex of a person was only one factor contributing to the experience of life in the city. Amongst both men and women, experiences of employment were clearly related to experiences in the sphere of reproduction through household/employment processes which were attached to wider patterns of inequality.

By conducting an historical study which looks in detail at the lives of working men and women we have identified some of the ways in which employment and households were connected in single processes. In order to develop further the integration of production and reproduction in understandings of women's, and men's, experiences of employment I would like to stress the importance of carrying out detailed studies. These help to identify the nature of household/employment processes and by working up from the detail should enable the development of more useful theoretical understandings.



LAT. 56° 29'

FORFAR. LIII. N.W

L I F F A N D B E N V E N U E

(Landward)

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PERTHSHIRE

BRAES OF THE CARSE

LAT. 56° 28'

LXXXVIII. N.W

PERTHSHIRE
SERN DIVISION
DUNDEE & NEWTYLE



AND STRATHMARTINE PH.
 Dundee Hospital

LAT. 56° 29'

COUNTY OF THE CITY OF DUNDEE

FORFAR. LIV. N.W.

30"

Sheet line
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DUNDEE PH.

LAT. 56° 28'

LIFF AND BENVIE
 (Burghal) Acres
 2033.067

Site of Battle
 Supposed, between the Picts and the Scots, 9th. Century

LOCHEE

LOCHEE
 Burghal

Shelter LOCHEE
 B.M. 339.5 PARK
 2033.067
 Shelter

Royal Victoria Hospital
 (For Incurables)



LAT. 56° 29'
FF AND BENVIE PH.
(Landward)
Parly Muni. & Police Burgh By.

LIFF AND BENVIE PH.
(Burghal)

LIII. N. E.

30''

L O C H E E

COUNTY OF THE CITY OF DUNDEE

LAT. 56° 28'



LAT. 56° 29'

DUNDEE PH. LIV. N.E. 30"

To Arbroath

C. R. & N. B. R. DUNDEE & ARBROATH JOINT LINE Stannergate

LAT. 56° 28'

DUNDEE

DUNDEE HARBOUR

APPENDIX III: SOME ADDITIONAL INFORMATION CONCERNING
THE SAMPLE

TABLE ONE: SIZE OF HOUSEHOLDS IN THE SAMPLE

HOUSE SIZE	NO. OF HOUSEHOLDS	%
1	79	8.5
2	151	16.2
3	168	18.0
4	131	14.1
5	97	10.4
6	121	12.9
7	90	9.7
8	49	5.3
9	22	2.4
10	15	1.6
11	5	0.5
12	4	0.4
<hr/>		
TOTAL	932	100.0

TABLE TWO: AGE AND CONJUGAL CONDITION OF THE SAMPLE

AGE	MEN				WOMEN			
	SINGLE	MARRIED	WIDOWED	TOTAL	SINGLE	MARRIED	WIDOWED	TOTAL
TOTAL								
0-4	233	0	0	233	267	0	0	267
5-14	476	0	0	476	498	0	0	498
15-24	342	24	2	368	489	54	1	544
25-34	70	147	5	222	178	181	11	270
35-44	20	136	6	162	90	170	45	305
45-54	5	100	10	115	36	114	67	217
55-64	5	63	15	83	21	65	68	154
65+	1	30	5	36	9	19	55	83
MISS.	1	1	0	2	0	0	0	0
<hr/>								
TOTAL	1153	501	43	1697	1558	603	247	2408

TABLE THREE: AGE PROFILE OF THE WORKING SAMPLE

AGE	TOTAL WORKFORCE			TEXTILE WORKFORCE		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
10-14	97	109	206	79	102	181
15-24	356	504	860	156	456	612
25-34	215	261	476	67	233	300
35-44	158	167	325	47	143	190
45-54	107	110	217	29	50	119
55-64	78	56	134	28	39	67
65+	29	13	42	8	6	14
MISS.	1	0	1	0	0	0
TOTAL	1040	1220	2260	414	1070	1484

TABLE FOUR: TEXTILE EMPLOYMENT AMONGST MEN AND WOMEN IN THE FOUR ENUMERATION DISTRICTS

DISTRICT	TEXTILES		NON-TEXTILES		TOTAL	
	N	(%)	N	(%)	N	(%)
1. DENS						
MEN	78	(23)	256	(77)	334	(100)
WOMEN	291	(79)	65	(21)	356	(100)
TOTAL	369	(54)	321	(46)	690	(100)
2. CALDRUM						
MEN	86	(39)	137	(61)	223	(100)
WOMEN	187	(88)	25	(12)	212	(100)
TOTAL	273	(63)	161	(37)	435	(100)
3. GLAMIS						
MEN	48	(43)	62	(57)	112	(100)
WOMEN	55	(81)	13	(19)	68	(100)
TOTAL	103	(57)	75	(43)	180	(100)
4. BOWBRIDGE						
MEN	182	(52)	167	(48)	349	(100)
WOMEN	519	(92)	46	(8)	565	(100)
TOTAL	701	(77)	213	(23)	914	(100)

TABLE FIVE: SEX AND AGE STRUCTURE OF THE SCOTTISH AND IRISH POPULATIONS IN THE SAMPLE

	SCOTTISH			IRISH		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
0-4	231	260	491	1	0	1
5-14	460	454	914	4	2	6
15-24	341	501	842	13	20	33
25-34	184	316	500	28	47	75
35-44	135	230	365	20	68	88
45-54	82	133	215	28	81	109
55-64	64	100	164	17	53	70
65+	26	63	89	18	10	28
MISS.	2	0	2	0	0	0
<hr/>						
TOTAL	1525	2057	3582	121	289	410

APPENDIX IV

USING HOUSEHOLD LEVEL INFORMATION

Given the basic premise of the work, that information on households and individuals' relationships to each other within households, was necessary for fuller understandings of their experiences, we needed some way of computing the information for each individual into a form where information on their households could be simultaneously read off. Three types of variable were used in order to obtain household level information:

(i). The first, and most basic, household variable was actually available on the individual data file. The variable RELATION on this file provided information on relationship to the head of the household; it indicated whether an individual was the household head, the wife, son or daughter of the household head, and so on. This information could be crossed with other variables, for example, marital status which provided further information on the characteristics of household heads. The occupations of household heads could also be examined in this way. Table One shows the distribution of male and female household heads, who were employed, across textile and non-textile work. From this we can see that female heads of households were far more likely to be found in textile jobs than were male household heads.

TABLE ONE: THE SEX OF HOUSEHOLDS HEADS BY TEXTILE/ NON-TEXTILE EMPLOYMENT

SEX OF HOUSEHOLD HEAD	TEXTILES	% TEXTILES	NON- TEXTILES	% NON- TEXTILES	TOTAL
MALES	157	(31)	357	(69)	514
FEMALES	227	(85)	39	(15)	266

This type of household variable, though providing an initial insight into the nature of households in the sample, left many questions unanswered. In order to obtain more detailed information on the characteristics of households a complex file structure had to be defined using spssx. The file type most useful for this purpose was a GROUPED FILE which permitted several records to exist for a single case. In this file the household, rather than the individual, became the case, and individuals within households were allocated separate record cards. Theoretically, the 'household' file would enable us to take out information on individuals within households, as well as, providing overall information on the characteristics of households. However, the information which existed was exactly the same as that on the individual file, the only difference being the way that it was stored.

(ii). The creation of household variables out of the information on individuals was the next task. The sorts of things which were thought to be of immediate relevance included: household size, number of children,

number of wage earners, number of boarders, and so on. The most basic transformation suitable for this purpose in spssx was the COUNT command. This procedure isolated each case (the household) and each record (the individual) and calculated the number of times a predetermined value came up. The result was a final count of the number of times that value appeared in each case (the household). This count was automatically retained on the active file as a new variable.

To look at the results of such a transformation the usual procedures: Frequencies, Crosstabs and so on, were required. Certain specifications were necessary in this type of exercise, consider the following example:

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COUNT HOUSIZE=RELAT1 TO RELAT12 (01 THRU 95)
```

This command was used to create the variable HOUSIZE which was the number of people in a household. The variable was made from information on the relationship of individual household members to the household head taken from the RELATION, a variable on the individual file. On the household file this variable became RELAT1, RELAT2, RELAT3...up to RELAT12 which equalled the maximum number of individuals in any household. The numbers appearing in the brackets at the end of the command line (above) refer to the values of the variables RELAT which are to be included in the new

variable HOUSSIZE. As the final count was to include all persons in a household and, therefore, all values of the variable, the total range of variables and values had to be specified.

The variables created using this method provided summary descriptions of households and could be crossed with either individual variables or other household variables giving detailed information on the nature of households. HOUSSIZE was crossed with RELATION, The results of HOUSSIZE crossed with RELATION, for example, can be viewed in Table Two.

TABLE TWO: SIZE OF HOUSEHOLD BY SEX OF HOUSEHOLD HEAD

HOUSSIZE	MALE	%	FEMALE	%
1	17	3	60	15
2	62	11	89	23
3	77	14	92	24
4	78	14	52	13
5	64	12	35	9
6	89	16	32	8
7	73	13	17	4
8	42	8	7	2
9	18	3	4	1
10	14	1	1	0.3
11	5	1	-	-
12	4	1	-	-
	543	(100)	389	(100)

It is evident from this table that female-headed households were far smaller than male-headed households which were, on average, much larger. More than fifty percent of female-headed households had three or less members, less than thirty per cent of male-headed were

of this size.

(iii). The COUNT command, however, also had limited applications. It was only really useful when the household variable required could be constructed from a single individual variable. The third type of household variable is the most complex, it was also created using the household file. Where a combination of the values of two or more individual variables is required to build a household variable, then a temporary or dummy variable must be employed. This is done using the spssx VECTOR command. The LOOP command is also required. The latter automatically goes through all household members until a particular value of a particular variable is found. In the following example we wanted to create a variable NWAGRELS which was the number of family members who were in full-time paid employment, as opposed to household members who could be boarders or lodgers:

```
VECTOR REL=RELAT1 TO RELAT12
VECTOR WORK=WORKST1 TO WORKST12
VECTOR WREL (12)
LOOP #1=1 TO HOUSIZE
DO IF ((REL(#1) NE 90 AND REL(#1) NE 91 AND REL(#1) NE
95) AND (WORK(#1) EQ 01 OR WORK(#1) EQ 04 OR WORK(#1)
EQ 05 OR WORK(#1) EQ 07))
COMPUTE WREL(#1)=1
ELSE
COMPUTE WREL(#1)=0
END IF
END LOOP
COUNT NWAGRELS=WREL1 TO WREL12 (1)
```

The vectors REL and WORK were temporary dummy variables which represented all values of the variables RELAT1 to RELAT 12 and WORKST1 to WORKST12. The vector WREL was a

stand in for the variable being created, the maximum value of which was twelve. The LOOP command merely told spssx to loop through every person in a household performing the set of instructions which followed. The instructions involved creating the variable WREL and giving it a value of one for all those values of WORK and REL specified on the DO IF statement. Anything not falling within this jurisdiction would be given the value zero. At the end of this procedure the variable NWAGRELS had to be manufactured out of the dummy variable WREL in the usual way using the COUNT command. Like those variables which were created using the single COUNT command, NWAGRELS could be crossed with individual and with other household level variables. In Table Three the employment of male and female heads was examined according to the number of waged relations in a household.

TABLE THREE: EMPLOYMENT OF MALE AND FEMALE HEADS BY
NUMBER OF WAGED RELATIONS IN A HOUSEHOLD

NWAGRELS	MALES			FEMALES		
	TEX	%TEX	NON TEX	TEX	%TEX	NON TEX
NWAGRS						
1	48	27	127	111	87	16
2	44	29	110	62	83	13
3	21	35	60	41	87	6
4	26	41	37	8	89	1
5	15	50	15	2	40	3
6	3	30	7	2	100	-
7	-	-	1	-	-	-
8	1	100	-	-	-	-
TOTAL	158		357	226		39

This tells us, firstly, that female heads were more likely to work in textiles than were male heads, something we already knew from the individual file. In addition, however, we can see that male headed households with one or two waged relations were less likely to work in textiles than were male-headed households with three, four or five relations in paid employment. Female heads, on the other hand, worked in textiles whatever the number of relations contributing to the subsistence of their households.

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1881	P.P. 1883	LXXX
1891	P.P. 1893/4	CVI
1901	P.P. 1903	LXXXIV
1911	P.P. 1912/13	CXIII, 1913 LXXVIII

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1881	P.P. 1883	LXXXI
1891	P.P. 1893/4	CVII, 1893/4 CVIII
1901	P.P. 1903	LXXXVI, 1904 CVIII
1911	P.P. 1913	LXXX, 1912/13 CXIX

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1891	P.P. 1892	XXV
1901	P.P. 1902	XIX
1911	P.P. 1912/13	XIV

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